THE STATISTICAL CONSULTANT



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So long, Farewell... Message from the Past-Chair



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Our section continues to grow and to make contributions to our professional meetings, our profession, and our communities. Those who were able to be with us in Montreal this past year participated in a number of outstanding sessions, organized this year by 2013 Program Chair

Nan Hu and 2014 Program Chair Nick Pajewski.

Section leadership is discussing future webinars related to statistical consulting, and members' input on topics would be timely. Also this year, webmaster Chuck Kincaid gave us a fine transition from an external website to an ASA microsite. The microsite is automatically linked by ASA staff to a number of resources, including the current officers and current charter, and there is considerable opportunity for us to add components useful to section members. To see the full resources on the microsite, please remember to sign in to the ASA website with your password and then go to 'ASA Community,' then look for your own name and click on 'My Communities,' then scan down to Statistical Consulting Section, and click on 'Visit microsite.'

There has been avid discussion of a variety of topics on the Statistical Consulting listserver. Recent threads ranged from the PStat professional accreditation; liability insurance for statistical consultants, which attracted the attention of the ASA Executive Director; resources to use when teaching statistical consulting; how to start a consulting business; plus a variety of technical topics. Our membership is extremely thoughtful and considerate regarding queries and other postings by section members, so please don't be shy to post.

As electronic media continue to advance far beyond the meetings-newsletter-listserver paradigm, the Executive Committee would like to hear members' thoughts about electronic resources and venues that would benefit section members, and particularly members who cannot attend the August Joint Statistical Meetings or the February Conference on Statistical Practice. Please send your thoughts to Executive Committee member Chris Barker (chris.barker@barkerstats.com).

Also this year, a subcommittee led by Section Chair-Elect Walter Ambrosius reviewed the Section Charter and proposed revisions, which have now been approved by the Executive Committee. Section membership will vote on the revised charter in the 2014 ballot. The executive committee also established formal section liaisons to several related activities and organizations, including Statistics without Borders (Nilupa Gunaratna); Student statisticians at StatCom (Eric Vance and Andy Hoegh); Committee on Isolated Statisticians (Ralph O'Brien); Committee on Career Development (Chris Holloman); and Committee on Applied Statisticians (Eric Vance.)

As Section Past-Chair, I will be chairing the nominating committee this year, so please send suggestions for future officers (marlene.egger@hsc.utah.edu).

I want to leave you with some thoughts articulated by Peter Block, in his classic book, Flawless Consulting¹

¹Peter Block. Flawless Consulting: A Guide to Getting Your Expertise Used. (2nd ed.) San Francisco: Jossey-Bass/Pfeiffer, 2000.

"In the end, it is our authenticity, the way we manage ourselves, and our connection to our clients, that is our methodology, our marketing strategy, and the fruit of our labor. The fact that we show up with a briefcase, a resume, and a conceptual framework is more a function of habit than necessity. It will be enough if we simply show up. And that is the heart of the matter"

An Interview with Doug Zahn



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The following is an interview of Doug Zahn, the 2009 inaugural recipient of the W. J. Dixon Award for Excellence in Statistical Consulting, conducted by Eric Vance, director of the Laboratory for Interdisciplinary Statistical Analysis (LISA) at Virginia Tech.

Doug Zahn earned his PhD in Statistics from Harvard University in 1970. He was an assistant, associate, and full professor of statistics at Florida State University (FSU) from 1969 until his retirement in 2005, with a visiting stint at Harvard in 1978-79. A few of his current projects include: writing a book about systematically improving statistical practice; participating in former ASA president Bob Rodriguez' "Personal Skills Development" initiative by conducting a workshop on statistical consulting and collaboration for the 2014 JSM in Boston; being available as consultant and coach to several young statisticians across the country on a regular basis; enjoying retirement with his wife Andrea and his sons and their friends; gardening and yard work.

Eric Vance [EV]: The W. J. Dixon Award for Excellence in Statistical Consulting is given annually by ASA to a distinguished individual who has demonstrated excellence in statistical consulting or developed and contributed new methods, software, or ways of thinking that improve statistical practice in general. In 2009 you became its first ever winner. Why do you think you won the award?

Doug Zahn [DZ]: I think I won it because my colleagues at FSU and I introduced video and video-based coaching to the education and career development of statistical consultants. What eventually evolved was a process for systematically improving the quality of statistical consultants' interactions.

EV: One of the things you are known for is teaching non-technical skills essential for effective statistical consulting as detailed in *The Human Side of Statistical Consulting*, published in 1981 by you and James Boen. When did you realize that these skills were so important for statistical consultants?

DZ: This started just before my first son was born. I was terrified about being a new father so I took a Parent Effectiveness Training course, which introduced me to a new way of parenting. I started thinking about treating children with respect, valuing their opinions, and asking them questions. This led to thinking and reading about psychology and how it relates to parenting and also to consulting.

