# Interested in Applying to a Liberal Arts Institution?: Perspectives from Reva Kasman, Julie Rana, and Chad Topaz Linda Chen

What follows was extracted from conversations with Reva Kasman, Julie Rana, and Chad Topaz about applying to faculty jobs at liberal arts institutions.

# **General Comments:**

RK: There is a wide spectrum of schools in terms of academic standards, student demographics, class size, expectations for faculty teaching load and research/scholarship, even within the broad category of "liberal arts colleges" or liberal arts-focused comprehensive universities. Applicants should have an open mind when looking at the different options for jobs and consider what will genuinely be a good fit, both professionally and personally.

JR: The most important thing you can do is to educate yourself about the types of jobs available: public/private, religiously-affiliated/secular, liberal arts/technical/R1, undergraduate-only vs. masters granting vs. PhD granting. Talk to people at these different types of institutions. Make sure you understand what liberal arts colleges actually are and why you want to go in that direction.

RK: Some liberal arts schools can have heavy teaching loads (3–4 courses in a semester), but some will also have very high research standards. So if your goal is a tenure-track job at a school with significant expectations for research output, consider whether you will be better positioned for such a job by doing a research postdoc first. (On the flip side, a research postdoc is not essential for every liberal arts tenure-track position, and having done one will not

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DOI: https://dx.doi.org/10.1090/noti1899

automatically rank a candidate higher than a well-qualified applicant coming right out of a PhD.)

CT: At liberal arts institutions, teaching is nearly always the top institutional priority, and this priority may create opportunities to work closely with students and make a significant impact on their educational experiences. Additionally, some liberal arts school careers might involve a good deal of formal and/or informal interaction with faculty from other departments. If working closely with students appeals to you, and if you are intrigued by thinking about how mathematics complements and connects to other disciplines, a liberal arts career could be a rewarding one for you.

**Q**: What is the most common mistake you see in applications?

CT: Generic cover letters. Cover letters addressed to the wrong college. Egregious typos or, even worse, misspelled names of people at my institution. Most of all, no attempt to address the liberal arts.

**JR**: Anyone who doesn't tailor their application has little chance of making it into our top twenty.

**RK:** I don't expect everything to be customized, but if someone mischaracterizes my school or our students, that is going to reduce the chance that I perceive them to be a good fit.

**Q**: What makes a strong cover letter?

RK: The cover letter is where you make a first impression, establish connections with a particular school, and convince a committee that this is a conversation they want to continue. If there are specific criteria mentioned in a job ad, be sure to address them, and if you don't fit the requirements in an obvious way, use your letter to make a compelling case for why you still believe that you're a good fit. Be clear that you value the kind of school that you are addressing—the category of "liberal arts institution" covers a wide range of colleges and student demographics, and you should demonstrate an awareness and appreciation for the one mentioned in the specific letter. If there is something unique in your experiences, highlight it here so that it won't get overlooked in a quick skim of your CV.

JR: I like to see that you've taken the time to get to know our school. The best cover letters I've seen also show evidence that you're someone who takes initiative. Tell us something you've done with your teaching/research/outreach/service that goes above and beyond, and talk about how that fits into your future with us.

CT: The most effective letters I've read are the ones that followed directions, sounded genuinely enthusiastic, and were specific about my liberal arts institution and the reasons that the applicant wanted to come be a faculty member there.

**Q**: What can I do one to two years before going on the job market to be better positioned at application time?

CT: Search committees will evaluate you based on your teaching effectiveness, your interest in and/or commitment to the liberal arts, and, possibly, your research contributions and your ability to advise student research. Make sure you have a portfolio of evidence along these axes. For teaching, the strongest applicants will have experience as instructor of record for at least one or two courses. If you are a graduate student and the opportunity to serve as instructor of record isn't available to you, make sure you serve as a TA frequently so that you build the group of courses with which you are familiar. Search committees are often impressed by candidates with well-rounded course portfolios that demonstrate experience with courses for non-majors, introductory courses for the major, upper-division core courses, and courses on specialized topics. Educate yourself about how to be a successful teacher and document your success by saving your teaching evaluations and by asking long-term faculty in the department and/or the director of your campus's teaching center to observe you so that they can write specific things about you at application time. To demonstrate interest in the liberal arts, take every opportunity to network with faculty at liberal arts colleges and volunteer to come visit them to give a talk and/or do outreach. To amass a convincing research portfolio, try to get a paper or two into print before you apply. Give as many conference talks as you can. Network with researchers outside of your institution who then might be able to write detailed and convincing letters about you at application time. Finally, seek the opportunity to supervise student research as part of a summer program, independent study, or thesis experience.

