## Interview

# Mary Batcher, Ernest and Young, USA 

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Dr. Mary Batcher

The interview shown below was conducted by all eight spring 2012 students in the GWU Certificate program who were taking survey management. The questions were provided by the students to Dr. Mary Batcher ahead of time. The students were Brent Willig, Lia Katz, Matthew Rae, Basema Maki, Daniel Lee, Will Hayes, Christina Lee, and Robert Dehaan.

As will be seen, the interview flowed easily from first to last. Because the class was using the John F. Kennedy book Profiles in Courage, it was decided later to ask Mary to elaborate on one important incident where her professional courage was needed and, in fact, where her approach won out in the end, infecting others to stand for an achievable principle, too.

Dr. Batcher begins with the early efforts she made in getting a PhD. Surprisingly, she does not dwell on the
fact that she was raising four children during her doctoral studies. She, as we saw with the other interviewees, was very self-effacing. This has forced the editors, here and elsewhere, to add footnotes at various points where more details seemed needed.

Background In terms of my background, I started out by getting my PhD in statistics a long time ago. It took a while to decide that statistics was right for me. I changed around a few times.

Right after I got my doctorate, I met Fritz at a conference. I was working at the National Center for Education Statistics at the time. Fritz and I hit it off really well, and enjoyed each other professionally. He was [then] at the IRS. Maybe six months later or four months later, I switched over to the IRS. We both were there together quite a while and did a lot of "neat stuff." [Maybe] you don't typically think of the IRS as doing interesting stuff, but they do. ${ }^{1}$

Then, it got less interesting; Fritz left and the agency was getting beat up by Congress on a regular basis. It was a "Keep you head down and do nothing" mentality. It got worse and worse. By that time Fritz was at Ernst and Young (E\&Y), so I went over there [in 1997]. And I have been there ever since.

About my current job. What I have always looked for in my jobs is something [that links to my values and] that engages [me intellectually]. I am not a theoretical statistician, I really like applied work, but I like it to "engage and challenge." As long as I have that, I am happy wherever I am.

[^0]I lead the sampling practice at Ernest and Young. My title is "Executive Director." We design samples and analyze the statistics that result. We also do, on occasion, the other steps in the survey process.

> Student(s): You said it took you time to come to statistics, what influenced your decision? Was it your passion or was it practical?

[I got to statistics] almost by a process of elimination. I think I started as a French or English major. I ended up [as an undergraduate] in Sociology. When I went to grad school I looked at Sociology first. But you had to specialize. When I reflected, I realized that I really liked the statistics and methods classes. That kind of pointed me in the direction of statistics. A couple of classes were difficult. A couple of the mathematics classes took a fair amount of work. But generally it was stuff I liked to do.

Student(s): In an interview with AMSTAT news, when talking to a client you stressed the need to avoid jargon and work/ideas that clients are not familiar with. How do you balance being straightforward, but not being too deep? How do you balance the two?

Well, it takes patience and just talking to people. Not talking down to them ['obviously'] because they are smart people, but they just don't have the same background and history [we do]. They don't have to understand everything in statistics. They do need to understand how it's going to affect them and whether there is any risk. You have to explain enough. You have to put it in common sense language. In statistics, you have to get your head around quantifying uncertainty. So it is explaining concepts intuitively. You may have to introduce some terms of art.
[In responding to a question about the difference between working in the government and the private sector]

Many of you sound like you are in the private sector but you are not having someone come and explicitly buy your statistical services. At Ernest \& Young, we cater to big companies. We really don't pursue government contracts. $\mathrm{E} \& \mathrm{Y}$ is working with ilbig public companies. Those companies are willing to pay a premium for the big accounting firms. That's because in their heads there is credibility [for the advice]. So they are willing to pay a fair amount. Another instance is when they are looking for a specific type of expertise. I do some ligation work; the law firms are looking for a

Ph.D. in statistics and certain experiences. Again they are willing to pay because they have a lot at stake. They might in a ligation have millions of dollars at stake. Now we are not gouging them, in fact we might discount them $50 \%$ or $60 \%$. In the private sector, people are paying for the services and that is one big difference between public and private sector work; you feel that your services are valued because they are paying a lot of money for them. The work I did in government is valuable but the benefit is sort of amorphous. But when someone comes and put money down you know they value what you do. There is also the market, if we stop making money for too long we will be out of a job. It is as simple as that. We probably could last six months to a year but then we would be gone. It makes you very entrepreneurial; you just can't sit around and wait for the work to come in. You have to pursue it. You have to think, always to be watching and being opportunistic, looking for whatever comes. Our biggest friends are the regulators because they create a lot of work. So when the tax law changes or when the banking regulators go after the banks for robo signing and other stuff; that brings us work.