At a JSM in the early 1970s, I attended a talk by Jim Boen on Eric Berne's work on Transactional Analysis. Boen showed how Berne's Parent-Adult-Child model was also applicable to the Client-Consultant relationship. Once I began applying these concepts to statistical consulting, a whole new panorama opened up for me to see new tools and concepts for improving consulting. I realized that the psychology and parenting books I was

reading also applied to statistical consulting and teaching; one just needed to change the words.

EV: What influenced you to video record your statistical consultations and use them for teaching consulting?

DZ: In the 1970s Boen said that he had been videoing himself and his students and found it to be most informative. He told me to do it in 1975. He told me again every year until 1978, but I was "too busy to do it." The truth of the matter was I didn't have the nerve to do it. In 1978-79, at Harvard as a visiting professor, I taught a consulting course for the first time. The video resources at Harvard were so easily available that I could no longer fall back on my "too busy" excuse and I videoed a consultation. The problem now was that I did not know how to analyze these data.

When I returned to FSU I met Dan Boroto, a clinical psychologist who did know how to analyze video data to produce useful information that could be used to assist consultants to improve. We decided to develop the first statistical consulting course to use video-based coaching to systematically improve students' consulting skills.

During the second year of our course in 1981, an event occurred that transformed my view on video and my career. Up to that time, I was using video largely because it seemed like a natural statistician thing to do: gather data to improve a process. I was not too excited about it.

Then came the day I videoed my meeting with a client I thought poorly of, to put it mildly. In my mind the session was a disaster because the client refused to take my advice to take a statistics course. Dan challenged my assessment. After a two-year struggle, I came to see the large part my attitudes played in producing the disaster:

- I had decided that her problem was not worth my time and that the only way she could survive was to take a statistics course.
- I totally ignored her input on these points, regarding my point of view as much superior, "highly recommending" that she take my advice.

She was a strong enough client so that arrogance, force, and attempted intimidation on my part did not work. It was not one of my finer moments! I realized that had it not been for the video, I would never have had these insights. I saw the impact of these insights on my career and became excited about video's potential to help statisticians systematically improve all aspects of their practices. Developing this potential for improvement became-and still is-my life work.

EV: What advice do you have for other statisticians?

DZ: Practice what you preach. Apply statistical thinking to yourself and your practice.

Systematically improve the quality of your professional services by regularly videoing each of your major professional activities (consulting-collaboration, teaching, supervision, administration, etc.). Using video allows you to see and hear what your clients see and hear. You will discover where there is room for improvement in your practice.

To capitalize on these opportunities for improvement, you need to learn how to analyze these data so that you can extract actionable information from the videos. Implement this information and assess whether you have improved your performance. To begin to teach others how to do this, my colleagues and I led a session at the

2013 JSM in Montreal: *Understanding and Improving the Non-Statistical Aspects of Client-Consultant Interactions*. There will be a follow-up workshop at the 2014 JSM in Boston that will teach how to use video and other aspects of effective statistical consulting and collaboration.

Find 1-3 partners who are willing to join with you on a journey to systematically improve your professional practices.

EV: What advice do you have specifically for statistical consultants?

DZ:

- Your attitudes about your clients have a large impact on how well you work with them. To become aware
 of your attitudes, video a consulting session and watch it with someone you trust.
- It's impossible to force a client to do anything. It is dangerous to provide advice that is needed (in your opinion) and not wanted (in your client's opinion). Police who intervene in domestic violence demonstrate this. Everyone agrees that the couple needs help. But they do not want it and, too often, end up attacking the officer.
- The more you know about a particular subject, the higher the risk that you become "information-proof." This is a condition in which you reject any input from outsiders, especially clients, because, after all, you are an "Expert." To accept input would acknowledge that there may be some aspect of this topic that you do not know.
- Suppose you have worked in an area for many years and that your client disagrees with your advice. My suggestion: "I've thought about that issue long and hard. My thoughts and activities over the past 20 years lead me to believe that... slshape Help me understand how you have come to your conclusion because I may well have missed something. You may be seeing something that I am not." This has to be an authentic query stemming from curiosity and a willingness to be open to the possibility that the client knows something you do not.

EV: Where do you see the field of statistical consulting going?

DZ: I see two paths ahead. Along the path straight ahead, the status quo path, I think the field is at risk of going into decline if it comes into competition with consultants with statistical knowledge from other disciplines who are masterful working with clients in both technical and non-technical aspects of their projects. It does matter to clients how they are treated in the non-technical aspects of consulting. Sure the clients want high quality service, but a large fraction of consulting problems can be handled without a PhD in statistics. We do not have a corner on the market.

The second path is based on a much broader recognition by those in our profession that it is not enough to have only hot-shot technical skills. It is also necessary to have the non-technical skills to communicate our technical knowledge effectively enough so that it is implemented. If enough people in our profession get serious about systematically improving our practice by collecting and analyzing data on what we do as statisticians, both technically and non-technically, then the second path is open to us.

