



Getting the Most out of the Examiners' Report

By Dan Tevet, FCAS, Candidate Liaison Committee

Beginning with the May 2012 examinations, the Examination Committee started publishing "Examiners' Reports" for Exams 5 through 9. These reports include narratives for each question describing where points were achieved and where points were commonly missed by the candidates.

The Examiners' Report is an invaluable tool when preparing for an upcoming exam or consequently assessing missed opportunities on

a prior exam. All candidates should read the reports from prior versions of the exam for which they are sitting. However, when incorporating the Examiners' Report into your studying routine, it is important to keep in mind what the report is and, most importantly, what it is not.

What the Examiners' Report Is:

The report provides insight into what the

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Predictive Analytics: "You've got to dig it to dig it, you dig?"

What Thelonious Monk can teach us about getting into predictive analytics.

By Michael Muhanna, Guest Writer

The quote in the title of this article was a piece of advice found scribbled in the notebook of one of Thelonious Monk's protégés. Monk, an eccentric jazz pianist, was famous for disseminating wisdom about jazz, art, and life through oddly phrased mantras. Nonsensical at first blush, these words have become increasingly relevant to me as I navigate the actuarial exams and venture into the world of predictive analytics.

Regular readers of *Future Fellows* have surely taken note of the recent prominence of articles about predictive analytics. Two key takeaways from these articles have been clear: predictive analytics is hot, and you'd better learn more about it if you want to stay ahead of the curve. So how do lowly, young actuarial students build

their chops as predictive modelers before they actually work in that space? To answer that question, we look to Monk. One way to learn to dig it is to find the people who are doing the most relevant and interesting work in that field, study the way they think and write, and then try to emulate their work.

In the case of Monk's protégé, he was instructed to explore Parker, Ellington, Armstrong, and others. For our purposes, we should look to professionals who design innovative predictive models and, more importantly, find effective ways to communicate their findings to a large audience. A great example of someone who fits the bill is *New York Times* blogger and nerd extraordinaire Nate Silver.

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DATES TO REMEMBER

EXAM REGISTRATION DEADLINES

Exam 1/P
June 6, 2013

Exam 2/FM
June 27, 2013

Exam 3F/MFE
May 30, 2013

Exam 4/C
August 20, 2013

Exam ST9
July 18, 2013

CAS SEMINARS AND MEETINGS

SEMINAR ON REINSURANCE
Southampton, Bermuda
June 6-7, 2013

CASUALTY LOSS
RESERVE SEMINAR
Boston, MA
September 15-17, 2013

CAS ANNUAL MEETING
Minneapolis, MN
November 3-6, 2013

The Creative Actuary: Who Knew?

By Kari Palmer, ACAS, Candidate Liaison Committee

When you think of people who are creative or innovative, what professions come to mind? The short list might include artists, writers, photographers, designers, architects or filmmakers. These people are imaginative, and they act on original ideas to create unique products or pieces of art. But what about an actuary? Although we may not place our work on the same level of creativity as the jobs listed above, actuaries are more innovative than you might expect. As far as Webster is concerned, innovation includes “introducing something as new” or “doing something in a new way.” We can all relate to these definitions, as we are constantly improving existing processes and creating better methods in our work product. Creativity can be seen in a wide range of actuarial projects. Here are a few examples that might help you to start looking for more ways to be creative in your job.

With innovation becoming a significant distinguisher among today’s top companies, actuaries can help with large projects like building a new proprietary insurance product. Developing rating algorithms for a product that hasn’t previously been offered is challenging and takes quite a bit of creative problem-solving. In particular, to calculate accurate rates and communicate the results with confidence to the various stakeholders can be particularly challenging. In the improvement of a current product, actuaries are involved in the details of the calculations and understand the areas that could be improved to make a new product better.

Another example might be finding new and unique ways to use actuarial techniques to solve other business problems. For example, predictive modeling can be a very useful tool in exploring new rating variables to incorporate into a rating plan. Thinking outside the box might lead to other useful

applications of this mathematical concept. Predictive modeling could also be incorporated into the analysis of a particular book of business to understand driving forces of performance.

