

## Chapter 03 : Examples for Oral and written scientific communications.

### 1. Communication:

A communication is the process of transmitting information, ideas, or knowledge between a sender and a receiver through verbal or written channels, with the purpose of creating understanding. In a scientific context, communication refers specifically to the structured exchange of research findings, hypotheses, methods, and interpretations within the scientific community and with society at large. It ensures the dissemination, verification, and application of knowledge, thereby contributing to the advancement of science. It can be divided into:

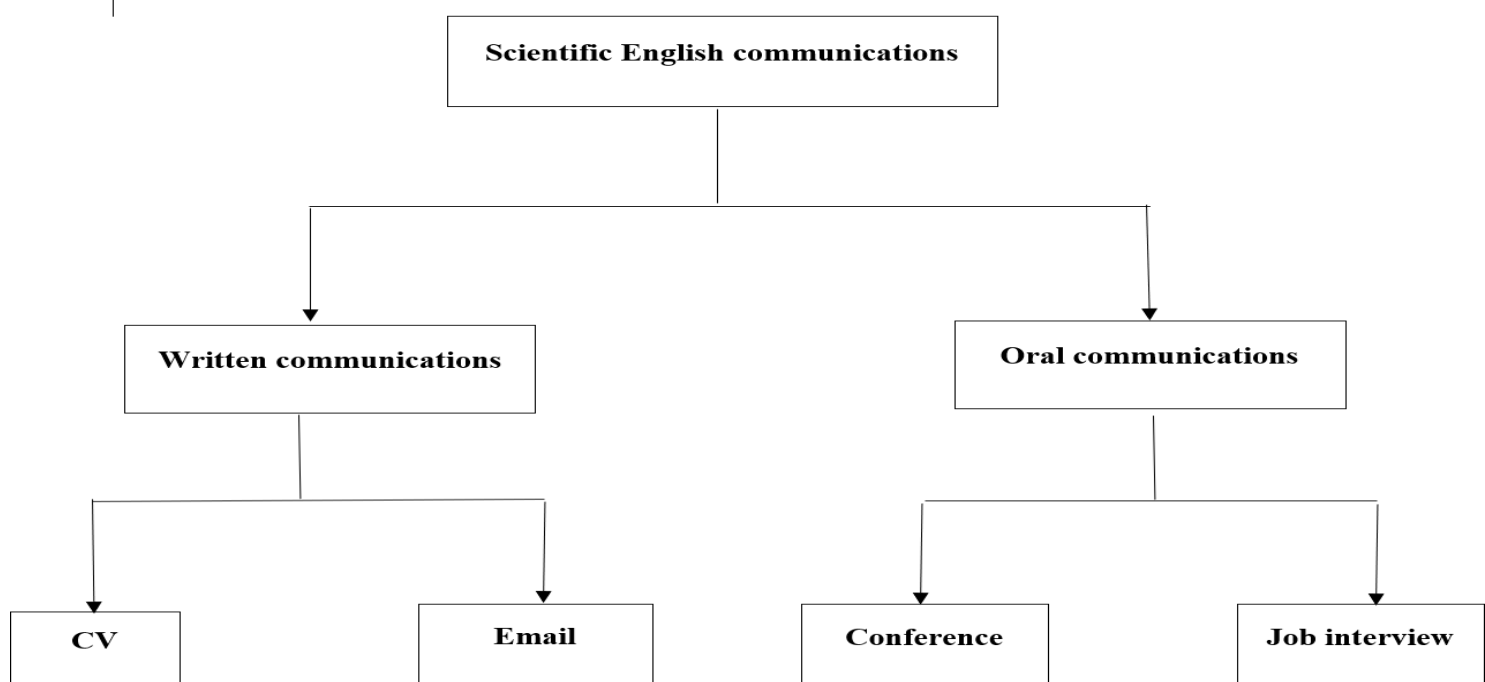
#### 1.1. Written scientific communication:

The most recognized form is the scientific article published in peer-reviewed journals, but many other formats exist. These include research reports submitted to institutions, theses and dissertations prepared for academic degrees, and conference proceedings that document presentations given at scientific meetings. Laboratory notebooks and technical reports play a crucial role in recording experimental procedures and results, while books provide comprehensive treatments of specific subjects. Reviews and meta-analyses synthesize existing knowledge, whereas popular science articles, blogs, or outreach publications aim to reach the general public in simpler language.