RK: While every liberal arts school is different, all of them will be looking to hire someone who demonstrates a commitment to high quality undergraduate teaching. Consider whether your teaching experience might seem sparse or lack diversity. If you are a graduate student who has had primarily research-based funding, it may be worth requesting a semester of teaching to add to your CV. If your teaching has been fairly limited in scope (e.g., only running discussion sections if you are a TA or only having taught calculus), ask your department if there are opportunities to teach a course or work with a student population that will broaden your experiences. Expand your knowledge of the range of schools that are out there so that you have a better sense of what jobs might be a good fit, and then tailor your appli-

cation materials appropriately. You might talk to people at smaller conferences about their jobs or read journals like *MAA FOCUS* or *PRIMUS* to increase your understanding of what is innovative in undergraduate teaching, and the kinds of scholarship and service that liberal arts faculty often do beyond traditional math research. Finally, start your job application materials early in the summer before you go on the market and get more than one person's feedback, ideally from someone at the type of school where you think you might like to work.

JR: Other ways to show interest in working with undergraduates: help a professor at your institution advise a summer undergraduate student (whether as part of an REU or not), get involved with your university's Putnam exam group or math club, organize outreach/enrichment activities, or help mentor an undergraduate's senior project. I would also encourage you to experiment with your teaching, and get feedback from your university's center for teaching and learning. You might also attend some sessions at MAA MathFest or the JMM specifically about teaching, and think critically about how you can incorporate some of these ideas into your own classes.

**Q**: What do you look for in a teaching statement?

JR: Above all, I'd rather see an anecdote than a philosophical description. More specifically, I look for evidence that you're truly interested in experimenting with your teaching. It's also important to me and to my institution that you've thought about and made progress toward managing diversity in the classroom. Be honest and thoughtful about what you do well, moments of failure and what you learned from them, and what you'd like to explore in the future.

CT: I look for authenticity, enthusiasm, organization, and pedagogy. I have hundreds of statements to read, and the best ones make clear for me what the main messages are by providing organization and by highlighting key points. The candidates who impress me the most are the ones who educate themselves about effective practices and put these practices into use.

RK: Avoid using trendy pedagogical "buzzwords" for their own sake, but if you genuinely subscribe to a particular philosophy or technique, then make sure to show how it tangibly appears in your classroom teaching. Your teaching statement should emphasize student learning of mathematics (which may include content knowledge acquisition, problem solving, critical thinking, applications, etc.) and how you strive to foster these skills effectively. Ideally, a teaching statement demonstrates an awareness that classrooms include students with a diversity of mathematical knowledge, interest levels, and career goals, and addresses the ways that you endeavor to create successful students

across this spectrum. Remember that a faculty position at a liberal arts college can involve teaching up to four courses at a time, so consider whether the highlighted characteristics of your teaching style are going to be replicable—for instance, talking about how you spend hours with individually struggling students may seem admirable, but can convey a lack of realism about what your job will entail and what students need inside the classroom. Finally, while I expect that a teaching statement will focus on a candidate's strengths, I look for evidence that someone is reflective about what is challenging in teaching mathematics, and where they perceive themselves to have room for future growth.

## **Q**: What do you look for in a research statement?

CT: The weakest research statements are ones where applicants say "this is the problem I work on" but give me no sense of why or of how it fits in to a bigger picture. The very best ones provide context for how the research fits into mathematics (or other fields) more broadly and also leave me with a fairly concrete sense of the candidate's plan. No matter how technical your research is, I will look for at least a part of the research statement that explains the work in a way that I (and even better, someone outside my department) can understand. I love when a candidate discusses research with students in the research statement, and I love when a candidate mentions potential connections to other areas of the liberal arts.

