

THE PERFORMING ART
of
SCIENCE PRESENTATION

with

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AGENDA

INTRODUCTION

PART I:

RELATIONSHIP TO AUDIENCE

Connection: Energy Flow

(How do we see, read and understand the audience?)

Physical Expression: Body Language, Gesture & Movement

(How can we be aware of and manage our physical selves?)

GOAL & TACTICS

Purpose: Clarify Goal

(How can we be clear about what we want to get?)

Tactics: Ways to Achieve our Presentation Aims

(How do we expand our repertoire of methods?)

EXCITEMENT AND PRESENCE

Passion: Connecting to Yourself

(How do we keep our presentations alive and fresh?)

PART II:

STRUCTURE & TIMING

From Purpose to Structure: Right Brain Writing

(How do we turn our material into an interesting, concise text?)

Using Power Point: Structure, Silence & Signposts

(How do we best use technology to aid rather than hinder us?)

BEST PRACTICES FOR SPEAKING

Stage Fright: Breath, Confidence and the Mind

(How do we change our mindset to manage fear?)

Vocal Power & Clear Speech: Language as a Physical Act

(How do we fill a space with resonance and clarity?)

Metaphors and Stories: Activating the Right Brain

(How do we add in the right comparisons?)

REHEARSAL

Learning Modes: Changing Habits

(How do we make our new habits stick?)

CONCLUSIONS

CONNECTION TO AUDIENCE: ENERGY FLOW

When we were children, many of us played with our "energy" in imaginative ways. We cast spells with magic wands or shot arrows that didn't exist. We received strong "energy" when someone pointed a finger at us in anger or glared at us when we misbehaved. We continue to experience examples of the power of "energy flow" when we put a hand out to "stop" a car in a cross walk or turn to see who has silently entered a room.

Constantine Stanislavsky, the father of contemporary acting theory, called the energy exchange between individuals "rays." We can see it vividly when two people are quietly arguing. We see it pass between individuals who are in love. We call it "chemistry" when two actors are dynamically connected by energy and "charisma" when we feel it land on ourselves from a public persona.

Whether you are in a small conference room or a large hotel ballroom, the ability to **land your energy on each individual in the room** will automatically make your presentation livelier. The individuals in the room will feel that you are actually talking to them and the event will become about **your active personal connection** to your listeners.

It is easy to identify and activate your "energy flow".

NOTES: CONNECTION TO AUDIENCE

PHYSICAL EXPRESSION: BODY LANGUAGE

Your physical self is as important to effective expression as your thoughts, ideas and words. There are many forms of physical activity that can bring you to a sense of readiness. Yoga, dance stretches, or various athletic warm-ups are all useful for waking up the body in preparation for presentation.

During rehearsal, the actor will experiment with the way a character stands, moves, and gestures. If the character is shy, the actor finds out what it means to be shy both mentally and physically. If a character is nervous, the actor must become nervous in his or her body. If a character is confident, the actor must use the physical form with confidence. Research has discovered that the inner life and the outer manifestation of that life are inseparable: identical chemical changes occur whether the body initiates and feeling follows or emotion leads and the body responds. If you can **create the shape of confidence in your body**, the inner feeling of confidence will flow into that shape, and the audience will respond positively to your physical being.

To find your most useful stance:

- Bring your feet to hip width
- Lengthen your spine from the tailbone to the base of the skull
- Float your head upward
- Let your shoulders drop and widen
- Allow your chest be open and free
- Let your arms and hands hang loosely at your sides
- Breathe deeply into the ribcage
- Open your face and smile with your eyes

NOTES: BODY LANGUAGE

PHYSICAL WARM-UP FOR PRESENTATIONS

WHOLE BODY

1. Stretch and yawn with your whole body
2. Feel your feet: energy moving upward through legs/hips/body/head
3. Gently jiggle legs/hips/body/shoulders
4. Gently jump up & down

NECK

5. Turn head from side to side/front to back/ear to ear
6. Roll head to the front/to the back/around in circles

SHOULDERS

7. Lift & drop shoulders
8. Move shoulders to the front & back
9. Move shoulders around in random directions

HANDS & ARMS

10. Shake hands/forearms/upper arms

RIBS

11. Swing arms around freely as body turns from side to side
12. Move ribs around in random directions

HIPS

13. Do the twist!

KNEES

14. Roll the knees in circles one direction/the other direction

FEET & LEGS

15. Standing on one foot, roll the ankle of the other foot
16. Shake the foot, calf, knee, thigh, and hip
17. Repeat on other side

WHOLE BODY

18. Freely shake your whole body, finish in the big "X" position:
20. Drop over from the waist with your head to the floor
21. Slowly roll up/feel length of spine and freedom of limbs & breathing

PHYSICAL EXPRESSION: GESTURE & MOVEMENT

Once we feel comfortable with an open, balanced, available stance, we can begin to play with **gesture as a second language**. The actor studies how to use gesture to express more clearly the concepts of the text, learning how to **avoid repetitive, meaningless or random movements**. When we have freed our arms and hands from habitual protective body language, we can use them to illuminate our concepts:

- time lines,
- relationships,
- antitheses,
- location,
- character, etc.