#### 1.2. Oral scientific communication:

It refers to spoken presentations that allow direct interaction between the speaker and the audience, including conference presentations, seminars, and lectures where researchers share their findings with peers. Other important forms are thesis defenses, where students defend their work before a committee, and workshops or training sessions that emphasize both presentation and demonstration. Oral communication can also extend beyond academic circles, such as media interviews and public talks aimed at popularizing science communications.

#### Examples:



## 2. How to prepare a professional CV?

### Curriculum Vitae (CV)

- A CV is a structured presentation of your professional profile targeted a specific job or company.
- The purpose of the CV is to get you to a job interview.
- You have approximately 30 sec. to make an impression – choose your key words strategically.

### Form of CV

- A CV should be well-structured, consistent and concise – maximum 2 pages.
- Avoid long and complex sentences – use important points.
- Make a difference between headline and subheading typography.
- Choose academic language.

Name | Address | Phone Number | E-mail

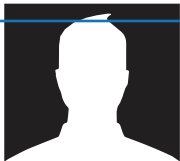
**Curriculum Vitae Name**

Age:  
Nationality:

**PROFILE**

A short description of your profile highlighting:

- What qualifies you? (education, experience, skills, achievements)
- What drives you? (interests, motivation, ambition)



**EDUCATION**

2014 – 2016    **MSc in (concentration)**, university, country

- Relevant courses
- Master thesis and/or projects
- Summer school and/or supplementary courses
- (GPA: XX/12)

2015 – 2015    **Exchange semester**, university, country

- Relevant courses
- (GPA: YY/7)

2010 – 2014    **BSc in (programme)**, university, country

- Relevant electives
- Projects and/or bachelor project
- Studies abroad and/or summer school and/or supplementary courses
- (GPA: ZZ/12)

2010 – 2010    **Supplementary courses**, school, country

- Courses

2005 – 2009    **Upper secondary school education**, school, country

**PROFESSIONAL EXPERIENCE**

2010 – 2011    **Position**, department, company, country

Responsibilities / tasks / achievements:

- ...
- ...

2009 – 2010    **Position**, department, company, country

Responsibilities / tasks / achievements:

- ...
- ...

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### Contact information

Place your name, your address, your phone number and your E-mail on the head of the page.

### Basic information

Details such as civil status, nationality, and age are optional supplements to the contact information above.

### Profile

A summary of elements in the profile targeted the specific position or company. Focus on education, experience, qualifications, interests, motivation and ambitions.

### Picture

Choose a picture adapted for a CV. A Passport photo size with a white or neutral background.

### Education

Education should always come before experience. Describe your studies, or projects in relation to the job you are applying for.

### Relevant courses and projects

Describe your studies (Relevant courses and projects) in relation to the job you are applying for.

### Other education / courses

Provide details about other education if it is a supplement to your primary education.

### Job title

Choose a job title that says something about your responsibilities and tasks.

### Job description

Describe the job in 4 or 5 sentences and focus on what you will be able to use in your “new job”.

**OTHER EXPERIENCE**

- 2015 – **Position/role**, organisation, country
  - Responsibilities / tasks / achievements
- 2013 – 2016 **Position/role**, organisation, country
  - Responsibilities / tasks / achievements
- 2009 – 2011 **Position/role**, organisation, country

**COURSES**

- 2015 Project Management, course provider, (country)
- 2014 social media, course provider, (country)
- 2012 Trading course (country)

**LANGUAGES**

- Language: Native
- Language: Proficiency level, oral and written

**IT**

- Programme: Proficiency level
- Programme: Proficiency level

**INTERESTS**

Describe your interests and show who you are outside of work and studies (3to 5 lines).

**REFERENCES**

*Available on request.*

**Other experience**

Do not underestimate the knowledge you have obtained through volunteer work and positions of trust. Described in the same way as your job experience.

**Languages**

Indicate all relevant languages including both oral and written proficiency.

**IT**

State your IT (Information technology) proficiency level (Computer systems).

**Interests**

It does matter! Keep in mind that you may have acquired several competences from being a competitive swimmer or playing the piano.

**References**

You should only give references, if the job ad requires you to do so.

