

# English for Scientific Communication

## Adrian Wallwork

### What the course will teach you. How to ...

- communicate with others by focusing on THEM not on YOU – you will understand that by helping everyone else you are also helping yourself
- see yourself and your research as a 'product' that you need to 'sell'
- increase chances of publishing your paper: reduce text, short sentences, highlight your findings, put right info in each section.
- structure an Abstract, Introduction, Discussion and Conclusions.
- structure a sentence and a paragraph.
- avoid redundancy, ambiguity and mistakes in general.
- deliver a presentation by engaging with the audience and leaving them with a positive final impression that will encourage them to contact you.
- be positive and constructive, and keep everything simple.
- write emails that ensure you get the response you were hoping for

### What the course will **NOT** teach you

- grammar (except tense usage in the various sections of a paper)
- vocabulary
- typical academic phrases and idioms

This is NOT a typical English course.

This document explains i) preparation to do BEFORE the course (page 2); ii) how to use Zoom (pages 2-3); iii) how I teach (page 4); iv) exercises for the course (page 5-end).

**At least one day BEFORE the course begins, reply to my email with:**

1. a **presentation in PowerPoint or as a pdf** about your research (in English) that you have **already** done in the past. You do **NOT** need to prepare a presentation specifically for this course. **Please label the presentation ONLY with your first name and family name (e.g. Maria Rossi).**
2. a **written speech** of what you would say when talking about the first THREE slides of your presentation (i.e. the title slide + two more slides). **Label the speech ONLY with your name (e.g. Maria Rossi).**

If you are NOT Italian, please let me know your nationality.

## Joining the ZOOM meeting / lesson

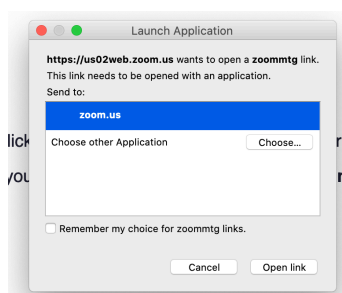
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At least 15 minutes before the meeting, I will email you a Zoom link, which looks something like this:

<https://us02web.zoom.us/j/83734931425>

There may also be a Passcode e.g. h7wp8n

The window below should open. The instructions are easy to follow.



If you haven't used Zoom before I suggest you join the 'meeting' (i.e. lesson) about ten minutes before it starts so that you can check that your audio and video work correctly.

Please join **with video** – I need to be able to see you.



You must join with your **real name** e.g. Angela Rossi. (first name + family name)

Unless you are doing a presentation, please keep your microphone on 'mute'.

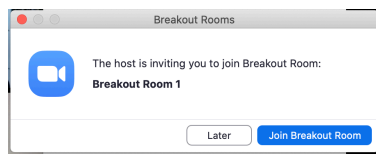
**SCREEN SHARING** When you give a presentation, you need to share your screen. If you can't find the 'share' button on Zoom then press Alt + S on your PC. Or if you have a Mac: command + shift + S.

## ZOOM Breakout rooms

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These are rooms where I can allocate you into small groups (2-5 people) and you can talk to each other. You will only be able to talk to people in your specific breakout group.

Please 'join breakout room' when the window below appears:



Turn your video and microphone on. Do not wait for me to appear: begin your discussion immediately.

I will 'visit' the breakout rooms individually. My aim is NOT to correct your English but to act as a facilitator and to hear the points that you are making. You do NOT need to compete to get my attention and you will NOT get extra credits for trying to do so!

You will be in the breakout room from between 1-10 minutes. I will 'shut' the breakout rooms when at least two of the groups have finished their activity. This means that you may finish your activity before the allocated time. If this happens, ask each other more questions about your research, family, interests, place where you come from ... do not sit in silence!

When the time is finished I will bring you back to the main meeting.