The gesture is "read" by our "scene partners" and augments their comprehension of our spoken words. The use of gesture can also help to slow us down, as well aid us in remembering what we want to say.

The actor's use of movement around the stage is also essential to effectively communicate ideas. An actor moves only when necessary, avoiding shifting, pacing, or other repetitive or random steps. We can use this technique as well. Simply plant yourself when you speak, and only **move when you have a reason to**. This will focus the attention of your listeners on what you are saying, not distracting them by wandering, pacing or shifting weight.

NOTES: GESTURE & MOVEMENT

PURPOSE: CLARIFY GOAL

According to many acting theorists, the concept of clarifying the goal is central to a spontaneous, dynamic performance. Rather than worrying about how to say a line, the actor focuses on what she or he wants to get from the other character(s) in the play. During rehearsal, the actor discovers and then names exactly what change or effect is desired from the scene partner. This frees attention from constant self-evaluation to **active engagement in communication**.

You can apply this technique to your performance as a public speaker. By clearly articulating your goal you will give your personal connective energy a name. Then you can easily use such tactics as to inspire, to win over, to entertain, to challenge, to provoke, or to inform in order to accomplish that goal.

Your focus on your own success or failure will shift to engagement with **how your listeners are getting what's important** to you. Your breath, your voice, your body, and your brain, no longer locked into judgmental self-analysis, can function with freedom, confidence and variety.

NOTES: CLARIFY GOAL

I want to find a way to get _____ to be or do _____.

Tactics:

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.
- 7.
- 8.
- 9.
- 10.

PASSION: CONNECT TO SELF

An actor looks for the central motivation of the role: what passion drives the character to behave in a certain way? You can steal this technique to become a more effective public speaker. If you can clearly articulate for yourself **why you are speaking**, you will awaken your passion for your subject. And, if your material is not important or interesting to you at the moment, find a reason that it will be interesting or **important to your listeners**.

Your own central motivating force is powerful fuel. The answers to the following questions must be part of your private preparation for speaking publicly. This passion for your work can fire a new form of communication. Ask yourself:

- "Why am I presenting this?"
- "What is important about this topic?"
- "What excites me about this subject?"
- "What draws me to this field?"
- "Why is this important to my audience?"

NOTES: CONNECT TO SELF

FROM PURPOSE TO STRUCTURE: RIGHT BRAIN WRITING

The act of preparing your presentation is not unlike the effort the playwright makes when creating a script. With the essential idea in mind, the writer tests, adds, subtracts, cuts, and rewrites, ultimately finding a structure and flow that brings the goal to best light. Once all the "paint is on the canvas," the writer can then find the natural **three point structure**, and **cut what is tangential** or inessential. When we approach our own writing in this way, we may find that we need fewer notes, and feel more confident in the presentation of the script.

The questions you must ask yourself as you prepare your presentation are the following:

- Who is my audience?
- What is my purpose?
- How much time to I have?
- What does my audience need to know right now in order to accomplish my purpose in the time I have?
- What are my three main points?
- What is inessential?

NOTES: FROM PURPOSE TO STRUCTURE

Intro (A.B.C.)

A. _____

- 1.
- 2.
- 3.

B. _____

- 1.
- 2.
- 3.

C. _____

- 1.
- 2.
- 3.

Conclusion (A.B.C. leading to D.)

USING POWER POINT: STRUCTURE, SILENCE & SIGNPOSTS

Listeners will look wherever the speaker guides them to look. Therefore, it is critical that we **not look at our own computer screen** when using power point. If we want our listeners to take in the material on the big screen, then we must use our eyes (and body language) to give them permission to do this. We can then refocus their attention on our interpretation of the material by re-engaging them with a personal connection. If images are too complex, the audience will lose their focus on the speaker's voice in order to concentrate on understanding the slide. Thus, **keep the material simple**, or build up the material with gradual animation.

We must also be careful **NOT to read the material on the screen** out loud at the same time the audience is trying to read it. People can only receive information through one avenue at a time (the eyes, the ears, or the body), and we must honor that by **using silence** from time to time to let them **process the written material from the screen**. Silence is also very important for setting the tempo of one's presentation. It's important to give your audience **time to digest key conclusions** or transitions.