### 3. How to write a professional email?

#### 3.1. Definition:

An Email is defined as the exchange of computer-stored messages (Digital world), from one user to one or more recipients via the internet. Emails are a fast, inexpensive and accessible way to communicate for business or personal use. Users can send emails from anywhere as long as they have an internet connection.

#### 3.2. In which case use an Email:

Even though there are multiple communication modes, Email is still considered as the most reliable and formal mode of communication, especially in some cases:

- Needing to reach someone not typically via telephone or in person.
- Information which is not time sensitive: a response may take a few days.
- Sending someone an electronic file such as images, a paper, or materials for a course.
- Needing to send information to a large number of people, such as a group of projects.
- Keeping a record of written communication that is easier to refer back to.

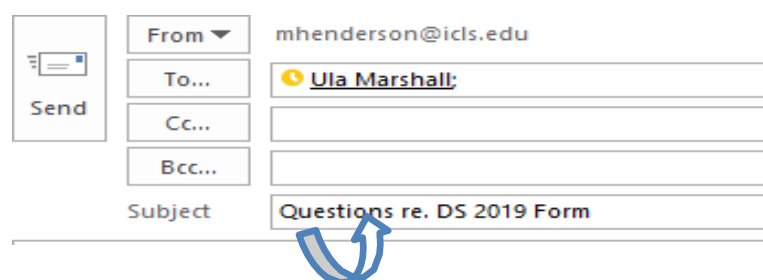
#### 3.2. Email Format:

After specify the name and the address of the receiver of the Email, we have to attend the following steps:

##### a) Subject line:

It's the first thing the recipient will see; it needs to be clear and informative and resume the global goal of the Email text.

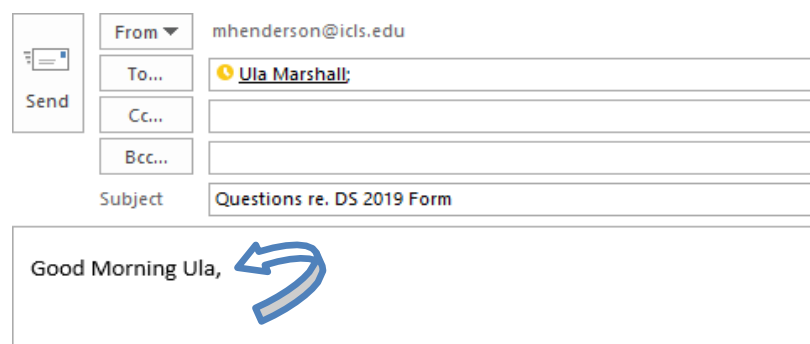
Examples: “**Meeting on Monday**” “**information request**”



The screenshot shows an email composition interface. On the left is a 'Send' button. The 'From' field is 'mhenderson@icls.edu'. The 'To' field contains 'Ula Marshall;'. The 'Cc' and 'Bcc' fields are empty. The 'Subject' field contains 'Questions re. DS 2019 Form'. A blue arrow points to the subject line.

##### b) Greeting:

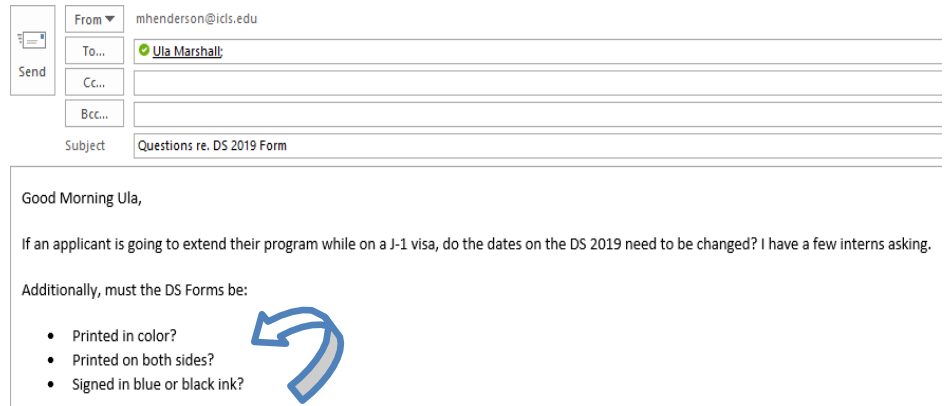
Form of salutations: When writing to someone you do not know by name, you put “**To Whom it May Concern.**” When applying for a job, you use “**Dear Hiring Manager.**” If you do know the recipient’s name, you write “**Dear Mr./Ms. Smith.**” For formal salutation, you use “**Hello**” or “**Hey.**”



The screenshot shows the same email composition interface as above. The 'Subject' field is 'Questions re. DS 2019 Form'. Below the form, the text 'Good Morning Ula,' is written in the body of the email. A blue arrow points to this greeting.