EV: How do we go down this second path?

DZ: We have to systematically educate our current statistics students in the non-technical skills essential for their success. And we have to improve the non-technical skills practiced by statistical consultants on the job in business, industry, and government.

One way to begin on this second path is for every statistics graduate program to teach a statistical consulting course that educates the students on how to interact with clients effectively to solve real-world problems. A key part of each of these courses would be videoing role plays and actual consultations and using the video as a basis for coaching the graduate students to improve their skills. This involves learning how to analyze video data. Implementing an on-going course like this would be a useful practice for quantitative groups in business, industry, or government. The same set of activities could be used there to systematically improve their technical and non-technical skills.

Chair's Column — Report from 2013 Charter Review Committee



Walter Ambrosious
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The Statistical Consulting Section's charter was last revised in 2010. The charter no longer reflects the actual practice of the Section nor does it conform to some ASA standards. To this end, a committee was formed from the officers to review the charter and make recommended

changes.

A version with tracked changes is available in the library on the Secton's ASA microsite (http://tinyurl.com/nm9yw7q). Very briefly, the changes clarify:

- which officers are elected vs. appointed,
- that all officers are voting members of the Executive Committee,
- that the program chair will propose the upcoming JSM program to the Executive Committee for approval,
- and that a charter committee will be formed to review the charter every three years.

Please review the these and a few other proposed minor changes to the charter. A vote on the proposed changes is anticipated to appear on the 2014 ASA ballot.

Many thanks to the 2013 Charter Review Committee members: Walter Ambrosius, Margaret Nemeth, Nan Hu, Ann Lazar, and Stuart Gansky.

New Section Microsite



Chuck Kincaid Experis

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The Statistical Consulting Section has a new website that brings our section into the 21St century and connects us more with the ASA. The old website will not be maintained anymore. Everything has been ported over to http://community.amstat.org/CNSL/Home.

The Section's new website is embedded within the ASA website, and as such the website is interconnected to

the ASA Communities and each memeber's personal profile. Many ASA members are already familiar with the capabilities of this popular resource. To navigate to the Section's website from the ASA Community, click on the "Visit Microsite" button located on the "My Sections" page (Figure 1).



Figure 1: Screen Capture of the Section's Microsite Link on the My Sections Page

The website will serve as a valuable tool for the Section officers to communicate to the members. All information about the Section is contained within the site: Current Officers, Newsletters and Brochures, Business Meeting Minutes and Tresurer's Reports can be accessed.

The website is also meant to serve the membership. On the front page, there are simple instructions for getting started (Figure 2).

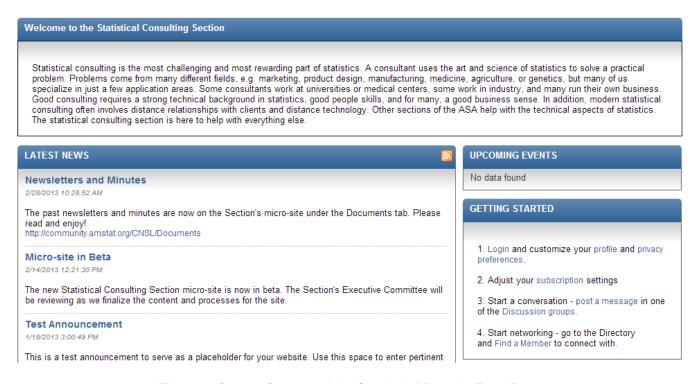


Figure 2: Screen Capture of the Section's Microsite Front Page

If there are features or functionality you would find valuable, please e-mail the Section's webmaster chuck.kincaid@experis.com.

Headlines and Announcements

Incoming Officers for Statistical Consulting

The results are in! The following officers were elected to terms starting in January 1, 2014. Congratulations to all and thank you for your willingness to serve.

- Chair-Elect Eric Vance, Virginia Tech
- Program Chair-Elect Kim Love-Myers, University of Georgia
- Executive Committee at Large (2014-2016) Scott Berry, Berry Consultants

JSM 2014 Boston Abstract Submission Deadline February 3, 2014 _

The JSM 2014 Abstract Submission Deadline is **FAST** approaching. Authors are encouraged to submit papers on the theme set by 2014 ASA President Nathaniel Schenker, "Statistics: Global Impact - Past, Present, and Future."

For more information on abstract submission guidelines, contact:

- 2014 Section Program Chair Nicholas Pajewski— npajewsk@wakehealth.edu
- 2014 Section Roundtable Chair Kim Love-Myers— krlove@uga.edu
- ASA Website http://www.amstat.org/meetings/jsm/2014/abstracts.cfm

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Section on Statistical Consulting Microsite

http://community.amstat.org/CNSL/Home

You'll find all information relating to the Section on Statistical Consulting, including our charter, officer list, section activities, past issues of *The Statistical Consultant*, minutes of past meetings, and more.