It is important to remember that the power point screen is the set design, and **the more simply you present the visual information, the more effective you will be as a speaker**. Therefore, keeping to the rule of threes: no more than three points per slide, nor more than three words per point, will help make the event about achieving your goal from your listeners, rather than about how full of information your slides may be.

Remember:

- Contextualize
- Click
- Look
- Interpret

NOTES: STRUCTURE, SILENCE & SIGNPOSTS

OVERCOMING STAGE FRIGHT: MENTAL IMAGE & BREATH

Most everyone who has made a presentation has experienced what performers call "stage fright." Speakers fear being inarticulate, foolish or forgetful, or are afraid of stage fright itself. Even if you are confident and in control, the symptoms of stage fright like dry mouth, rapid speech, physical tension, perspiration, chills, mental blankness, pounding heart, shallow breath may still spring up unexpectedly. The human organism is responding in a natural physical way to a perceived threat or danger. The adrenal gland begins to release adrenaline, which increases the heart and breath rate. Blood vessels constrict. The mind shuts down as the body readies itself for massive muscular activity.

What techniques can we learn from actors and performers to combat this situation?

- Prepare and practice
- Bring confidence into your body
- Focus on your goal
- Awaken your passion
- Visualize the success of your audience
- Bring positive thought into you life
- BREATHE!

NOTES: MENTAL IMAGE & BREATH

VOCAL POWER & CLEAR SPEECH

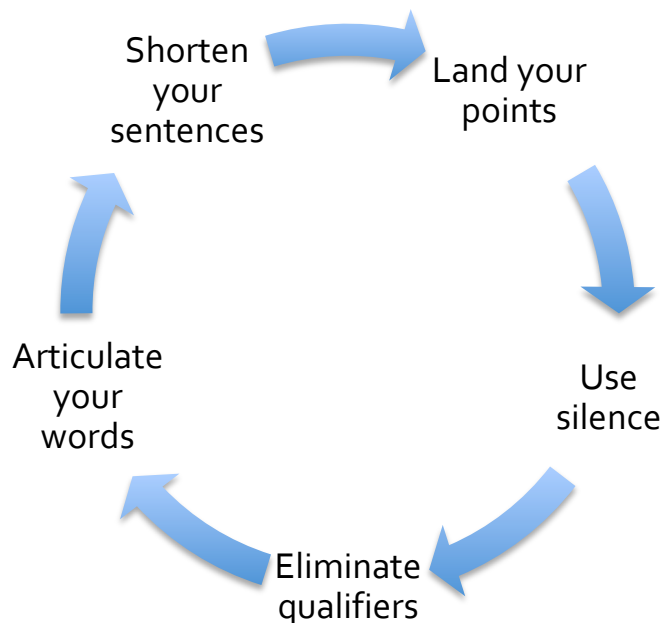
VOICE: Your brain initiates thought, but you create your voice by engaging **breath and resonance** throughout your body. Air passing the vocal cords creates a sound wave. This vibration is amplified by the many resonating parts of your body like the "woofer" and "tweeter" of a good speaker system.

SPEECH: The face is made up of complex musculature. Speaking uses intricate combinations of the muscles of the lips, jaw, tongue, insides of the mouth, and neck and throat. When the **articulators** move freely, speaking becomes dynamic and precise.

VARIETY: We can begin to play with how pitch, rate, and volume **variation increase our communicative** abilities. Lower or raise your pitch to emphasize, slow down or speed up to create excitement.

CLARITY: Your **important words** are like the pearls on a string. When we use these main words a lot, we may run roughshod over them, speaking them too quickly, or without emphasis.

NOTES: VOICE & SPEECH



VOCAL WARM-UP FOR PRESENTATIONS

BREATH

1. With your hands on your ribs, feel your breath drop into body

BODY RESONANCE

2. With one hand on your sternum, sigh your voice into your hand
3. Wake up your body resonance by tapping your torso: chest, ribs, back
4. Gently jump up & down sighing resonance into your body
5. Send your body resonance out from your sternum with a gesture

HEAD RESONANCE

6. As if you were chewing with your mouth closed, hum into your face
7. Make a high, bright "hee" sound while shaking your shoulders
8. Start with a low "hah" and as you come up in pitch turn it into "hee"

PROJECTION

9. Play with nonsense syllables, sending your voice to points in the room:
zai yai yai, wuzza wuzza wuzza, blah blah blah, yadda yadda yadda

FACIAL MUSCULATURE

10. Stretch your mouth wide open, tongue forward, eyes expanded
11. Pinch your face into a tiny tense spot/alternate with above
12. Move your facial muscles around in random directions