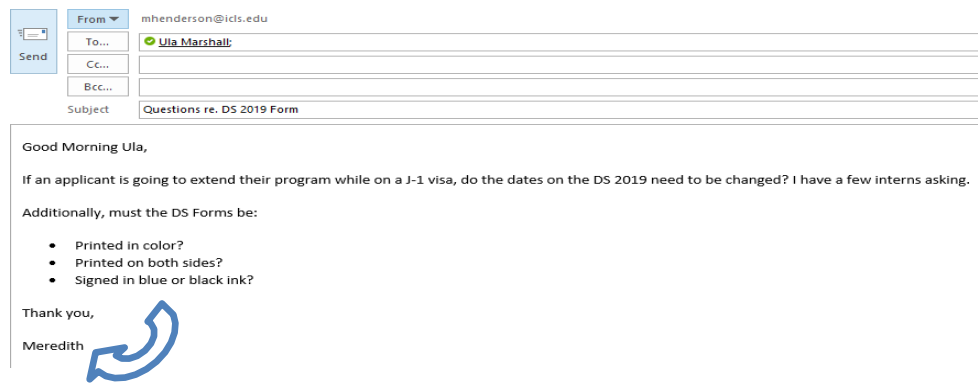
**c) Email Statement:**

Most of the time, emails have to be presented in form of short paragraphs, and each paragraph should contain a single precise point. It is also important to provide questions in order to have a quick response. You can support your email text with attached documents (**Papers, pictures or videos.....**) in connection with the subject discussed.



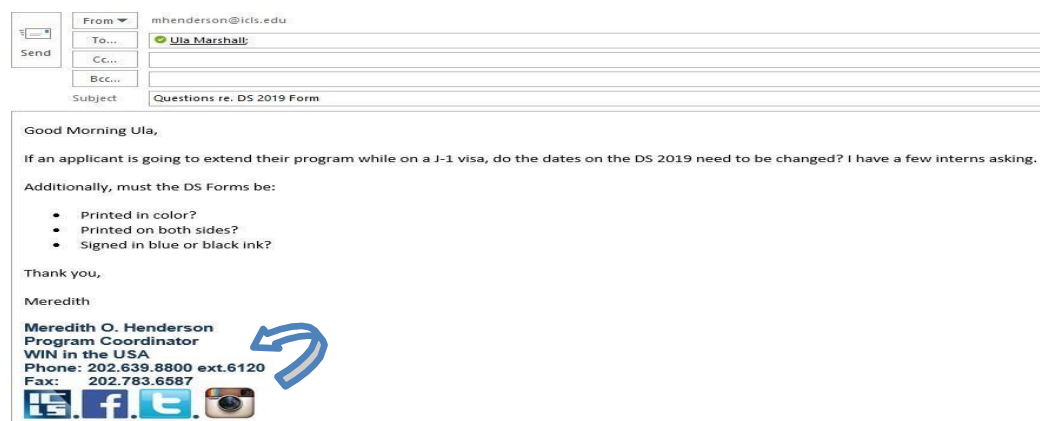
**d) Closing:**

It's a short formal salutation to end the text of the email. Examples: **“Best wishes”**, **“Sincerely regards”**, **“Thank you”**. The closing part has to be followed by the name of the sender.



**e) Contact information:**

Make sure you include your contact information at the end of your Email. Consider creating a signature that has your full name, phone number, company website (Skype, Facebook or instagram....) address.



#### 4. How to prepare and present a scientific conference:

##### 4.1. Definition:

A scientific conference is a formal meeting where researchers, scholars, and professionals gather to present, discuss, and exchange knowledge about recent studies, findings, and developments in a specific scientific field. It provides a platform for sharing original research, networking with other experts, receiving feedback, and fostering collaborations. Scientific conferences usually include oral presentations, poster sessions, keynote lectures, and panel discussions, allowing participants to communicate their work, learn from others, and stay updated with the latest scientific progress.

