



Establishing an MQC Score

By Dan Tevet, FCAS, Vice Chairperson, Candidate Liaison Committee

The concept of the minimally qualified candidate (MQC) score is familiar to most candidates, but the process by which MQC scores are established tends to cause confusion. Continuing with our series of articles that (hopefully) help demystify the CAS admissions process, here is a description of the steps involved in setting MQC scores.

A few months before the exams are administered, there is a pass mark panel meeting for each exam. These meetings generally include the chairs and vice chairs of the exam as well as a handful of other committee members and general officers of the examination committee. Dr. Richard Fischer, who is an expert on psychometrics and test development, also participates in these meetings to provide guidance on general testing philosophy (learn more about Dr. Richard Fischer and his role in the CAS here:

<http://www.casact.org/press/index.cfm?fa=viewArticle&articleID=2204>). The fundamental purpose of a pass mark panel meeting is to establish the a priori MQC score for each question. The first step in this process involves painting a picture of the minimally qualified candidate. Which topics do we believe the MQC should have full mastery of, and which topics require average mastery? Though these rankings are not published, the committees do assign a relative value to each exam topic. For example, those who took Exam 5 probably won't be shocked to learn that Bornhuetter-Ferguson items will require a higher MQC score, as a percentage of total points, than techniques for estimating unpaid loss adjustment expenses. In addition to topic importance, question difficulty is also taken into account in setting MQC scores. Thus,

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Change to Process for Releasing Exam Results

To alleviate the increased traffic on the CAS Website server when CAS exam results are released, the CAS is changing the process for releasing exam results starting with the Fall 2013 exam sitting. The CAS will discontinue posting the list of passing candidate numbers on the CAS website between 3:00 and 3:30 p.m. EDT on the day results are received in the office. Instead, a link to the web page with passing candidate numbers, which will reside at a randomly generated web address, will be sent via email to the candidates who sat for the exam for which results are available.

To summarize the new process:

- When the list of passing candidates for an exam is available, the list will be posted at a randomly generated web address.
- An email with a link to the web page with the list of passing candidates will be sent to all candidates who sat for that particular exam.
- Several days after the email is distributed to candidates, a link to the list of passing candidates will be posted on the CAS website.

Please contact the CAS Office with any questions about the process for releasing exam results. [f](#)

DATES TO REMEMBER

EXAM REGISTRATION DEADLINES

Exam 1/P (January)
December 2, 2013

Exam 2/FM (February)
December 30, 2013

Exam 3F/MFE (March)
January 23, 2014

Exams LC, ST, 5,
6C, 6U, 7, and 9
March 13, 2014

CAS SEMINARS AND MEETINGS

RATEMAKING AND PRODUCT
MANAGEMENT SEMINAR (RPM)
Washington DC
March 30-April 1, 2014

ICA 2014 (INTERNATIONAL
CONGRESS OF ACTUARIES)
Washington DC
March 30-April 4, 2014

NO SPRING MEETING IN 2014

SEMINAR ON REINSURANCE
New York, New York
May 21-22, 2014

Actuaries Teaching Actuaries

By Elie Bochner, ACAS, Candidate Liaison Committee

If you are reading this newsletter, you probably are more interested in an actuarial career than a teaching career. What you may not know, though, is that it is possible to pursue both careers simultaneously. Your options are as varied as teaching actuarial science classes at a university, writing papers on actuarial topics, or serving on the CAS Syllabus Committee. Wherever your interests lie, you can learn a great deal about actuarial education from the experiences of Alisa Havens and Howard Mahler, interviewed below.

Alisa Havens Walch

Alisa Havens Walch is a lecturer at the University of Texas at Austin. She enjoys outdoor activities and hopes to complete Candy Crush before her students do.

What did you want to be when you were growing up?

When I was really little, I wanted to be the first female president of the United States.

Wow! President of the United States? Is that still your ambition?

Absolutely not! Now that I have more of an understanding about what it means to be president, it's not interesting to me at all. You get a little more work-life balance in an actuarial career.



What is your current role?

I am the assistant director of the actuarial science program at the University of Texas. I also teach several actuarial science classes in the mathematics department.

What brought you to academia?

I actually interned and worked for several years at The Hartford before I made the switch to academia. I started out in the industry without giving much thought to what I wanted my day to day life to look like. Academia is a much better fit for me because I can do a lot of the actuarial math that I enjoy without the profit-driven environment of the industry.

