

# **Secrets to Effective Communication for Statistical Consultants**

August 5, 2013

Section on Statistical Consulting,  
Statistics Without Borders

Joint Statistical Meetings (JSM)

Montreal, Canada

# Quote of the Day

**“Communication works for those who work at it.”**

John Powell

# Panelists

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# Organizer/Chair

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# Acknowledgments

We would like to thank the following colleagues for their invaluable help in shaping up this session:

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# Audience Makeup

**How many of you are:**

- Consultants with < 5 years of experience?
- Consultants with 5 to 10 years of experience?
- Consultants with 10+ years of experience?
- Aspiring Consultants?

# Audience Background

**How many of you consider yourselves:**

- Great communicators?
- Good communicators?
- Communicators in need of some assistance?

# Audience Needs

Please turn to the person next to you and share in the next 60 seconds **what you hope to gain from this session.**

# Session Setup

We will share secrets to **effective communication** for preventing or solving **real-world problems** faced by statistical consultants.

We will provide you with **additional resources** at the end of the session.

We will provide you with an opportunity to **ask questions** during the question period.

# Effective Communication

In the context of statistical consulting, effective communication is the successful interface between the client needs and the consultant deliverables.



# Why is effective communication important?

- Key to business success.
- Generates trust and respect.
- Builds expertise.
- Generates repeat business.
- Helps prevent/resolve conflict.

# Our Message for the Audience

**Effective communication is a learnable skill but also an attitude of mind.**

Communication as a Learnable Skill	Communication as an Attitude of Mind
<ul style="list-style-type: none"><li>- Non-technical skills</li><li>- Technical skills</li></ul>	<ul style="list-style-type: none"><li>- Having a positive and flexible mindset</li><li>- Being of service (but not a servant!)</li><li>- Being on the client's side</li></ul>

# Secret # 1 (Colleen)

## Establish rapport with the client.

- **What is Rapport?**

Rapport occurs when two or more people feel they are in sync or on the same wavelength because they feel similar or relate well to one another

- **Why is Rapport important?**

It builds trust and trust is the foundation of relationships.

- **How do you build Rapport?**

- Mirroring and Matching

- Be familiar with different communication styles and adapt

# Secret # 2 (Ralph)

**Maintain a professional attitude throughout the consulting process.**

- Don't make excuses.
- Follow through on promises.
- Be punctual for your meetings.
- Answer e-mails and phone calls promptly.
- Confirm everything in writing.
- A sincere apology is sometimes appropriate.
- Respect the client's expertise in their field.
- Aim to under-promise and over-deliver.
- Maintain your professional standards and integrity.

# Secret # 3 (Ralph)

**Ask about client's preferred means of communication and desired frequency of communication.**

- Will the client need an initial meeting?
- Will the client need status updates at various stages of the project?
- Will the client need to meet in person or via phone to discuss final results?

# Secret # 4 (Ralph)

**Ask the client to explain the importance of the project to them or their company.**

- What is the bigger context?
- How will your results impact the client or their company?
- How will your performance affect your ability to get repeat business?

# Secret # 5 (Elena)

## Uncover the client's real needs.

- Ask as many questions as necessary, but be mindful that the client is a busy professional.
- Rather than asking open-ended questions, offer some possible answers that the client can choose from.
- Pay close attention to what the client says but also to what they don't say.
- Focus on what you need as a professional from the client to get the job done.
- Don't get drawn into the client's lack of purpose, organization or management.
- Do not work with clients who insist that you should produce their desired outcome.

# Secret # 6 (Ralph)

## Confirm deliverables with the client.

- Do all deliverables make sense? If not, work with the client to identify proper deliverables.
- Does the quality of the data support the deliverables?
- Does the statistical analysis plan support the deliverables?
- If budget is limited, can the deliverables be prioritized?

# Secret # 7 (Ralph)

## Confirm time estimates and deadlines with the client.

- Break the project down into several manageable tasks.
- Be accurate in your assessment of how long each task will take to complete.
- Allow for the possibility that things will take longer than expected (assume that if anything can go wrong, it will).
- Allow for back-and-forth communication with the client.
- Factor in all other current demands on your schedule, as well as any future demands.

# Secret # 8 (Jack)

## What should be included in a contract

- Information needed from a client
- Client deliverables
- Time schedules
- Software
- Confidentially
- Invoicing

# Secret # 9 (Jack)

## What to look out for in your contract

- Penalty provisions
- Review by an attorney of larger contracts/agreements
- Written assurances that some provisions do not apply to you

# Secret # 10 (Elena)

**Inform the client on possible approaches for solving their problem and use your professional expertise to recommend the optimal approach.**

Optimal approach should:

- Take into account the client's level of *statistical literacy*;
- Relate to the *client's needs and concerns*;
- Achieve the right balance between *simplicity* and *complexity*;
- Reflect *time* and *budget* constraints.

# Secret # 10 (Elena) – ctd.

Remember that the client is usually interested in understanding:

- ❑ The core message of the optimal approach;
- ❑ The key statistical concepts involved in this approach.