##### 4.2. In which cases scientific conference is presented:

A scientific conference is usually presented on occasions where researchers, academics, and professionals come together to share and discuss new knowledge in their field. Common occasions include:

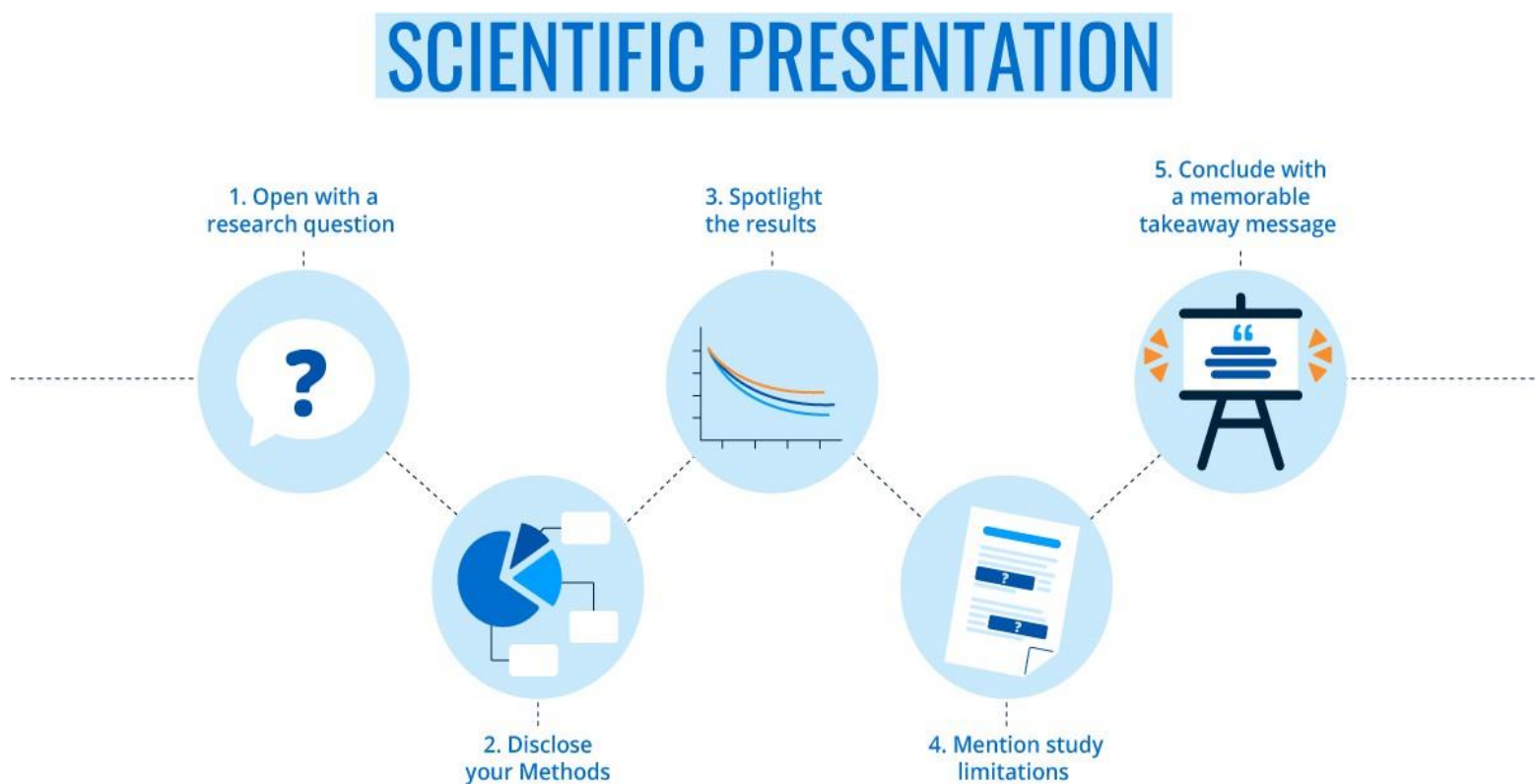
- **Annual or international scientific meetings:** organized by professional associations or research societies.
- **University or institutional conferences:** where faculty, researchers, and students present their work.
- **Specialized symposiums or workshops:** focusing on a specific scientific problem or research area.
- **Research project dissemination events,** where results of funded projects are shared with the scientific community.
- **Graduate or doctoral seminars:** often organized for students to present their research progress.
- **Multidisciplinary conferences:** where scientists from different fields exchange knowledge on broad themes like climate change, health, or technology.