What's the most valuable skill you bring to the table at UT?

Most of our other lecturers in the actuarial science program have only been teaching and have not practiced in the industry. One of my unofficial responsibilities at UT is to advise students career-wise, and I'm able to do this because of my industry experience.

Did you develop any skills in the corporate world that helped you in academia?

I think a lot of the soft skills and professional skills (making deadlines, drafting communications, etc.) that I learned in insurance helped me a great deal in academia. Other professional skills that I think are helpful are managing expectations and materiality.

You've worked both in the industry and in academia. What would you say are the advantages of each career path?

I definitely think one of the advantages of the insurance career path is the salary. One of the big advantages of education is that I have a lot of freedom. I have a lot of freedom with my schedule and also have the freedom to run my classroom how I think is best for my students.

Do you have any advice to share with students interested in a career in academia?

I would recommend that you try to figure out what you can offer an actuarial science or mathematics program that it doesn't already have.

Howard Mahler

Howard Mahler, FCAS, has been teaching classes and seminars and writing study guides for actuarial exams over the past two decades. He has taught more than 175 courses and seminars over the years. He has written more than 10,000 pages of study guide material covering different exams.

What did you want to be when you were growing up?

I went to graduate school in mathematical physics. I had trouble with my thesis, and the job market was lousy at the

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time, so I decided to pursue an actuarial career.

What was your first actuarial position?

I started out with the Continental Insurance Company (now part of CNA) in New York. I then went to the Massachusetts Insurance Department. After that I worked in the Massachusetts Workers' Compensation and Auto Rating Bureaus. I've been doing teaching and study guides full-time for the last 14 years.

When did you first become involved in actuarial education?

In 1981, when I joined the CAS Examination Committee. I rotated off that committee in 1993, after serving three years as Chairperson.

Why did you become involved?

Well, I did some teaching when I was in graduate school. I also had experience teaching students as a manager, so I've been teaching in some ways all along. After I rotated off the Examination Committee, Sholom Feldblum of New England Actuarial Seminars (NEAS) contacted me to teach seminars.

What goes into preparing a seminar the first time?

It's a lot of work to prepare a seminar. You first have to become very familiar with the readings, produce the written material, come up with good practice problems, and create formula summaries. It is also important to make sure your examples illustrate the point but are not too complicated. You have to come up with a good schedule: how much time are you going to spend on each reading or topic.

I'd say it takes a total of about 1,000 hours of preparation to do a good job the first few times you deliver a seminar. After that, the prep time is a lot less.

Wow! And we complain about balancing exams and work. How were you able to manage your time?

From 1994-1999, I was still working full-time at the Rating Bureau and teaching seminars. Unfortunately, you don't get seminar prep time, so it was tough doing both at the same time. I prepared for the seminars whenever I had free time and delivered the seminars usually on weekends. I was only teaching one subject, though, so it was not as bad as if I were teaching more than one subject.

Can you share any advice to candidates that want to get involved in actuarial education?

First, get your Fellowship. Then join either the Examination or Syllabus Committees. Next, start out small by explaining individual topics to groups of people, perhaps where you work. Maybe you can then write a study note for the syllabus that will cover a topic better. Writing a paper for one of the CAS publications or giving a talk at one of the CAS special interest seminars are other ways to educate people.

If you are more ambitious, you may wish to write a study guide or deliver a seminar for an entire exam or maybe half an exam with someone else doing the other half. However, that takes a very significant time commitment. **ff**

Post-Exam Surveys: Your Opportunity for Feedback

You have put in over 300+ hours of study time over the last few months, crammed in as much study time in the last seven days as you could find, and sat through a grueling four-hour exam. You would like to spend some time with your family and friends and get back to your normal life. The last thing you probably want to do is dedicate even more time to this exam sitting.

However, there is an important last step you should do to complete the exam process. Every CAS exam sitting gives candidates an opportunity to fill out a post-exam survey.

The post-exam survey is not too long. Usually only 14-16 questions, many of which are multiple-choice and a few that offer an opportunity for written feedback. Candidates are given an opportunity to provide feedback on the quality of the exam, the difficulty of the exam, the coverage of the syllabus, the value of the different articles on the syllabus, and even the exam location.