RK: It is fine if the main body of the statement is technical and beyond the scope of my knowledge, but I want to see that a candidate has made an effort, at least in the early paragraphs, to value me as a reader and introduce their research area in an accessible, big picture way. This introductory section should avoid notation whenever possible, and if there are necessary technical terms, then they should be defined casually at this point. Be transparent about your own contribution to the field, and include your plans for continued research. Finally, I expect that research statements for a liberal arts school be about two to three pages. If a longer, more detailed one is required for research postdocs or similar jobs, then a candidate should write two versions and submit each to the appropriate places.

JR: I look primarily for evidence that you can continue your research in a teaching-intensive, undergraduate-only environment. I also look for evidence that you're starting to think beyond your thesis. If you can include well-formulated ideas for projects with undergraduates, that's a huge bonus.

**Q**: What are some characteristics of a good teaching recommendation?

**RK**: The best recommendations are likely to come from someone with whom you have an established and ongoing relationship about your teaching. This can be a formal supervisor or simply a faculty member who has both seen you teach and had conversations with you about your course planning, assessment, and things that challenged you. Such a person has the material to write a well-rounded letter about who you are as a teacher, rather than just giving a quick summary of a single class observation or student evaluation data. If you don't have a long-standing relationship with a teaching mentor or colleague, it is still worth being proactive about obtaining an informative letter: invite a faculty member to come to your current class at least once and have follow-up discussions with that person. Remember that outside of your institution, no one will know if there is a person who typically writes everyone's teaching letters (e.g. a director of undergraduate studies), so it is more important to get an insightful and personalized letter from an educator you trust than to get a formulaic letter from someone designated to this role.

JR: In a nutshell, I look for any evidence that you're a productive colleague who's thoughtful about your teaching. The most helpful teaching recommendations make it clear that the letter writer has observed many different instructors and has observed you multiple times over one or two courses. This makes any comparison with your peers more convincing. I also appreciate reading recommendations from letter writers who are aware of modern teaching practices.

CT: They are specific and enthusiastic. For graduate students, letters from a professor or administrator who has supervised a course that say little more than "so-and-so was a good teaching assistant" convey little information and might even be read as lukewarm. As with most types of writing, specificity really matters. I get the most information from letter writers who have observed a candidate teaching and spoken to them about their pedagogical goals. From these letters, I learn how the candidate structures their course or discussion section, what they do in and out of the classroom, and how students respond to them. You, as a candidate, can encourage your letter writer to include this type of information. "Here's my assessment scheme for this course, and here's how it aligns with effective practice," you could say. "It would be so helpful if you could mention this in the letter you write for me."

Q: What advice do you have for candidates when discussing diversity, either in a separate diversity statement or in other materials?

CT: A strong diversity statement might include one or more of the following components: a discussion of why equity, diversity, and inclusion (EDI) issues are important; disclosure of your own identities along various axes of diversity; presentation of any formal knowledge you have about EDI; examples of EDI issues at play in teaching you've done; descriptions of professional activities related to EDI; and other relevant personal or professional thoughts and experiences. Whether you choose from among these components or include others, a committee will want to see some thoughtful discussion of and genuine interest in EDI. An excellent diversity statement can really make a candidate stand out.

RK: Issues related to diversity are going to be present in your job. Your application should demonstrate an awareness of equity issues that may be present in your classroom (or broader school environment) and indicate that you take seriously your responsibility for creating an inclusive and supportive learning environment for students coming from vastly different circumstances. If you have personal experience that impacts your professional perspective, enhances your ability to mentor and support students, or that you hope to use in outreach efforts, then you are most welcome to include it, but you are under no obligation to disclose characteristics of your identity for the sake of making an impact in a diversity statement. Moreover, it is important not to stereotype students by their racial, socioeconomic, or other characteristics, to present yourself as "saving" certain groups of students from their circumstances, or to draw what may be uninformed parallels between your own experiences and those of others. As with the teaching statement, be genuine and concrete in the views and examples you share in a diversity statement, avoid throwing in keywords that you think a committee wants to hear, and be reflective about your own potential for growth in this area.

JR: I like to see that you've both read and thought about issues of equity and inclusion, especially in the context of teaching. For example, check out the fabulous AMS inclusion/exclusion blog, <a href="https://blogs.ams.org/inclusionexclusion/">https://blogs.ams.org/inclusionexclusion/</a>. If you are considering including information about your personal background, think carefully about how your statement puts your experience into the context of these larger issues. If you can't address this, you may not want to include this information.