### 4.3. How to prepare a scientific presentation:

Preparing a scientific presentation requires organizing your research in a clear, concise, and engaging way for your audience. Here are the principal steps to prepare and success a scientific presentation:

- a) **Understand the event:** Check the type of presentation (oral, poster, keynote) and read the conference guidelines.
- b) **Know your audience:** Identify whether they are specialists, general scientists, or mixed participants.
- c) **Organize your content:** Structure your presentation into introduction, objectives, methods, results, discussion, and conclusion.
- d) **Design your visuals:** Create clear slides or a poster with simple text, large fonts, and effective figures/graphs.
- e) **Practice your talk:** Rehearse several times, manage your timing, and prepare smooth transitions between sections.
- f) **Anticipate questions:** Think of possible questions and prepare clear answers.
- g) **Handle logistics:** Register on time, prepare travel materials, and review the conference program.
- h) **Prepare networking materials:** Bring business cards or contact information to share.
- i) **Take care of yourself:** Rest well before the presentation and arrive early to get comfortable with the room or poster space.



**Figure 13.** Principal steps for preparing a scientific presentation

### 4.4. How to present a scientific conference:

Presenting at a scientific conference is an opportunity to share your research findings, receive feedback, and build professional connections. The key to a successful presentation lies in preparation, clarity, and engagement.

- 1- First, begin by introducing yourself, your institutional affiliation, and the title of your research.
- 2- Then, briefly set the context by explaining why your study is important and what specific problem or question it addresses. This provides the audience with a clear understanding of the relevance of your work.
- 3- When moving to the main part of the presentation, focus on the core sections of your research: methods, results, and discussion. Keep explanations concise, avoiding unnecessary technical details, and support your points with well-designed visuals such as graphs, tables, or images.
- 4- Emphasize the most significant results, interpreting them in relation to the objectives you presented earlier and always maintain logical flow so that the audience can follow your reasoning step by step.
- 5- During the presentation, speak slowly and clearly, using a confident tone. Maintain eye contact with your audience and avoid reading directly from your slides or notes. Use body language naturally to reinforce your points, and manage your timing carefully to stay within the allocated slot.
- 6- At the end, summarize your findings and highlight their implications for the field, suggesting possible directions for future research.
- 7- Finally, be prepared for questions. Listen attentively, respond respectfully, and if a question is unclear, politely ask for clarification. Handling questions with openness shows your command of the subject and your willingness to engage in scientific dialogue. A professional and confident presentation will not only make your research more impactful but also leave a positive impression on your audience.



## 5. How to plan and conduct a job interview:

### 5.1. Definition:

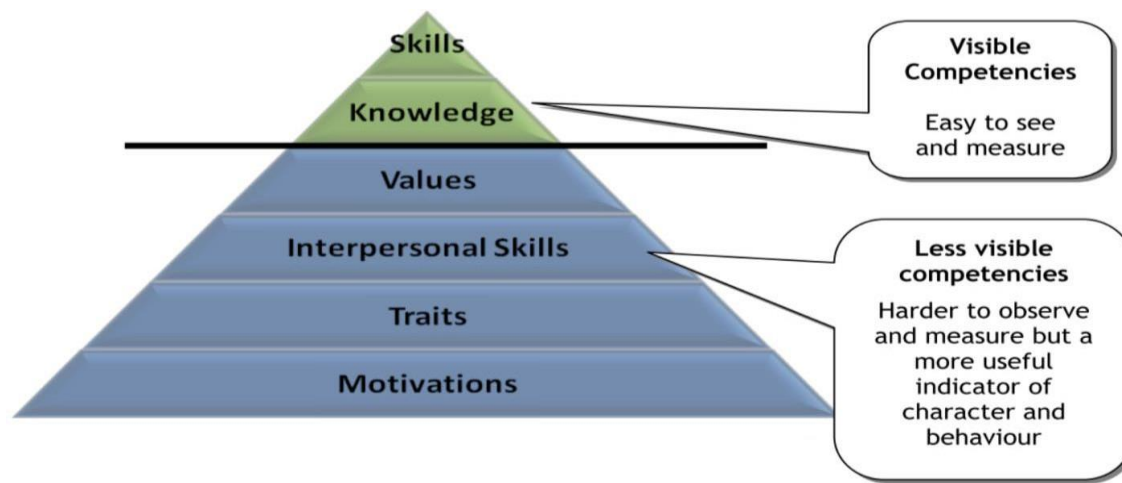
An interview is at the most fundamental level, a meeting between strangers. It is worth bearing this in mind at all times when you are preparing for an interview. You have a very limited amount of time to make a good impression, so preparation is key. An interview should be a two-way process, but in reality, particularly early on in your career, it can often feel that all the power is in the hands of the interviewer. It can feel like you, as the candidate, are being judged and weighed in the balance, whereas an interview really should be a two-way process. You need to be sure the job and the organization is right for you too.