Consultants can convey the core message and the statistical concepts pertaining to the optimal approach using communication tools such as:

- Conversation
- Presentation
- Charts
- Tables
- Graphs
- Reports

All of these communication tools need to target the particular level of statistical literacy of the client. They should be simple and to the point and should not contain useless technical details.

# Secret # 10 (Elena) – ctd.

Statistical concepts that often pose challenges to clients include:

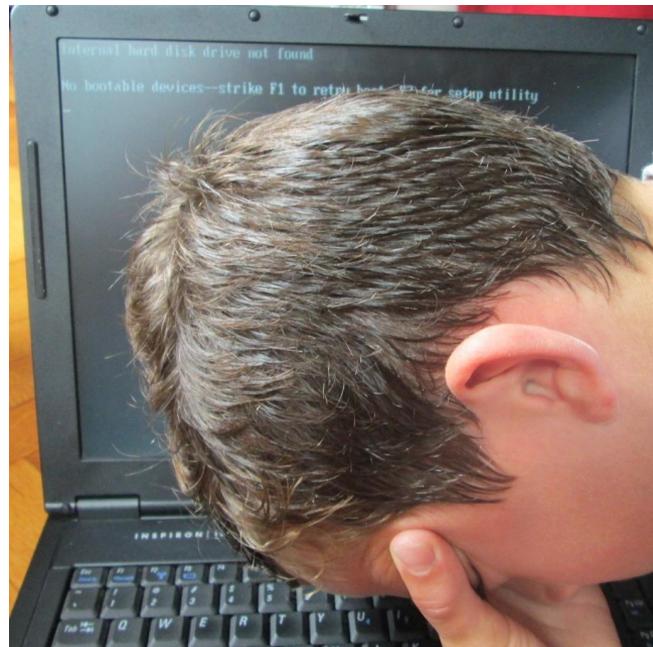
- Statistical Significance
- Sample Size
- Correlation
- Bias
- Odds Ratios
- Multicollinearity
- Independent samples vs. matched pairs
- Continuous versus binary responses

When explaining these concepts to the client, remember that the client's intuition is not always their best friend.

The use of handouts, visuals and other supplementary materials will improve the client's understanding of what the consultant has to say.

# Secret # 11 (Alan)

**Keep the client in the loop about any anticipated or unanticipated challenges that you encounter while working to solve their problem.**



# Secret # 12 (Elena)

**Provide regular updates to your client on the number of hours spent working on the project.**

- Keep track of hours worked on a project
- Update client on a regular basis on hours spent on their project and what was accomplished  
*(clients want to know what was accomplished, not just how long it took)*
- Avoid waiting until the project is complete to communicate hours spent on project to client  
*(clients generally do not like surprises)*

# Secret # 13 (Colleen)

**When communication isn't working, it's time to reflect, get motivated, and take action.**

Conflict is inevitable and difficult for everyone. The secret is to find effective ways to address it.

- **Know your current response.**  
Avoid, Give in, Passive-Aggressive, Bully the other person, Compromise, Problem Solve Together, Honor the Other Person
- **Get motivated to deal with the conflict. It takes effort to change.**
  - What does it cost you and/or the client?
  - What's good about it or could be good about it for you and/or the client?

# Secret # 14 (Colleen)

**Once motivated to improve communication, take action and focus on what is doable.**

- Use Truth Talk to discover what's going on for you.
- Find the 1% you agree with and agree 100% with it.
- Focus on the real want or need. (revisit secret 4 and/or continue to explore this)
- Consider taking a break or calling it like it is.
- Consider using a coaching model such as GROW (goal, reality, options, way forward)

**\*\*\*\*Communicate in person or by phone if at all possible.**

# Secret # 15 (Colleen)

**Use reflection after meeting with your clients to understand what worked/didn't work.**

- What was great about the meeting?
- What did you do well? *(list 3-5 items)*
- What would you do differently? *(limit to 1 item)*