Innovation doesn’t necessarily have to involve creating a cutting-edge new product or using predictive modeling. It can be as simple as looking at a problem from a different angle to come up with a better solution. For example, you could redesign a current process to make it more efficient or more accurate or both. Maybe you know a better way to get at missing data that will improve an analysis or open the potential to create new metrics. You could also streamline a forest of Excel workbooks into a simple macro to eliminate the potential for errors in manual processes. Being willing to brainstorm and try new techniques can improve the status quo and raise the level of your work as well as the work of your colleagues.

Finally, actuaries should constantly be looking to improve communication with their business partners. Completing a significant work product will not mean much if the conclusions cannot be shared with others. Simply asking yourself, “What is important to my audience and how can I present this in a manner that is meaningful to them?” can force you to see the problem from various points of view. This can also be helpful in documenting work products. Coming up with new ways to clearly present your methods and assumptions can be very helpful in transferring knowledge to others.

So the next time someone asks you if you are creative, say “Yes!” with confidence! These are just a few examples of ways actuaries are innovative on both large and small scales. Thinking outside the box, looking at a problem from a different angle, and being willing to try new ideas are all simple ways we can keep creativity flowing through the profession. **ff**

Would you like to be the voice of CAS Candidates?

The CAS Candidate Liaison Committee is looking for candidates currently taking CAS exams to join the candidate liaison committee as official candidate representatives. The selected candidates will be active participants on the *Future Fellows* editorial board.

Representatives are responsible for presenting candidate views to the committee to help identify issues that should be addressed by the CAS. The candidates must:

- Be a candidate for the Casualty Actuarial Society;
- Be active in the examination process (must have sat for a CAS examination within the last two sittings);
- Be willing to serve a two-year term;
- Participate in the Candidate Liaison Committee meetings (quarterly telephone conferences and an annual in-person meeting); and
- Provide one letter of reference from a CAS member.

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CLC: What Can Volunteering Do for Me?

By Diana Zaidlin, with input from Dan Tevet, FCAS, and Kari Palmer, ACAS

The CAS Candidate Liaison Committee (CLC) is quite a unique committee. While most CAS committees only accept CAS members as volunteers, the CLC includes both credentialed actuaries and candidates who are actively pursuing their designations. As such, there are two ways to join the CLC—CAS members can express interest through the participation survey that is released each summer, and candidates can apply to be candidate representatives.

What is the CLC?

The CLC's main focus is to keep the lines of communication open between the people making the decisions for the CAS and candidates who are deeply impacted by those decisions (whether those decisions involve the admissions process or the future direction of the organization). As the only committee which includes both actuarial students working towards a designation and CAS members, our goal is to extend the voices of our members in order to better represent the thoughts and concerns of our future fellows.

All members of the committee are volunteers from different backgrounds and with different views. Some of us began working in the actuarial field right out of college and were near Associateship when we became candidate representatives, while others joined the profession later in life or were earlier in the exam process. We are also from different geographical backgrounds to represent each region's own uniqueness. We will soon begin recruiting new volunteers to help us guide the next wave of actuaries through these interesting and uncertain times. Being part of the committee is not only about what others can learn from us, but also about what we have learned through our involvement.

For more information on the application process for candidate representatives, please see the blurb in this issue of *Future Fellows*.

We hope that you will consider applying, and in order to help you make that decision, here are some personal accounts of the value of joining the CLC. Though we encourage both actuarial candidates and credentialed actuaries to join, this article is geared more toward actuarial candidates (since the target audience of this publication is, after all, *Future Fellows*).

Diana Zaidlin

I joined the committee as a Candidate Representative in November 2012. I decided to join because I am a strong believer that getting involved can give me the extra drive to get through the exams and serve as a window to all the possibilities open to me once I become a Fellow. Also, as a Canadian, I felt that I could offer a unique perspective on matters that affect Canadian candidates who were not yet represented. During my short time on the committee so far, I have met some very driven, interesting people whose viewpoints and experiences opened my eyes to many possibilities. I have also greatly appreciated having the ability to ask questions directly to people who are so heavily involved in the CAS. Getting answers from knowledgeable, informed CAS members helps put my concerns at ease.