## Student(s): Has the health care bill helped?

Not yet. We have always done some health care work and if the health care changes are fully in place, what we do now will be magnified. Most of the work we do is look for billing coding/error on Medicare/ Medicaid billings. So if everyone has medical insurance there will probably be a lot more of that.

## Student(s): What is that makes you say "yes this is

 what we want to take on?"Actually we just decided not to bid on one. But then they came back and said nobody has responded so I think we are going to end up doing the work anyway. But they were looking for a statistician to support what they were doing. They wanted somebody to review. So if it is in the sweet spot, more or less for our group, and really seems like a good fit, that's what we are going for. We try to avoid (the competitive situation).

## Student(s): So the company is usually already working with the company when you guys are brought in?

Yes, relationships are really important in what we do. Everything is sold through relationships. Sometimes the process is competitive. But still we have a relationship to start with - someone to call up the buyer in the company or someone close to the buyer to find
out who else is bidding. You can sometimes get even more information, like what is the budget.

Student(s): As you move up to the next position, do you find yourself to be more of a manager or leader?

I think you always have to be both, and I think all of you all play both roles too. Somewhere in your life you're a leader as well as a manager. Leaders have to manage. They have to manage the relationships (that is one of the biggest things they have to do). They just can't walk away from it and say you do this and I do something else (you won't be a leader for very long, or you will be a leader with no followers). I think as you move up you focus more on leadership. But I think you can be a leader no matter where you are, because you lead with your ideas, you don't have to have a particular position to lead but you have to have the ideas and persuade people; it's a very powerful way to lead. If you have done your homework and are confident you will be leading. You just have to know what you are talking about and project confidence.

Don't ever let them see that you are uncertain. I was leading in some way from the very beginning. I guess I was looking for opportunities where there are new things going on. I don't know how much chance you get to lead if you are in a job that is totally defined and squashes you if you step out of it.

But if you have the opportunities to work on something new that hasn't been done before, then certainly try. You just have to remind yourself how good you are. You are sitting in this class. You already know stuff. By the end of this class you will know a lot more. You have taken a bunch of these classes. You already know more than most of the other people you work with and could probably take on the new tasks.

Student(s): The question I have is about confidence as a manager or leader, can you give an example where you took a risk and it didn't work out the way you wanted. Then what you did to fix and gain confidence from your staff?

Well there is this old hack saying, but it's true, you declare victory and you move on and that is pretty much what I have done. Because you don't ever crash and burn: I guess sometimes you do. But, fortunately, that hasn't happened to me. You do have small failures or big failures. Declaring victory means that things are not going well, not what you planned, and pieces are falling apart here and there. Still you say OK, we have done this and it's good. And we move on.

Student(s): In your career we are sure you had many heroic moments. Can you talk about one of these please and why it was heroic?

Let me go back about 15 years ago to my days as a manager and leader at the IRS. I ran a project called the Integrated Test Call Survey System (ITCSS). This was in an era where everything was mainly paper, anyway largely before we had extensive electronic filings and surveys, like we do today.

Companies had electronic filing but most people were still filing paper returns. The IRS had a telephone assistance program for individual taxpayers to call and get help. IRS assisters would answer taxpayer questions about their filings.

Now the GAO had tested the responses and found that the accuracy rate was not acceptable, it was something like $67 \%$. The IRS was quite concerned about this and got called before Congress. There was a lot of bad press and the problem was receiving attention at the Commissioner (Larry Gibbs) level.

At first the IRS managers were "in denial." They thought the GAO testing was inaccurate and they decided to do their own program, do it right, and thought the accuracy rate would be higher. That program was the ITCSS (Integrated Test Call Survey System). It was statistical and consisted of a set of scripted questions, trained people to make blind calls posing as taxpayers, to the telephone assistance call sites. The sample was fairly complicated. It rotated through all the sites, at all the times of the business day. The questions were carefully developed with the help of IRS Council and questioners were trained. It was also, interestingly enough, co-developed with the GAO to some extent.