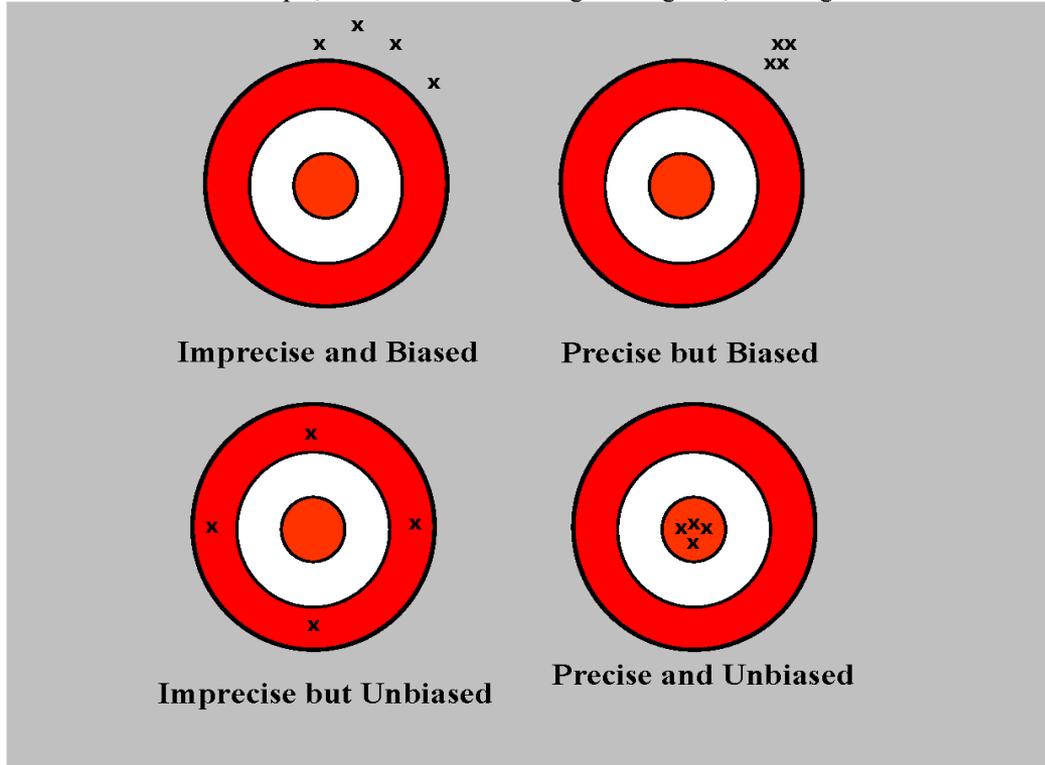
# Secret # 16 (Alan)

**Present your findings in a clear and impactful way.**

- KISS (Keep It Simple Stupid)
- For longer written documents or reports, include tables or figures when you need to present more than 2 or 3 numbers.
- The tables and figures should flow with the text and serve to highlight or further explain the concepts.
- Put any necessary math or complex calculations in the appendix or footnotes.

# Secret #16 (example)

An estimate is precise if it consistently produces the same result in repeated applications. An estimate is accurate if it approximates the true difference or value being estimated. We call an inaccurate estimate “biased” and an accurate method “unbiased.”<sup>1</sup> To demonstrate these concepts, consider the following four figures, showing the results of four dart throwers.<sup>2</sup>



<sup>1</sup> The statistical term bias, unlike the lay term, does not imply intention.

<sup>2</sup> These charts are adapted from Kelley, W.D., Ratliff, Jr., T.A., and Nenadic, C., *Basic Statistics for Laboratories: A Primer for Laboratory Workers*, Van Nostrand Reinhold: New York, 1992.

# Secret # 17 (Alan)

**Be clear about the limitations and implications of the findings you produce for your clients.**

# Remember

Effective communication is a **learnable skill** but also a **state of mind**.

Act like an effective communicator and you will become one.

Your communication skills will be challenged every now and then – use challenges as an opportunity to grow and learn new things.

When encountering a challenge, remain positive, objective and open-minded so that you can make the best decisions possible for you and your client.

# General Communication References

- **The Coward's Guide to Conflict, Empowering solutions for those that would rather run than fight**, by Tim Ursiny, PhD.  
([www.advantagecoaching.com](http://www.advantagecoaching.com))
- **You Already Know How to Be Great**, by Alan Fine  
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([www.insideoutdev.com](http://www.insideoutdev.com) )

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- **Power of Communication:** *The Skills to Build Trust, Inspire Loyalty, and Lead Effectively*  
by Helio Fred Garcia (Pearson Education, 2012)
- **Improve Your Communication Skills,** Rev. 2<sup>nd</sup> Ed.  
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- **Communication Skills for Effective Management**  
by Owen Hargie, David Dickson and Dennis Tourish  
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- **Listening: The Forgotten Skill**  
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by Madelyn Burley-Allen (Wiley, 1995)

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- **Beyond "Hello":** *A Practical Guide for Excellent Telephone Communication and Quality Customer Service*  
by Jeannie Davis and Pat Landaker  
(Now Hear This Inc, 2000)

# Technical Communication References

- **Effective Communication Skills for Scientific and Technical Professionals**

by Harry E. Chambers (Perseus Publishing, 2001)

# Presentation References

- **Presentation Zen**

*Simple Ideas on Presentation Design and Delivery,  
Second Edition*

by Garr Reynolds (New Riders, 2012)

- **Slide:ology**

*The Art and Science of Creating Great Presentations*

by Nancy Duarte (O'Reilly Media, 2008)

- **Effective Presentation Skills**

*A Practical Guide to Better Speaking*

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*45 Key Steps for Better Managing E-mail Overload*

by Randall Dean (Sortis Publishing, 2009)

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*How to Write and Manage E-mail in the Workplace*

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- **E-mailing**

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# Social Media Communication References

- **Blogging for Dummies**

by Susannah Gardner and Shane Birley

(For Dummies, 2012)

- **How To Tweet, The Basics**

*Dos and Don'ts for Newbies (Using Twitter)*

by Kathi Flynn

- **Become really effective on Twitter in just 5 days**

by Andrew Knowles (Writecombination Ltd , 2013)

# Thank you!

Thank you for attending our session!

If you have any questions related to  
this session, please e-mail  
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