### Breakout rooms: Your responsibilities

When you are in the breakout room, follow these 'rules':

- **Do NOT dominate the discussion.** If you find that you are always the one talking, ask your colleagues questions and encourage them to talk.
- **Do NOT be the one who always starts the discussion.** Say something like: *I started last time, Marina do you want to start this time?*
- Use phrases such as: *I (don't) agree with you. I am not sure I agree with you. Do you agree? Yes, I agree*

## How I teach

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I will speak slowly and clearly – if I speak too fast, send me a message via Zoom's 'chat'.

I will switch frequently from topic to topic (e.g. from writing skills to presenting skills). I use a wide variety of activities to try and maintain your interest.

I will give you a lot of useful tips – many of these will initially seem counterintuitive – but trust me!

Be prepared for a lot of comments on the way you do your presentations – but I will deliver the comments in a constructive way with a bit of English humour!

When I show a slide, I will let you read it before I start talking about it.

The lessons are 120 minutes with a 10 minute break in the middle.

### My website: [e4ac.com](http://e4ac.com)

Details about our services, the course, and notes on the lessons.

ALL THE LESSONS + NOTES ON THE LESSONS CAN BE FOUND HERE:

[e4ac.com/resources](http://e4ac.com/resources)

### Some of my books, all available on [amazon.it](http://amazon.it)



### Revision / Editing Service

If you (your colleagues, profs etc) want your paper edited, please check out our editing service at [e4ac.com](http://e4ac.com) and send me an email.

We do not edit theses.

## EXERCISES THAT WE WILL DO DURING THE LESSONS

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**Do NOT do these exercises before the course begins.**

**1 In what ways is the writer of this email not showing empathy towards me?**

Good morning

My name is Pinco Pallino and I am enrolled in the first year of the PhD course in Terrestrial Vehicles and Systems of Transport. Since it is only now that I have made my online enrolment to the course “Scientific English”, I am not in the list of students of either the first course or the second course of lessons. I would like to know whether, despite my delay in enrolling, I can still participate in the course: if possible I would like to follow the first session. However, for reasons that unfortunately I cannot change, which are related to my activity as a PhD student, I will not be in Pisa in concomitance with the first lesson of the first session.

I look forward to hearing from you.

Dr Pinco Pallino

PS My girlfriend wants to do an online English course, please could you send me recommendations ... and also for a good English grammar (preferably with Italian explanations).

**2 Write the following email.**

You submitted / uploaded your paper for publication in a journal several months ago. The editor has never replied even though you have written her two emails.

- Think of a subject line.
- Explain the situation and find out whether your paper has been accepted or not.
- Use appropriate salutations at the beginning and end.

Subject line:

Dear \_\_\_\_\_

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### 3 Which version do you prefer: A or B?

a) Human memory can be subdivided into sensory memory (by which we see a film as a continuous scene rather than a series of still images), short-term memory (as used for example when you mentally calculate  $3 \times 7 \times 4$ ), declarative-learning long-term memory (i.e. conscious recollection, for example of last week's English class), and procedural-learning long-term memory (of how to do something, for example play the piano).

b) There are four main types of human memory. First, sensory memory, for example we see a film as a continuous scene rather than a series of still images. Second, short-term memory, this helps for example when you mentally calculate  $3 \times 7 \times 4$ . Third, we have declarative-learning long-term memory. This means conscious recollection, for example, of last week's English class. Finally, procedural-learning long-term memory reminds us how to do something, for example play the piano.

### 4 What is the problem with this sentence?

English, which owes its origins to the Anglo Saxons (a tribe who lived in what is now Denmark and Northern Germany) and is the international language of communication, in part due to the importance of the USA, rather than the Queen of England, is now studied by 1.1 billion people.

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5 Look at the sentence in Ex 4. **THINK** (don't write) about how you could divide it into four shorter sentences.

