

Communication Skills for Life Sciences Professionals

Presenting Technical Information to Non-Technical People





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This e-book was assembled from work done by the team of Executive Communication Coaches at The Speech Improvement Company. Visit us at www.speechimprovement.com

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Introduction: Why This Matters to Life Sciences Professionals

In the fast-paced, highly regulated world of life sciences, effective communication isn't just a leadership skill—it's a critical success factor. Yet, many managers in life sciences didn't set out to be leaders—they began their careers as scientists, researchers, or technical experts. Trained to analyze data, design experiments, and solve complex problems, they excelled as individual contributors. However, the skills that earned them recognition in the lab often don't translate seamlessly to the demands of leadership. Most never received formal training in management communication while in school, nor did they develop these skills early in their careers.

Now, as managers, they're expected to communicate in ways that inspire teams, persuade stakeholders, delegate tasks effectively, and motivate performance. They must deliver presentations that secure funding, provide clear guidance in high-pressure situations, and handle sensitive conversations with diplomacy and tact. In short, they need to influence and lead—not just inform. And in an industry where the stakes are high and the margins for error are slim, these communication skills can't be left to chance.

Whether navigating complex clinical trials, ensuring regulatory compliance, or leading cross-functional teams, life sciences executives and managers operate in an environment where clarity, precision, and impact are non-negotiable. Poor communication in this field doesn't just lead to missed deadlines or budget overruns—it can jeopardize patient safety, derail regulatory approvals, and erode organizational trust.

This e-book bridges that gap. It provides life sciences executives and managers with proven strategies, tools, and techniques to master the art of management communication. Drawing on 60 years of experience coaching leaders at companies like Merck, Johnson & Johnson, BD, and Blue Cross Blue Shield, the insights here will help you communicate with authority, empathy, clarity, and confidence—skills essential for leadership in today's life sciences landscape.

By strengthening your ability to connect, influence, and inspire, you'll not only drive better outcomes—you'll build trust, align teams, and lead with impact in one of the most complex and consequential industries in the world.

Dr. Chas Womelsdorf Executive Communication Coach





Presenting Technical Information to Non-Technical People – Recorded Lesson



You know the look—it's in their eyes: they're glassed over, or half-closed, or looking down at their laptop/phone. Key people are not hearing the incredibly exciting, groundbreaking research you're providing. When more than one person disconnects, it can be excruciating.

In this <u>44-minute recorded lesson</u>, Executive Communication Coaches <u>Dr. Ian Turnipseed</u> and <u>Melody Elkin</u> will teach you four important techniques for conveying complex information:

- 1. Understanding human patterns of reasoning
- 2. Being truly persuasive
- 3. Organizing your thoughts for greater impact
- 4. Thinking on your feet

You'll gain skills you can use immediately to speak more clearly, confidently, persuasively and with the right technical and scientific content, whether one-on-one, in a small group, or in front of thousands.





Are You Always in the Weeds? Understanding Your Mindset is the Key to Stopping!



by Robin Golinski Executive Communication Coach

When communicating up the corporate ladder, the ability to curate information effectively is crucial. However, many people fall into the trap of oversharing details, driven by underlying psychological factors that can undermine communication effectiveness.

One of the primary reasons people feel compelled to overshare is the **desire to validate their worth**. The mindset of proving you've done a lot of work often stems from a need for recognition and approval. By sharing every detail, individuals might hope to demonstrate their diligence, competence, and value to the organization. However, this approach can backfire, as it overwhelms the listener with information that dilutes the core message. Instead of being perceived as thorough, they risk being seen as unfocused or even insecure.

Another factor is the **fear of being perceived as unprepared or uninformed**. Some people equate brevity with a lack of knowledge, believing that by providing more details, they can protect themselves from scrutiny or criticism. This belief can stem from a lack of confidence or an overestimation of how much information others need to see them as credible. Yet, this attitude often leads to information overload, which can frustrate senior



leaders who are pressed for time and need clear, concise insights to make informed decisions.