Anyway, the IRS did their big program of test calls. Lo and behold they found their measured rate of accuracy was lower than the GAO's. That caused quite a lot of consternation within the agency.

Student(s): What happened? What did the IRS do after they found out that their highly statistically reliable results were even worse then their critics said they were?

First, I think there was still some denial. For a time we doubted ourselves. But the statistical design was solid. This was a well-designed program. Now the initial IRS reaction was understandable, especially at the local call sites. To their credit, though, the IRS Executives after checking with the statistical and operational groups accepted the premise that the Service had a problem. How to fix it became the issue?

The IRS then started programs to improve the system. But one of the first things that I did was to visit the local sites, the places where the assistors were, and where they answering these questions incorrectly. I had to get them to understand that the measurement was accurate. Some of the people from taxpayer services went out, I went out to talk to those people, to explain the system to them and to get them to really acknowledge and understand there were problems. To their credit, they stepped up really fast to deal with the issues. They always monitored the telephone assistors, but they started to look at the problems of how they were monitoring. The fact that the people that were doing the monitoring was well known, friends perhaps of the assistors or even if they weren't friends they were people that think "oh I already buzzed in on this person twice today and I will just let this go." Anyway, the outreach we did was effective. The IRS Call sites decided to try to find a way to fix the problem-tTo solve the problem and not to criticize the critics.

## Student(s): How did it all turn out?

I don't remember all of the different things the call sites tried. I do know there were natural experiments going on throughout the country to try to affect improvement and there was sharing of what they did with each other. Over the next couple of years, a major part of the success of the ITCSS program and the accuracy improvement was this program. Part of the commitment of upper management was to continue this measurement program, not to kill it. The program continued for two or three years at least and over that time the numbers kept getting better and better. The measurement got more and more rigorous too I would say, because we were recording actually questions and scripting our test questions from those. We were doing more and more to improve the training of the people making the calls to improve the measurements so that improvement in the numbers was real.

Student(s): Your heroism and stubbornness and that of your fellow statisticians seemed to be infectious?

With our help the IRS actually solved the problem when they realized they had to solve the problem. For more details on this I have provided some references.

One last footnote here-During those years some newspapers were doing a small sample of 100 questions. Now they were finding at the beginning that the GAO was doing the same as they were doing, which was not very good. Later on, after IRS had gotten a
lot better, and were sampling thousands of time with high reliability, there was one year, just by chance the newspapers got a better answer than IRS did. I urged the IRS to tell the newspaper their numbers were better than ours and it was just by chance. They didn't do that.

Then the next year the situation reversed just by chance, because we all know, as statisticians, there is variability around the measurement of the true value so sometimes it is going to be up sometimes it is going to be down. The chance happening in your favor one time is going to against you the next in the randomness of the situation.

Fritz: One of the things Mary, that I remember particularly attributed to you is the fact that heroism is contagious. The person who can, in a matter of fact, careful way, say simply is this the best we can do, can say you can do better, please do better and they did do better, God bless them.

Mary: Yes, I agree. I think there was several heroes in that situation. Fritz was a hero; I guess I was a hero, Paulette Sewell was a hero; Tom Marussin was the branch chief who took a lot of the grief from the field operations because of the measurements. Bob (whose name I cannot remember) was the Assistant Commissioner for Taxpayer Service. He stood very tough (and Larry Gibbs, who was the Commissioner, was personally involved and committed; it was an amazing moment). So it was a transformation and the transformation happened because you had support from the upper management, and accurate measurement. The people couldn't deny; they had to accept the fact of that evidence, they had to change. They stepped up to the challenge and made the change. They got rid of bad assistors, they retrained, they enhanced training. The gated the calls (that was the innovation, they sent the questions to experts on those topics, and that really was really obvious, but it wasn't obvious at the beginning). The specialization where if the call was in a certain area it went to a specialized person. That was the discovery that happened in a couple of call centers and was communicated to the rest and became standard practice. It made a huge difference.

Fritz: They were in denial, but once the call centers figured out what to do different and improve their rates by 20 percent, by just gating the calls everybody got the message and the whole world changed for the better. Thank you, Mary.

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[^0]:    ${ }^{1}$ Dr. Batcher recounts one of the IRS incidents at the end of this interview. This material was added later in a small reinterview with her. Some material was omitted for space reasons.