**6 The sentence below is from an Abstract. Is it easy to read without much mental effort?**

The aim of our study was firstly to assess changes in the level of tolerance of natives of one country towards immigrants over the course of a 50-year period in order to be able to advise governmental agencies on how to develop strategies based on those countries that have been more successful in reducing racism as already investigated in previous studies, but not in such a systematic way, and secondly to establish correlations with data from the USA, which until now have been reported only sporadically.

*Now look at the four short sentences below, which have been extracted from the long sentence above. Put them in the most logical order.*

1. The main aim was to be able to advise governmental agencies on how to develop strategies based on those countries that have been more successful in reducing racism.
2. The second aim was to establish correlations with data from the USA, which until now have been reported only sporadically.
3. This aspect has already been investigated in previous studies, but not in such a systematic way.
4. We assessed changes in the level of tolerance of natives of one country towards immigrants over the course of a 50-year period.

**7 Make the sentence below more readable by dividing it up into shorter sentences.**

Using four different methodologies, previously used in the literature in separate contexts (i.e. anthropology, biology, physics and soil sciences), each of which gave contradictory results, in this study, the meaning of life, as seen through the perspective of a typical inhabitant of western Europe, was investigated, confirming previous research (Smith et al, 2020) indicating that, as a general rule, we understand absolutely nothing.

We investigated the meaning of life, as seen through the perspective of a typical inhabitant of western Europe. We used four different methodologies, previously used in the literature in separate contexts (i.e. anthropology, biology, physics and soil sciences), each of which gave contradictory results. Our findings confirmed previous research (Smith et al, 2020) indicating that, as a general rule, we understand absolutely nothing.

**8 Cut the redundant words. For example:** It was yellow ~~in colour~~ and round ~~in shape~~.

1. This will be done in the month of December.
2. During the maturation process, the plant grows to ten times its original size.
3. We did x. This choice meant that ...
4. As can be seen, Figure 1 shows that  $x = y$ .
5. The activity aimed at the extrapolation of X is not trivial.
6. The summary statements presented above represent the authors' current perceptions in relation to the results. Since the work is ongoing, these statements should only be viewed as conclusions to the extent that it is the author's intention and aim to embellish them in the light of subsequent events.

**9 Find the redundant word and delete it, as in first sentence.**

1. One ~~suitable~~ method is to separate the men from the women.
2. Dynamism and velocity are typical characteristics of this species.
3. Their head office is located in London.
4. If there is water present in the system, this may cause rust.
5. The results obtained highlight that  $x = y$ .

1) suitable 2) typical *or* characteristics 3) located 4) present 5) obtained Alternative for 4) Water in the system may cause rust



**10** Which text do you prefer: A or B? What is the main difference between them? Does Text A contain any useful info that Text B does not contain?

TEXT A	TEXT B
<p>Even though GC/MS and GC-C-IRMS are the main techniques reported in the literature for the study of organic residues, recently, we have seen an increasing in the applications of high-resolution mass spectrometry (HRMS) mainly coupled with liquid chromatography. It provides the opportunity of performing accurate mass measurements, has shown its enormous capability to distinguish isobaric compounds thanks to the determination of exact molecular mass and elemental composition. In addition, when the instrumental asset makes it possible, the interpretation of tandem mass spectra allows the elucidation of chemical structures, even in the case of isomers, to be obtained.</p>	<p>GC/MS and GC-C-IRMS are the key techniques for studying organic residues. However, high-resolution mass spectrometry (HRMS) coupled with liquid chromatography is becoming more common. Through accurate mass measurements, HRMS differentiates between isobaric compounds by determining the exact molecular mass and elemental composition. In addition, tandem mass spectra can potentially reveal the underlying chemical structures, even for isomers.</p>

**11** Decide which one (a or b) in the following pairs of sentences is correct.

1a) We found useful to consider the cases separately.      2a) It is worth to note that  $x = y$ .

1b) We found it useful to consider ...      2b) It is worth noting that  $x = y$ .