The inability to ruthlessly curate information may also be influenced by a **perfectionist mindset**. Perfectionists often struggle with the fear of leaving out something important, leading them to include excessive details "just in case." This cautious approach, while well-intentioned, can hinder effective communication by cluttering the message with unnecessary information.

To overcome these inhibiting attitudes, it's important to shift the focus from proving oneself to serving the needs of the listeners, "It's not about *you*!" Recognize that clarity and relevance are valued far more than sheer volume of information. By distilling your message to its essential elements, you not only demonstrate respect for your listeners' time but also convey confidence in your judgment and decision-making abilities.





The Importance of Brevity When Presenting Technical Information



by Laura Mathis Executive Communication Coach

Think back to your English classes in school. Do you remember the haiku poems you might write for your mom on Mother's Day, or about love on Valentine's Day?

Haikus present us with nuggets of wisdom and beauty. The simplicity of the 5-7-5 syllable format forces distillation and brevity. They are also a written surprise. The unexpected challenge of decoding a well-crafted haiku mentally engages your reader or listener.

Yes, it's your job to communicate the technical information. But shouldn't presentations also inspire? Can they be evocative as well as informational?

When crafting a presentation, give yourself time to identify a theme you can carry through. This could be a symbolic idea, a powerful phrase, or a unifying creative thread.

When presenting technical information to non-technical people, a helpful approach is to use more brevity, which encourages the distillation of your primary point or data.



With brevity comes simplicity. Edit out extra elements with your visuals. Remove slides. Put less on each slide.

Take the time to master being direct and offer your unique perspective or analysis and get there quickly.

An unexpected bonus of using brevity is that it helps you stay on time. If you are asked to speak for 45 minutes, instead speak for 35 minutes, leaving time for Q and A or open discussion. Or even end early! No one has ever complained about that.

One final thought to leave you with:



Humans aren't moved to action by 'data dumps,' dense PowerPoint slides, or spreadsheets packed with figures. People are moved by emotion. — Jonathan Gottschall





Getting Your Message Across: Strategies to Convey Complex Information



By Laurie Schloff, Executive Communication Coach

Communication excellence, the ability to speak clearly and convey ideas with impact, is highly associated with career and organizational success.

Yet, healthcare and technology leaders face a major challenge: how to simplify complex and technical information so that others "get it," buy in, and take action for best results.

Here are some truths about transmitting knowledge and influencing others outside your field:

Knowing your topic does not equate to speaking clearly about your topic.

Your listeners likely don't care about your topic as much as you do—sorry!

Anytime you speak, whether one on one or to a crowd, in person or virtual, in a formal or informal setting, you are a "presenter".



Preparation, not desperation: Strategize and plan, no matter how knowledgeable you are. Let's look at key strategies for thinking and speaking "mind over mouth".

Develop communication empathy

As experts in your field, your knowledge, breadth and depth, mastery of the big picture, AND the details are valued. Don't be heartbroken to learn that your audience doesn't **care to hear it all**...especially some of those technical specifics.

Approach your meeting with a listener-centered mental mindset, what I call **communication empathy**.

Let's consider questions to develop your communication empathy:

- 1. What are the top three points these listeners care about?
- 2. What do I care about that they don't?

A grant writer I worked with went into passionate detail about the 16 spreadsheets the government required. It was a painful waste of time for me. All I *needed* to know was the goal of the grant.

3. What can I **omit** to focus and streamline? (And not feel like you are giving away your firstborn!)

If you're worried about leaving out something important, keep in mind that you can always troubleshoot questions you may be asked in advance, or follow up after the meeting if requested.

Check in with your listeners

1. Communicate in advance.

The best communicators get comfortable with asking listeners what they'd like to cover *before* the meeting. Executives in a large health care company I'm working with shared this blunt advice: "Talk about what I want to hear. Just ask me and I'll tell you."

You may also want to consider consulting with a colleague who knows the listeners or a needs assessment prior to a high-stakes presentation.

2. Consider listeners' level of knowledge about the topic.

If you're over their heads, the deal may be over as well. Jess, a biotech entrepreneur I prepped, lamented "I messed up an investor presentation. I thought they were scientists, but it turned out they were analysts and laser-focused on the bottom line.