So what happens to the survey results? The information is compiled and distributed to select members of the different admissions

committees, including the Candidate Liaison Committee, Exam Committee, Syllabus Committee, and Education Policy Committee. Over 100 committee volunteers receive the feedback from the survey, which can be over 150 pages long for all of the exams combined.

The results include a distribution of responses for the multiple-choice questions, as well as every written response for the written feedback questions. This information is used to help determine which readings to keep on the syllabus, ways to improve the quality of the exam, and how to address concerns from candidates about individual exam locations.

Although it varies for each exam, typically only about 30% of exam-takers fill out the survey. While this is a good response rate, 70% of exam-takers are missing out on their one opportunity to provide direct feedback to the admissions committees. So even though you may want to be done with the exam, take an additional 15 minutes to fill out the post-exam survey. Your input is valuable and valued. **ff**

Exam Seasonality

By Katrina Redelsheimer, ACAS, Candidate Liaison Committee

If you're like me, the last month of each exam season takes a serious toll. When you don't think you can solve another system of equations or recall another accounting convention, your mind starts to drift. When this happens, I fantasize about all the things I'll get to do in those precious few study-free weeks between exams. These fantasies help me maintain my sanity, but they are also impossibly ambitious. They tend to fall into the following categories.

The Socialite

In my Socialite fantasy, I'll be living it up between exams. I'll actually see my friends. I'll return phone calls. I'll attend parties. I'll throw parties. I'll go out on weeknights. I'll become a "regular" somewhere. I'll go to brunch on Saturdays and Sundays. Those brunches might even involve bottomless mimosas. Anything's possible.

The Artist

As a counterpoint to all that left-brained studying, I'll need work on my artistic side during my break. I imagine I'll dust off my bass guitar. I'll practice piano every day. I'll take dance classes. I'll finish that short story. I'll work on my screenplay in a coffee shop while wearing a beret. Maybe I'll even go to an open mic night or karaoke. Très bohème.

The Professional

Being an actuary isn't just about exams, so there's a lot of professional development to be done between exams, too. Now all those extra hours spent studying can be spent billing hours. I'll bill 300 per month easily, not to mention all those extra non-billable projects I'll take on. I'll finally get that research paper published. I'll go to conferences. I'll even improve my work wardrobe. Power suits and shoulder pads all the way.

The Hobbyist

As the Hobbyist, I dream of a full schedule of extra curricular activities. I'll finally read that mechanic's textbook

so I can rebuild my car's engine. I'll improve my Mario Kart skills. I'll make jewelry. I'll take that motorcycle class. I'll get my pilot's license. I'm down for anything, as long as it's not stamp-collecting.

The Domestic

It's no secret that household maintenance is one of my first sacrifices to the exam gods. Once I get my life back, I'll start making my bed in the morning. I'll clean out the fridge. I'll fix that creaky floorboard. I'll tend to the garden. I'll cook and bake every day. I'll learn to use my sewing machine. I'll vacuum in pearls. Eat your heart out, June Cleaver!

The Athlete

I'm embarrassingly quick to abandon physical activity in the name of studying, but no matter: I'll make up for it after the exam. I'll go to the gym every day. Maybe twice a day. I'll join a sports team. Heck, I'll start a sports team. I'll be able to do a backflip. I'll go backpacking and mountain biking and surfing. Yes, before the next exam I'll be a swimsuit-ready ninja, you'll see.

The Realist

Well, those were some lovely fantasies, but let's be real: what I'm actually going to do between exams is sleep and watch *Star Trek*.

Enjoy the break, everyone! **ff**

Resources & Reminders

Use the CAS website for:

- CAS *Syllabus of Basic Education* and updates
- "Verify Candidate Exam Status" to confirm that joint exams and VEE credits are properly recorded
- "Looking at the Exam Process" series
- Feedback button to the Candidate Liaison Committee
- Feedback button to the Examination Committee
- CAS Regional Affiliates news

EXAM REGISTRATION CONFIRMATION—If you have not received a confirmation of your registration for Exams 3L and 5-9 two weeks prior to the registration deadline, please contact the CAS Office.



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the MQC score for a Bornhuetter-Ferguson question will likely be higher than the score for a question of comparable difficulty that involves calculating unpaid LAE. For example, if each question were 3 points, the BF may have an MQC score of 2.5 while the unpaid LAE may have an MQC score of 1.5.