**12 Each of the sentences below contains words or phrases that can be deleted without requiring any other changes. Delete such words and phrases.**

The solution ~~adopted~~ was to ~~carry out a~~ test of all the software on the market.

1. As we have already noted in Section 4.2.1, the presence of x can influence y.
2. However, we have to make use of other techniques.
3. Paint samples, as described previously, normally contain mixtures of different substances.
4. In comparative terms, there is no real difference between x and y.
5. Also, we present simulation results that will provide a two-fold contribution: (i) confirm the effectiveness of ..., and (ii) highlight the importance of ...
6. The document was written in the English language and the contents represent a new innovation in the sector of telecommunications.

1. As ~~we have already~~ noted in Section 4.2.1, [~~the presence of~~] x can influence y.
2. However, we have to ~~make use of~~ other techniques.
3. Paint samples, ~~as described previously~~, normally contain mixtures of different substances.
4. ~~In comparative terms~~, there is no real difference between x and y.
5. Also, we present simulation results that ~~will provide a two-fold contribution~~: (i) confirm ..
6. The document was written in ~~the~~ English language and the contents represent an innovation in ~~the sector of~~ telecommunications.

### 13 Replace the *verb + noun* construction with a single verb

to reach a conclusion = to conclude

- |                           |                          |
|---------------------------|--------------------------|
| 1. achieve an improvement | 5. execute a search      |
| 2. carry out a test       | 6. exhibit a performance |
| 3. cause an increase      | 7. give an explanation   |
| 4. effect a reduction     | 8. implement a change    |

- |            |             |            |            |
|------------|-------------|------------|------------|
| 1) improve | 3) increase | 5) search  | 7) explain |
| 2) test    | 4) reduce   | 6) perform | 8) change  |

### 14 Answer the questions in relation to the two versions.

- 1) Which is easier to read a) or b)?
- 2) Which is more elegant a) or b)?
- 3) Which contains more information a) or b)?

VERSION A (55 WORDS)	VERSION B (40 WORDS)
<p>In Figure 2 the curve <b>exhibits a downward trend</b> (portion A-B); then it <b>undergoes a rapid rise</b> (part B-C), it then <b>assumes a leveled state</b> (zone C-D). It <b>possesses a peak</b> at point E before <b>displaying a slow decline</b> ...</p> <p>On the other hand, the curve in Fig. 3 <b>is characterized by a different behavior</b>.</p>	<p>In Figure 2 the curve initially <b>falls</b> (segment A-B) and then <b>rises rapidly</b> (B-C). It then <b>levels off</b> (C-D). Finally it <b>peaks</b> at point E before <b>falling slowly</b> ... On the other hand, the curve in Fig. 3 <b>behaves</b> differently.</p>

**16 Read this abstract about batteries in cell phones. What information is missing?**

cell phone - cellulare, 5G - quinta generazione, battery - batteria/pila, recharge - ricaricare, predict - prevedere

In the last few years 5G cellular batteries have become increasingly popular in the telecommunications and computer industries. Many authors have studied the various features of such batteries and noted that the lifetime of a 5G cellular battery, in particular those used in the most recent generations of mobile phones, may be subject to the number of times the battery is recharged and how long it is charged for. In addition, it has been found that there is no adequate analytical model to predict this lifetime. Such an accurate model is necessary in order for producers and consumers alike to be able to predict how long the batteries will last and also, in some cases, how they can be recycled. In this work, an analytical model is developed which describes the relationship between the number of times a battery is recharged, the length of time of each individual recharge, and the duration of the battery.

**17 Read this revised abstract. Why is it better?**

**Note: The numbers are MY numbers and refer to the analysis below. \***

(1) The lifetime of a 5G cellular phone battery may be subject to the number of times the battery is recharged and how long it is charged for. To date, there has not been an adequate analytical model to predict this lifetime. (2) In this work, an analytical model is developed which describes the relationship between the number of times a battery is recharged, the length of time of each individual recharge, and the duration of the battery. (3) This model was validated by comparison with both experimental measurements and finite element analyses, and shows strong agreement for all three parameters. (4) The results for the proposed model are 63% more accurate than results for previous analytical models reported in the literature for 5G cell phones. (5) The new model can be used to design longer lasting batteries. It can also lead towards further models that can predict battery failure.