"Wish I knew that in advance."



We all know what she should have done, her research before the meeting.

Instead, it's about helping

Preparation, not desperation, Jess!

3. Stop to include your listeners.

Make sure you're meeting their needs *during* the presentation. No one hits the bullseye 100%. Make your key point at a meeting in 60 seconds or less, then volley to your listener(s). Become comfortable with questions like:

Anything you'd like to add or ask? Are we on target? Questions, comments?

Master verbal organization

Excellent speakers convey their message concisely, with fluency and focus. Show me a great presenter in your field, and I bet you they have prepared, practiced and probably have a coach. One half of one percent of the population are gifted verbally. The *rest* of us benefit from learning and mastering technique.

1. Headline for impact:

Work to convey your key points in 15-25 words, what I call a *verbal headline*. (That's actually a generous number of words, a newsletter or a slide headline is usually less than twelve words). Listeners value your ability to bring what they need or want to hear to the foreground. Devote time to figuring out what *matters* to your listeners and then create your headlines. Here's a strong, succinct headline a healthcare VP shared recently:

"We're innovating to improve complex care."

Note that the wording is well chosen to streamline and tighten the thought.

2. Learn the HEC model

The *HEC* model is popular with clients who present an idea, or who are on the spot at meetings.

HEC stands for **H**eadline—**E**xample-**C**omment

Headline followed by an Example, and then an ending Comment(opinion, perspective, action).

Practice HEC with this question:



What do you find most rewarding about your work?

Here's a sample reply:

Headline: I love creating and designing programs for individual and groups.

Example: For example, an investment firm asked my team to design a program for 35

analysts presenting at a client conference virtually for the first time.

Comment: Not knowing what's around the corner, and always having a fresh project at hand

keeps me busy and energized.

3. Make new ideas or terminology easy to understand.

Listeners are uncomfortable when they don't know a term, abbreviation, or concept you are sharing. It's crucial to scan your words and be sure to explain and simplify what isn't familiar or clear. This sequence will help:

State the term, Define the term briefly, offer an example.

Try it out with a word or idea that listeners outside your field find challenging.

Let's give it a try with the words "fast pacing".

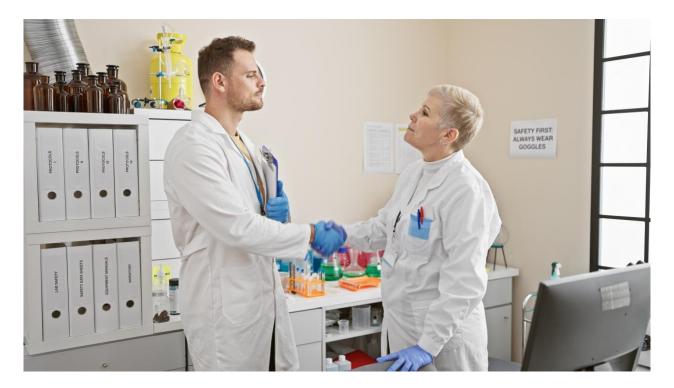
Term: Watch out for fast pacing with non-technical listeners.

Definition: Fast pacing means you are including too much material in the time you have. **Example:** For example, a speaker who is too fast paced will lose their listener at point one

and already be speaking about point five.



From Jargon to Clarity



By Monica Murphy, Senior Coaching Partner

In the life sciences, your expertise is invaluable—but when sharing complex information with non-technical listeners, the goal isn't to showcase your depth of knowledge. Instead, focus on helping them understand and trust what you're saying.

As a communication coach with 30 years of experience, my advice is simple: "It's not about you." Your listeners need clarity, not complexity. Tailoring your message to how they want to receive it fosters understanding and builds trust. Here are three tips to simplify technical communication:

1. Start with What Matters Most

Begin with the key takeaway your listener cares about, then add the necessary context. Ask yourself, **"What do they need to know right now?"**

2. Use Analogies and Visuals

Relate complex concepts to everyday ideas. For example, explain a cell's function as a factory or use a graph instead of raw data to illustrate trends.



