TÉCNICO LISBOA

Departamento de Engenharia Informática
(MEIC & METI)

2024/2025

1º semestre (P1)

Communication Skills I

In-Class Activity

Topic: Non-Verbal Communication

Week 3 [24-27 September]

Prof. Cláudia Silva

In-Class Activity: Vocalics in Technical Communication

Objective:
This exercise helps computer science students practice vocalics—tone, loudness, speed, and timing—to improve their nonverbal communication skills. The goal is to show how vocal variation can enhance clarity and engagement when explaining technical concepts or giving feedback.

Time Required: 30 minutes
Group Size: 5 students

By the end of this exercise, students will have achieved the following learning outputs:

1. Mastery of Vocalics: Students will effectively use tone, loudness, speed, and pauses to enhance clarity and engagement in technical explanations.
2. Application in Technical Communication: Students will practice vocal variation in explaining technical topics and receive peer feedback to refine their skills.
3. Reflection and Feedback: Students will engage in discussions on the impact of vocalics in technical communication and provide constructive feedback to peers.

Step-by-Step Breakdown:

Part 1: Familiarize yourselves with Vocalics (5 minutes)

1. **Search online examples of how to adjust vocalics**

    - **Tone**: The emotional quality of your voice (serious, enthusiastic, neutral).
    - **Loudness**: The volume of your speech (appropriate loudness for emphasis or clarity).
    - **Speed**: The pace at which you speak (slow for important points, faster for less critical details).
    - **Timing/Pauses**: Strategic pauses to let information sink in or to emphasize a key point.

2. **Challenge:**
   Imagine you are explaining a technical topic (e.g., how an algorithm works), how would you change your tone, loudness, speed, and pausing in strategic moments?

Sources:

1. **Video about tone:** https://www.youtube.com/watch?v=hPQyHXc1ksA
2. https://robinkermode.com/blog/vocal-variety-how-to-use-tone-pitch-and-pace-for-impact/

Part 2: Assign Topics & Vocalics (5 minutes)

1. **Assign Topics & Vocal Focus:**
   Each student is assigned a short technical or communication-related topic, along with a specific vocal quality to focus on during their explanation:

   Topics:

   - How to write an efficient **for loop**.
   - The importance of **code readability** in software development.
   - Differences between **object-oriented** and **functional programming**.
   - How to give **constructive feedback** in a peer code review.
   - The benefits of **version control systems** (e.g., Git).

   Vocal Focus Assignments:

   - Student A: Focus on **tone** (serious, enthusiastic, neutral).
   - Student B: Focus on **loudness** (adjust volume to emphasize important points).
   - Student C: Focus on **speed** (vary speed to highlight or skim over details).
   - Student D: Focus on **timing/pauses** (strategic pauses to give emphasis or let information sink in).
   - Student E: Combine **speed and tone** (e.g., slow down and use a more serious tone when discussing crucial points).

Part 3: Individual Preparation (5 minutes)

Each student prepares a short, 1-minute explanation of their assigned topic. They must plan how to use their assigned vocal quality to enhance their explanation.

Example of a script with vocalics instructions in yellow**:**

> As I work on **improving my communication skills**, I've noticed a few key areas for growth (use a **neutral tone** to introduce the topic). One area that has really helped me is **learning how to vary my tone** depending on the situation (say this part with a **slightly enthusiastic tone** to engage listeners).

For example, when giving **constructive feedback**, it's important to focus on **improvement** (slow down your **speed** here and lower your **tone** slightly to sound more serious and thoughtful). You want to avoid harsh criticism or focusing on just the negative aspects (use a **soft but firm tone**, to show careful consideration). Instead, emphasize positive changes (increase your **loudness** a bit to highlight 'positive changes').

It's also crucial to manage your **speed** when speaking—talking too fast can overwhelm people, while slowing down for important points makes sure your message is clear (here, **speak faster** to illustrate the overwhelming feeling, then **slow down** for 'important points'). And always **pause** (take a short, deliberate pause) to let key points sink in."

Another thing I've been practicing is managing my **tone** while presenting. A **serious tone** (say this part with a **calm, serious tone**) works best when explaining technical topics, but being too monotone can lose your audience (use a **monotone voice** for a second to demonstrate the effect). I try to sound **enthusiastic** (use an **energetic tone**) when discussing something exciting or new.

Lastly, when presenting, I make sure not to speak too softly or too loudly (adjust your **loudness** here: start by speaking a bit **too softly**, then **too loudly** for a second, and finally return to a **moderate volume**). I try to keep a steady volume unless I need to **emphasize something important** (increase your **volume** to 'emphasize something important'). Pausing is key too—it lets your audience catch up (use another short **pause**).

Part 4: Presentations & Feedback (15 minutes)

1. **Presentations (10 minutes):**
    - Each student presents their topic, using their assigned vocal quality as the focus.
    - Presentations should be **1 minute** long.
2. **Peer Feedback (5 minutes):**
    - After all presentations, the group provides **constructive feedback** on each student's use of vocalics.
    - Students should reflect on:
        - Was the tone appropriate for the content?
        - Did changes in loudness help highlight key points?
        - Was the speed effective for clarity or emphasis?
        - Were pauses used effectively, and did they enhance the explanation?

Part 5: Reflection & Wrap-Up (5 minutes)

1. **Group Discussion (3 minutes):**
    - Discuss how varying vocalics made the explanations clearer or more engaging.

- Reflect on how vocal elements can improve technical presentations and make them more professional.

2. **Final Tips & Wrap-Up (2 minutes):**
   - The instructor emphasizes that, like gestures, **vocalics** are key in both presentations and everyday communication, especially in technical fields where clarity is essential.