Kari Palmer, ACAS

Kari joined the CLC as a Candidate Representative in November 2011. Kari is heavily involved with the students at her company and even runs the Student Forum Committee, which holds a half-day forum every six months with three speakers (including both students and non-students). Due to her involvement in the forum, Kari thought that she could be a good voice for actuarial candidates. As the two roles complement each other she can take back some ideas of topics from which her organization's students might benefit.


Kari's highlights on the committee include writing an article about Exam strategies, in which she had the opportunity to construct and evaluate a survey on how students prepare for actuarial exams. She found that reading the survey results was both interesting and entertaining. She likes being kept in the loop on all of the changes going on within the CAS and seeing the other side of the coin. An example is why certain pass marks were set or why the CAS reacted a certain way to the Hurricane Sandy situation. Her most memorable experience was going to the annual in-person meeting in Chicago to match faces with names. It was interesting for her to hear from a variety of different perspectives ranging from insurance to consulting and even research, and yet feeling as part of a close team while brainstorming and working together.

Dan Tevet, FCAS

Dan joined the CLC in December 2008 as a Candidate Representative and became a full member of the CLC when he attained his ACAS in March 2010. Dan was interested in getting involved in the CAS before he was a member, and the CLC provided a great opportunity for doing so. Dan has enjoyed writing many articles over the years, and one that he particularly liked was "Research and Publication in the Actuarial World," in which he interviewed Glenn Meyers.

Dan's favorite parts about being on the CLC has been learning more about the admissions and examination processes and communicating candidates' concerns to CAS leadership. The connections that he has made with CLC members and others have been invaluable. Though he was initially concerned that CLC volunteer duties would conflict with study time, he found that that was not the case, as the CLC does not require a major time commitment and the hours are flexible. All in all, Dan found that being a Candidate Representative was a very worthwhile experience. He recommends that anyone who is interested apply, regardless of background or exam progress.

* * *

I greatly look forward to the remainder of my two-year term with the committee, and I hope that we have inspired some people to apply for a spot with us. This committee is what we make it. The possibilities are endless. 

Getting the Most out of the Examiners' Report

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graders for each question were looking for in responses that received full or nearly-full credit. This includes an explanation of common mistakes and oversights among candidates. Though candidates can lose points on any given question for a variety of reasons, common themes tend to emerge across the range of responses.

A common complaint among candidates is something like “We have no idea what you want from us!” This criticism is perhaps further magnified by the move toward testing at higher levels of Bloom’s Taxonomy, which tends to create more open-ended questions. While the Examiners’ Report will likely not completely address the open-ended nature of some exam questions, it does provide a valuable insight into the differences between responses that are comprehensive and those that are lacking in some way.

What the Examiner’s Report Is Not:

The report is not a guide to providing the minimally acceptable answer to each question. As stated above, the report describes what graders were looking for in perfect responses, not what they expected from the minimally qualified candidate (MQC). In fact, the report provides no insight into what the MQC score was for each question. For example, the report may include a sentence such as, “A very small number of can-

didates received full credit,” but the majority of candidates may have still scored above the MQC standard for that question. Likewise, just because a report says “Candidates scored well on this question,” doesn’t mean that the majority scored the maximum points.

Additionally, the report may not be helpful in the appeals process. In order for an appeal to be valid, it must demonstrate that a particular response, which was initially considered to be incorrect, should instead be given full or partial credit. Since the report is confined to the response(s) that were considered correct in the first place, it is unlikely to help in crafting an appeal, though it *may* provide guidance on whether a particular question is worth appealing.

So in summary, you should think of the Examiners’ Report as a tool to help you master the material, rather than as an aid to changing the outcome of a prior sitting or as a means of gleaning information about the MQC standards set by the Examination Committee.