3. Acknowledge Uncertainty Confidently

Transparency is key, but don't overwhelm your listener with technicalities. Say, "While some data is still emerging, here's what we know and how we're addressing it."

Before and After: Simplifying a Response

Question:

"What's the mechanism of action for this drug?"

Before:

"This drug is a monoclonal antibody that binds to the PD-1 receptor, blocking its interaction with PD-L1, restoring T-cell activity in the tumor microenvironment."

After:

"This drug reactivates the immune system to attack cancer. Think of it like flipping a switch that helps the body see and fight the cancer cells again."

Again, communicating technical information effectively isn't about proving your expertise. By focusing on their needs and simplifying your approach, you'll ensure your message creates the impact you want.



Answering Challenging Questions on Your Feet – Recorded Lesson



When presenting technical information, questions are continuously being tossed out to us. At times.

- We don't know the answer and feel like we should.
- We can't answer the question.
- We don't have a good answer.
- We know the question will cause conflict if we choose to answer it.

Anticipating questions can create anxiety, stress, and a loss of productivity. There is a way to prepare for these questions so you feel more confident through giving information to others. In this 30-minute recording, Executive Communication Coach Robin Golinski focuses on real-world skills and gives technical professionals the tools so they can be on top of their game anytime these challenging questions arise.





Simple & Effective PowerPoint Strategies for Non-Technical Listeners



by Kristen Curran-Faller, COO/ Senior Coaching Partner

When presenting to non-technical listeners, remember that your PowerPoint slides should clarify and emphasize your key business points. As a presenter, you may think all the information on the slide is important, but do your listeners need to understand it? Avoid overcrowding your visuals with text and complex charts. Remember, your listeners should be listening, rather than reading your slides.

Here are four tips:

- 1. Identify the main takeaway for each slide.
- 2. Remove any unnecessary information.
- 3. Add value by conveying information not shown on the slide.
- 4. Ensure every slide is essential.



Meaning Keeps Non-Technical Listeners Engaged



By Melody Elkin Executive Communication Coach

I recently met with a client who was concerned about presenting on a "dry topic." His topic was full of data and technical concepts that he felt would bore the audience, and after hearing his first run through, he was correct.

One of the best ways to present technical information to a non-technical audience is to focus on what data means, not on the data itself. For example, if you analyze the stat sheet of your favorite athlete, the collection of numbers and statistics translate into how good or great the athlete is. Perhaps the data indicates that the team is stronger on the road than they are at home, which is meaningful when you plan to bet on a game.

This example translates across industry from life-sciences to logistics. Instead of breaking down the scientific method, talk about how many lives your therapy saved, or how quickly life-saving supplies can be received after employing your new system.

Getting to the point or *meaning* behind your message will keep your non-technical listeners glued to your message. Then, when they seek you out to learn more, you'll have the details in hand and ready for them to dive in.



Be Prepared Before You Speak to a Group



By <u>Dr. Dennis Becker</u>, Author, CEO, Senior Coaching Partner, and Co-Founder of The Speech Improvement Company

Here are 10 important questions to ask before the business presentation process. These 10 questions relate to listener analysis, and therefore, your needs:

- 1. Why am I speaking to these listeners?
- 2. Why are they listening?
- 3. What relationship do we have?
- 4. What relationship do listener members have with each other?
- 5. What do they know about this topic?
- 6. What would they like to know?
- 7. How will they use this information?
- 8. What are they doing the day before I speak?
- 9. What will they be doing the day after?
- 10. What are the logistics of the event?

This last one, logistics, is often overlooked. What do you need to know about the speaking situation before you speak? Answers to the following questions will help you gather information. Add additional items to fit your particular situation.



- 1. Where will I be speaking?
- 2. What time of day will I speak?
- 3. How long will I be speaking?
- 4. Who is speaking before and after me, and on what topics?
- 5. Will there be a moderator? Will I be introduced?
- 6. What is the size of the room?
- 7. How will the seating be arranged?
- 8. Will the setting be interactive? Will it be formal or informal?
- 9. What audiovisual equipment do I need? Will a technician be available on site?
- 10. What are the lighting and temperature of the room?
- 11. How far in advance may I check out the room before speaking?