### 5.2. In which cases, job interview is requested:

A job interview is requested when an employer or recruiter wants to meet with a candidate to evaluate their suitability for a position. It usually happens in the following cases :

- ❖ **Application Stage:** After you submit your CV or application, if your profile matches the job requirements.
- ❖ **Pre-selection Screening:** When recruiters want to verify details (skills, experience, motivation) before shortlisting.
- ❖ **Hiring Decision:** When the company needs to assess several qualified candidates face-to-face (or online) to choose the best fit.
- ❖ **Internal Promotion or Transfer:** Sometimes current employees are interviewed for a higher role or new department.
- ❖ **Competitive Programs:** For scholarships, internships, or training programs, an interview may be requested to assess motivation and potential.
- ❖ **Clarification:** If the employer wants to explore points from your CV, cover letter, or test results in more detail



**Figure 14.** Competencies needed in a job request

### 5.3. How to be prepared for a job interview:

To be well prepared for a job interview, a candidate should begin by:

1. **Researching the company:** learning about its mission, values, products, services, and any recent achievements or projects. Equally important is reviewing the job description carefully and matching personal skills and experiences with the role's requirements.
2. **Practicing common interview questions:** preparing answer questions such as Tell me about yourself; What are your strengths and weaknesses? and why do you want to work here?
3. **Playing on behavior:** choosing professional and appropriate clothing reflects seriousness, while practicing good communication clear speaking, active listening, and confident body language helps build credibility.
4. **Respecting interview timing:** candidates need to know the exact location and plan to arrive 10 to 15 minutes early. For online interviews, testing internet connection, camera, and microphone in advance avoids last-minute issues. Bringing necessary materials (CV, notebook, pen ...)
5. **Being relaxed:** Candidates should remain calm, breathe deeply to reduce nervousness. Confidence, combined with genuine interest and preparation, leaves a lasting positive impression on employers.



#### 5.4. How to conduct a successful job interview:

A successful job interview begins with careful preparation. The interviewer should review the candidate's CV, cover letter, and any pre-screening notes in advance to understand their background. For a candidate, conducting themselves well in a job interview means showing preparation, professionalism, and confidence.

1. First, they should greet the interviewer politely, offer a firm handshake if appropriate, and maintain eye contact with a natural smile. Starting with a positive and respectful attitude helps set the right tone.
2. Throughout the interview, the candidate should listen carefully to each question and answer clearly, using specific examples to demonstrate their skills and experiences. The **STAR method** (Situation, Task, Action, Result) is a helpful way to structure responses, making them precise and convincing. It is also important to stay honest; if the candidate does not know something, it is better to admit it and show willingness to learn rather than guess.
3. Professional communication goes beyond words. Candidates should sit upright, avoid distracting habits (like playing with hands or checking their phone), and use body language that shows attentiveness. Speaking with enthusiasm and maintaining a calm, steady tone reinforces confidence and credibility.
4. At the same time, the candidate should show genuine interest in the role and the organization. Asking thoughtful questions about the job, the team, or the company's future demonstrates motivation and engagement. This transforms the interview into a two-way conversation rather than a one-sided interrogation.
5. Finally, at the end of the interview, the candidate should thank the interviewer for the opportunity and express enthusiasm about the role. A polite closing statement, combined with a follow-up thank-you email, leaves a lasting positive impression. By being prepared, respectful, and engaged, a candidate can conduct themselves in a way that maximizes their chances of success.



**Figure 15.** The STAR Method for a job interview