Once the picture of the minimally qualified candidate – which only changes season-to-season if there are new learning objectives or knowledge statements – is complete and understood by the panel, the pass mark panel goes through each question and sets the **a priori** MQC score. This process generally involves quite a bit of debate among panel members, and it's not uncommon to see chairs fly across the room. Ultimately though, the a priori mark is established.

The next phase involves determining the **a posteriori** MQC scores, and that occurs during the grading sessions (famously held at an undisclosed desert location). Based on candidate performance by question, the scores set at the pass mark panel meeting are reevaluated. To be clear, the MQC scores don't automatically move to meet actual candidate scores. Instead, the graders are asked to select a score for their question based on the responses that they have seen. This is done blindly, with the graders having no knowledge of the MQC scores on which the pass mark panel agreed. The exam committee officers then reconcile every question, taking the a priori score and the graders' a posteriori estimates into consideration. In some cases the a priori score is changed, and in other cases it isn't.

For example, say a particular question tests a topic of medium

importance, and the pass mark panel believed that the question was straightforward and thus assigned it a relatively high MQC score. However, in actuality candidates struggled much more with the question than was anticipated. Because the candidate population performed differently than expected, the officers may adjust the MQC score for that question. This process is called reconciliation and is done for each question for which the a priori score differs from that of the graders. Questions with the largest difference are reconciled first, but ultimately every question is reconciled before the final pass score is established.

For most exams, the final pass mark is simply determined by summing up the a posteriori MQC scores for each question on the exam. In some instances though, the pass mark is adjusted to reflect unanticipated factors. For example, the examination committee works hard to create exams that allow candidates sufficient time to demonstrate their knowledge, but in some cases the committee misestimates the overall length of the exam. In such circumstances, the committee may make a bulk adjustment to the final pass mark.

As this article hopefully highlights, much debate, discussion, and reconsideration go into selecting final MQC scores, and the Exam Committee considers this process to be very important.

If you have any questions or comments, please send us a note by filling out the Candidate Liaison Committee feedback form. We always look forward to hearing from candidates on the admissions process, as well as on any other topic. [f](#)

Candidate Liaison Committee Mission

The Candidate Liaison Committee communicates with CAS candidates, collectively and individually, who are taking CAS examinations. The committee informs candidates as to appropriate courses of action available to them. Through periodic communication, this committee informs candidates of results of examination administrations, actions taken on complaints received regarding examination questions, and reasons for syllabus and examination changes being implemented. Communication encompasses existing policies and procedures as well as changes being considered. The committee should advise the CAS and its committees of the interests of the candidates regarding matters that come before the CAS and its committees. Candidates may contact the Candidate Liaison Committee at the CAS office address. The Casualty Actuarial Society is not responsible for statements or opinions expressed in the articles, discussions, or letters printed in *Future Fellows*.

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Calling All Gamma Iota Sigma Alumni!

Gamma Iota Sigma (GIS), the international risk management, insurance, and actuarial science collegiate fraternity, boasts an alumni base of over 17,000 individuals from 55 chapters, including a large contingent of current CAS candidates and members. GIS needs your help in updating its records! GIS alums

are encouraged to provide their current contact information to GIS so you can keep up with the latest news and updates.

If you are a GIS alum, please visit www.GammaIotaSigma.org and follow the link to the Alumni Update Form at the bottom of the home page to update your information. **f**

Vendor Links

The CAS provides vendor information on review seminars and study aids as a service to its candidates. The CAS takes no responsibility for the accuracy or quality of the seminars and study aids announced in *Future Fellows*. Please note that candidates are expected to read the material cited in the *Syllabus* and to use other material as a complement to the primary sources rather than a substitution for them. **f**

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<http://www.actexamdriver.com/>
 Exams 1, 2, 3F, 3L, 4, 5, 6, 7, 8, and 9

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<http://www.studymanuals.com/>
 Exams 1, 2, 3F, 3L, and 4

Jim Daniel's Actuarial Seminars
<http://www.actuarialseminars.com/>
 Exam 4

Midwestern Actuarial Forum
<http://www.casact.org/affiliates/maf/>
 Exams 3F and 3L

New England Actuarial Seminars
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