**\* Now read an analysis of the structure of the abstract above.**

- 1) The problem that this paper is trying to resolve. Why did you carry out your project?
- 2) New solution given by authors of the paper. What makes it different from previous research?
- 3) Validity of the model. Does it really do what you say it does?
- 4) Results. What is new compared to previous results?
- 5) Implications and future work. What does this all mean? What are your conclusions and recommendations? What do you plan to do next? *[Check your journal to see if implications and future work are required or not in the Abstract.]*

**18 Here is an alternative, less traditional, structure. Which do you prefer 17 or 18?**

We have developed an analytical model which predicts the relationship between the number of times a 5G cellular phone battery is recharged, the length of time of each individual recharge, and the duration of the battery. We validated this model by comparison with both experimental measurements and finite element analyses, and it shows strong agreement for all three parameters. The results for the proposed model are more 63% accurate than results for previous analytical models reported in the literature for 5G cell phones. The new model can be used to design longer lasting batteries. It can also lead towards future models that can predict battery failure.

**19 Below is a fictitious abstract entitled *Is it Time to Leave Him?* It is written in an impersonal way. What do you notice about the structure?**

(1) Three red flags were identified that indicate that the time to leave him has come. (2) These red flags are: five burps per day, two mansplaining \* episodes per day, and five games on the Playstation with friends per week. (3) A large number of women have doubts about the right moment for leaving their partner. (4) Research in the last decade has shown that women wait in hope for a change in their partner's habits. (5) One hundred couples were analyzed, recording their daily life for six months. (6) Women were provided with a form to mark the moments of annoyance recorded during the day. (7) Burps, sitting-zapping sessions and games on the Playstation with friends produced the highest index of annoyance. (8) The probability of eliminating these habits was found to be significantly low when the three red flags had been operative for more than three months. (9) Thus, these numbers provide a good indication of when the time to leave him has come. (10) With these red flags, women will no longer have to waste their time waiting for the right moment.

\* Mansplaining è un neologismo sincretico anglofono, formato dal sostantivo man abbinato a splaining, derivato dal gerundio del verbo explain (spiegare), e usato nel contesto del femminismo della quarta ondata, con cui viene definito quell'atteggiamento paternalistico di alcuni uomini (ma non solo) che tendono a commentare o a spiegare a una donna, in un modo condiscendente, troppo semplificato o troppo sicuro di sé

### **Structure of dynamic abstract**

1. What you did + the key result, i.e. begin with info that the reader does NOT already know
2. Introduce background by connecting to what you said in (1).
3. Use the background information (max 30%) to justify what you did.
4. More info on your results.
5. Implications of your research.

### **20 Answer the questions.**

1) At their first reading, how many people can understand a sentence of:

- 8 words a) 90% b) 100%
- 27 words a) 27% b) 4%
- 32 words a) 25% c) 2%

2) True or false? You will lose more readers in the first 50 words than in the following 250 words.

### **21 How difficult is this text to understand?**

Different writers have different methods of organizing their reports, and some seem to have no discernible method at all. Most of the better writers, however, appear to be in remarkably close agreement as to the general approach to organization. This approach consists of stating the problem, describing the method of attack, developing the results, discussing the results, and summarizing the conclusions. You may feel that this type of organization is obvious, logical, and natural. Nevertheless, it is not universally accepted. For example, many writers present results and conclusions near the beginning, and describe the derivation of these results in subsequent sections.