The information you gather from all these questions will make preparing a speech much easier. Additionally, if your listeners understand that your research has helped you tailor your preparation specifically for them, they will be more likely to respond positively.





About Us



Since 1964, the professional Speech Coaches at The Speech Improvement Company have touched more than a million people around the world. We are woman-owned and are the oldest speech coaching firm in the United States.

We support an international clientele including Fortune 500 executives, business professionals, politicians, professional athletes, entrepreneurs, and private individuals to strengthen their

communication skills. We work with leaders of countries, companies, and people throughout organizations. Our coaches are formally educated at the graduate level or beyond in all aspects of human communication and cultural understanding. We have both the educational background and the real-world experience to identify speaker strengths, uncover areas of need, and evoke behavioral change.

To date, we have written 13 books on communication and are published in 5 languages. We have instructed at Harvard University, MIT, and other world-class institutions as well as conducting pro bono work for non-profit and community organizations. Our coaching team attends monthly development days to ensure they are apprised of the latest research, theory, tools, and trends related to human communication.

What Topics We Cover

Our focus is on helping clients strengthen communication skills for application in both business and personal settings. While each client interaction is unique, our most popular areas of focus are in the following 5 areas:

- Leadership & Management
- Public Speaking
- Sales Communications
- Customer Service Excellence
- Accent Modification

Our Life Sciences Clients

We've delivered group workshops and one-on-one executive coaching to hundreds of life sciences clients from the world's largest pharmaceutical firms to small biotech startups to regional healthcare providers. They all share one challenge: the need to speak clearly, persuasively, and with confidence in any setting. Some of our well-known clients include:

Pfizer Bristol Myers Squibb Mass General Hospital

Genzyme Kaiser Permanente Moderna Boston Scientific Novartis ICON

Takeda Sanofi Olympus Medical



Dr. Chas Womelsdorf, Ph.D., M.A., B.S. Executive Communication Coach



Chas Womelsdorf, Ph.D., brings over 20 years of advanced communication experience in both the private sector and teaching at a graduate level, with a strong focus on executive coaching and leadership development. He has worked extensively with leaders at all levels, helping them master key skills such as team building, speechwriting, storytelling, conflict resolution, interpersonal and intercultural listening, and public speaking. His expertise has earned him a reputation as a trusted advisor, preparing guests for high-profile appearances on networks like CNN and MSNBC.



Chas has partnered with companies across diverse industries, including retail, legal, entertainment, aviation, and tech, providing tailored one-on-one coaching, formal classes, and interactive workshops. He has delivered communication training to senior executives and leadership teams at organizations like T-Mobile, Paramount, Mayer Brown, NextEra Energy, the U.S. Army, the Department of Justice, and the White House.

In addition to coaching executives, Chas has also mentored other coaches and proudly led collegiate speech teams to national prominence, coaching over 100 nationally ranked competitors and 30 champions in public speaking events.

EDUCATION

Chas holds a Ph.D. in Communication Studies, with a concentration in Rhetorical Studies from Louisiana State University; a Master of Arts in Communication Studies with a concentration in Critical, Cultural, and Rhetorical Studies from the University of Alabama; and a Bachelor of Arts in Communication Studies from the University of Alabama. His accomplishments in the field of communications include numerous courses and workshops taught across a wide variety of communication specialties. Topics include:

- Accountability and Leading Up
- Advanced Public Speaking



- Building Collaborative Teams, Building Cohesive Teams, Business Etiquette
- Communication Leadership
- Conflict Resolution
- Crisis Management
- Cultivating a Positive Workplace Environment
- Dealing with Organizational Change
- Delegating Effectively
- Diversity-Equity-Inclusion
- Effective Business Writing
- Influence and Persuasion
- Interpersonal Communication
- Leadership Skills for Supervisors
- Motivating Your Workforce
- Navigating Difficult Conversations



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