JAW

13. Massage the jaw hinge

LIPS

14. Blow through your lips/add in vibration

TONGUE

15. Move your tongue around the mouth as if looking for peanut butter
16. With tip of the tongue behind front teeth, stretch back of tongue

NECK

17. Stretch the chin to the ceiling/make a little arc

NONSENSE SOUNDS

18. Repeat each phrase several times quickly & lightly:

unique New York red leather yellow leather topeka/bodega

METAPHORS & STORIES

Comparison is essential to creative expression. Poetic comparisons (simile, metaphor, allegory, parable, and so on) deepen our understanding of a concept by comparing it to something else. A metaphor (the term we will use to mean any of the above comparisons) can be any size: it can be used to clarify a single point, the theme of a presentation, or your life's work. Your listeners will remember an interesting image, story or experience more easily than an abstract concept. And because a metaphor activates the right brain, it can **make a complex idea more readily understood**. The power of the comparison lies in presenting the metaphor first. Your listeners can then link back into the metaphor when you bring out the details of your point, concept or theme.

The comparison, whether as small as a simile or as long as a parable, needs to be expressed well. If you are telling a story your gestures can show relative space, time sequence, physical state, status level or character. Your voice can reveal emotion, personality, or relationship. You can create a sound painting with your speech use. The whole self can be involved in **making the image both accessible and lively**.

NOTES: METAPHORS & STORIES

REHEARSAL

Rehearsing a play takes weeks, or sometimes even months. There is no expectation that everyone is immediately going to get everything right. The playwright may be rewriting daily. The actors learn and relearn the lines. They make choices about how to move or speak. They try different objectives and tactics. They search for the core of the role. Sometimes a choice is a successful one; sometimes it leads to a better one. The director helps the actors hone their ideas so that their story is told in the most effective manner. The process is one of experimentation, exploration and collaboration.

When most of us prepare a presentation, we think only of the content. We might think we are rehearsing when we are simply reviewing what we plan to say in our minds. Although this is an effective way to help our brains remember the text, it doesn't help our bodies create a memorable event for the audience.

The most useful rehearsals are "on your feet." If you can **practice your presentation** in the space that you will be speaking in, with the actual tools that you will be using (props, set, lights, sound, costume, etc.), you will learn very quickly what parts need to improve. Ideally, you will have a "director" -- someone who knows how to give you creative feedback and perhaps even guide you when you aren't sure how to get better.

By the time you get to the actual presentation, your confidence will have increased. You will then be able to freely land your energy on your listeners with a clear objective and personal passion. You can be calm and available, moving comfortably through the space. You'll be handling your props with ease. Your voice will be open and expressive. Your metaphors and stories will be lively and engaging. Like a well-rehearsed actor, you will be able to create magic, to make the unexpected real, to transport the audience into realms of imagination and emotion.

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BIO

A stage director, award-winning actor, and nationally recognized theater educator, **Nancy Houfek** www.nancyhoufek.com presents workshops combining communication, negotiation and leadership techniques for corporations, think tanks, universities, and professional organizations throughout the U.S., Canada, and Europe. At Harvard, where she was Head of Voice & Speech for the Tony Award winning [American Repertory Theater](#) from 1997- 2014, Nancy also taught in programs at the Derek Bok Center for Teaching and Learning, the Kennedy School of Government, the Harvard School of Public Health, and the Medical School. Nancy continues her work there with the Radcliffe Fellows, the Harvard/Smithsonian Center for Astrophysics, and the Graduate School of Design. [The Act of Teaching](#), a film of her work with Harvard faculty produced by the Bok Center, has been distributed to faculty development centers nationwide. From 1999 - 2019, she was a facilitator for COACH (the Committee on the Advancement of Women Chemists) offering leadership, negotiation and communication workshops to scientists. She has also been a presenter for the Science Leadership Training at the University of Toronto and, since 2011, for the Tobias Fellows at the Tobias Center for Leadership Excellence at Indiana University.

Nancy holds a B.A. from Stanford University and an M.F.A. from San Francisco's American Conservatory Theater, where she remained as an actor, director and coach for nearly a decade. She has also held faculty or guest positions at the University of Washington, the Drama Studio of London, Southern Methodist University and the University of Minnesota. Nancy received seven consecutive awards for excellence in teaching from Harvard University. Nancy's performance career spanned several decades in theaters from New York to California. Publications include articles in *Voice & Speech Training in the New Millennium: Conversations with Master Teachers* by Nancy Saklad, *The New England Theater Journal*, *The Voice & Speech Review*, *The Complete Voice and Speech Workout* and the *VASTA (Voice and Speech Trainer's Association) News*.