**Q**: Besides a generic cover letter, what are other common mistakes you see?

RK: I am rarely impressed by quotes from student evaluations or dramatically positive student evaluation data—hearing that someone was called "the best teacher ever" is not helpful in assessing potential as a full-time faculty member, and can sometimes be off-putting. If student evaluation quotes are included, then they should highlight something specific from a candidate's experience that enhanced student learning.

Applicants can inadvertently minimize a school's students and the courses they will teach. There is a tendency for candidates to sound like they are most excited about teaching upper-level major courses and that they put the greatest value on students who love mathematics and/or are heading to graduate school. They may talk about "lower-level classes" and mean Calculus II, or imply that struggling students are "problems" who can be fixed individually in office hours. At many schools, "lower-level" means a variety of pre-calculus, service, or remedial courses, and most of your teaching audience may be non-majors. Many mathematics majors will not be graduate school bound. Don't accidentally shoot yourself in the foot by diminishing the majority of students at a school or those that won't follow the same educational path as you did.

CT: In the teaching statement, do not vehemently express ideas that are incorrect. For instance, I have seen candidates write sentences such as, "Students learn best when material is explained clearly and multiple example problems are presented." Says who!? There exists a wide variety of effective pedagogical models (though they all share some common general principles grounded in learning science). The candidate's statement makes me fear that they are not open to examining and refining their teaching based on theory and evidence.

JR: We've had a few applicants from the same school apply for the same job. This is bound to happen, but it can mean that two applications look nearly identical, especially if everyone is helping out with the same enrichment events, attending the same conferences, teaching the same courses, etc. To make yourself stand out, take initiative to organize something on your own, and point this out in your cover letter.

**Q**: The focus of this article is not the interview process, but do you have recommendations for resources for how to prepare for interviews, or for job advice more generally?

JR: I used the interview prep materials on theprofessorisin .com. But whichever resources you use, make sure you practice, practice, practice! Be sure you read up a lot on the institution you're visiting, and ask a lot of questions. Be

honest while you're visiting. Ask the questions you really want to know the answers to!

CT: One resource is people who have served on search committees at liberal arts colleges. If you have access to any such person, ask them if they'd be willing to do a 20-minute mock interview with you and give you feedback on it.

RK: Do practice interviews, ideally with someone who is at the type of school where you hope to work. Ask someone at a conference if they will do a mock interview with you on Skype, for example. Look at the kinds of questions you might get asked (there are good resources online) and practice giving your answers out loud, even when you're alone. Have good examples on hand to answer questions like "what was something you did well in a class" or "what was something you'd like to do differently" so that you won't go blank in an interview, or worse, come up with a spontaneous anecdote that reflects poorly on you or your teaching. Have questions ready to ask of the school—something simple like "Tell me what you like most about working in your department" can provide deep information about a potential job.

For example, some practice questions can be found at https://blogs.ams.org/onthemarket/2013/02/04/preparing-for-an-interview-questions-by-sarah-ann-stewart-fleming-belmont-university/

LC: The November issue of the *Notices* will include advice on preparing for the Employment Center and Joint Meetings interviews for tenure track jobs.

## **Other Comments:**

**RK:** As you put together your application materials, keep the perspective that every item in some way showcases who you are as a teacher, communicator, and future professional colleague. Let that influence the tone and style you use to present information and engage with your audience in each document, from your cover letter through to your CV.

Remember that your job search and your goals—both professional and personal—are your own. Don't let anyone else try to define them for you. Ask many people the same questions as you go through this process. Know that you are going to get well-meaning advice from some people that is not always about you or reflective of your needs and wants, and you are free to ignore anything that doesn't feel right.

CT: If your goal is to have a fulfilling career, you should think deeply about what matters to you in life, and hold those values up against every single job you apply for—academic or otherwise—to see if your priorities align with those of the job.

JR: I'll reiterate Chad and Reva's comments: Educate yourself about the types of jobs out there, and be honest with yourself about what you want in a career. If you do that and it shows through in your application, you're on the right track!





Linda Chen

Reva Kasman





Julie Rana

**Chad Topaz** 

### **Credits**

Photos of Linda Chen, Reva Kasman, Julie Rana, and Chad Topaz are courtesy of the interviewer and the interviewees.