The primary mission of the Candidate Liaison Committee is to communicate the concerns of candidates to CAS leadership. If you have any questions or comments on the examination process, or on any other topic, please feel free to share your thoughts with us by filling out the Candidate Liaison Committee Feedback Form. [f](#)

Predictive Analytics: ‘You’ve got to dig it to dig it, you dig?’

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First making his mark in the world of baseball analytics, Silver has now become most famous for his statistical analysis and predictive models of presidential and congressional races. The popularity of his blog, FiveThirtyEight, skyrocketed during the 2012 election season, resulting in the release of his bestselling book, *The Signal and the Noise*, and countless TV interviews and appearances.

Silver’s success could just be chalked up to him being a good modeler. He intuitively understands the situation he is trying to model. He is an avid baseball fan, which might be one reason why PECOTA (the system he developed to forecast player performance) is still used today in organizations across Major League Baseball.

But perhaps Silver’s biggest strength is his ability to effectively communicate his analyses to a broad audience. While he accurately predicted the electoral outcome of every state in the 2012 presidential race (and 49 out of 50 in 2008), he was able to do so in an understandable way, presenting his complex models

both graphically and verbally without watering down their content—such much so that FiveThirtyEight became one of the most visited pages on the *New York Times* site. That, I think, is the more impressive feat. Nate Silver is to predictive analytics what the journalist Malcolm Gladwell is to social sciences: two analytical minds writing about complex problems and making them both accessible and interesting to the casual observer.

As you prepare for a career in predictive modeling, you should make a concerted effort to read the work of writers like Nate Silver and emulate their writing styles in your own work. Note that Gladwell and Silver are only two of the many of great writers working in this space who are worth studying. Find their books and articles on predictive modeling, engage in self-study, and then utilize those skills on whatever data is available to you. Ultimately, if you are interested in learning more about predictive analytics, make sure you that you follow Monk’s advice: learn from the best people doing what you want to do. [f](#)

CAS Offers Online Course on Enterprise Risk Management

The next offering of the CAS Online Course on Enterprise Risk Management (ERM) is scheduled for October 4-21, 2013. Because the course presumes no prior knowledge of ERM, it may be of particular interest to CAS candidates who have not yet had the chance to be exposed to ERM practice in their actuarial positions.

The online course provides an opportunity for an independent self-starter with a busy schedule who wants an introduction to the field of ERM and wants to learn how actuarial skills and techniques are applied in ERM. The course consists of lectures, readings, a discussion forum, and an exam. The course is taught asynchronously so participants can fit the work into their individual schedules. The exercises and exam will be based on the lecture material and readings that will test the student's grasp of the subject matter.

The instructors include three professors from University of Illinois at Urbana-Champaign: Steve D'Arcy, Rick Gorvett, and Mark Vonnahme. They will cover the following topics over 12 lectures:

1. Introduction to ERM
2. ERM in Context
3. ERM in Practice
4. ERM Framework
5. Hazard Risk
6. Financial Risk
7. Operational Risk
8. Strategic Risk
9. Risk Metrics
10. Application of ERM
11. COSO Framework: PROs and CONs
12. Conclusion

For more details about this online course and to register, please visit the CAS Web Site at <http://www.casact.org/education/online-courses/index.cfm?fa=erm>.

Space is limited, so register online today! **ff**

Would you like to be the voice of CAS Candidates?

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To be considered for the position of Candidate Representative, your application and one letter of reference from a CAS member must be received at the CAS Office by August 16, 2012. The new

representatives will be selected in September and will begin a two-year term in December. **ff**

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*.

Future FELLOWS



Future Fellows is published four times per year by the Casualty Actuarial Society, 4350 North Fairfax Drive, Suite 250, Arlington, Virginia 22203.

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Subscriptions to the newsletter are complimentary to CAS candidates who registered for a CAS Examination during the previous two years.

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ISSN 1094-169-X

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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. 

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

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

New England Actuarial Seminars
www.neas-seminars.com/misc/
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