**22 Reformulate (use Track Changes if you can) the sentence below by putting the subject at the beginning.**

We have mentioned a number of different factors that can improve one's writing of scientific papers, however there is one factor that is even more important than the others (i.e. conciseness, sentence length, blah blah and blah blah, using verbs instead of nouns) and this factor is rarely taken into consideration by writers although it is absolutely fundamental; that factor is, of course, putting the subject at the beginning of the sentence.

Putting the subject at the beginning of the sentence is fundamental in improving one's writing of scientific papers.

But unlike the other factors (i.e. conciseness, sentence length, using verbs instead of nouns) it is rarely taken into consideration by writers.

**23 Relocate the *verb* so that is next to the subject.**

Various European languages including Italian, and Portuguese, along with Hindi, Russian and Chinese (which has only recently been added to this list), *can be learned* using this method.

Various languages *can be learned* using this method. These include European languages such as Italian and Portuguese, along with Hindi, Russian and Chinese. Chinese has only recently been added to this list.

**24 Decide whether the part in bold is in the correct position. If it is not, move it to the correct position.**

1. We consigned **these values** to their respective chemicals.
2. We can associate **the list of points in P** with each cell.
3. X receives **the position of the pointing device** as input.
4. We sent to our co-authors **all the data**.
5. They deferred to the next meeting **the matter**.

1) OK 2) OK 3) OK (*as input* could also be put after *receive*) 4) all the data to our co-authors // We sent our co-authors all our data 5) They deferred the matter to the next meeting.

**25 Complete the second sentence so that it means the same as the *first*. Note that the word order in the first sentences is not correct.**

1. *In Fig. 2 a 3D model and 2D model are shown.*

Figure 2 \_\_\_\_\_

2. *Ten datasets with the same X but a different Y, along with five datasets with a different X but a similar Y, were generated.*

A number of datasets were generated: \_\_\_\_\_

3. *The analytical steps, owing to the difficulties in measuring X, require some simplifications.*

Due to \_\_\_\_\_

4. *We can separate, by splitting these sections in the middle, P and Q.*

P and Q \_\_\_\_\_



1) Figure 2 shows a 3D model and 2D model.

2) A number of datasets were generated: ten datasets with the same X but a different Y, and five with a different X but a similar Y.

3) Due to the difficulties in measuring X, the analytical steps require some simplifications. / The analytical steps require some simplifications due to the difficulties in measuring X,

4) P and Q can be separated by ... // By splitting ... , we can separate P and Q.

## 26 Email

You are working with a colleague to produce a presentation for an international conference. Your colleague has emailed a first draft of the presentation in order to get your opinion. You think:

- there is no introduction
- too much text / too many slides
- fonts and colours are not clear
- concluding slide is really boring

Write an email to your colleague giving your reaction to her/his draft. Remember everything we have learned about empathy and respect!

**27 Answer these questions thinking from a reader's perspective.**

1) *How could these two sentences be improved?*

Finding a candidate with all the right qualifications, with a high level of communications skills, a good knowledge of at least two languages and a friendly personality is not an easy task.

It is advisable that a foreign language should be learned at a young age.

2) *Which is better? A or B? Why?*

**A)** You are doing this course in your own time but at the expense of your department in order to learn English.

**B)** In order to learn English you are doing this course. The course takes place in your own time but at the expense of your department.

3) *Which is the most immediate and easiest to read? A or B? Why?*

**A) English**, although currently the international language of business, diplomacy and science, **may** one day be replaced by Spanish or Chinese.

**B) Although English is** currently the international language of business, diplomacy and science, it may one day be replaced by Spanish or Chinese.

**28 True or False?**

1. People want key information first. On CVs people put their most recent achievements first. They don't put what primary school they went to.
2. If you put most important element at the beginning of sentence this will force you to think what the most important element is. This will also help the reader understand more.
3. By putting subject and main verb at the beginning you will be forced to write more concisely and probably with shorter sentences.
4. People want to know WHY they are doing something before they are told HOW to do it.

**29 Below is the speech from a presentation to present the final slide. The presenter is trying to encourage the audience to contact her. Think about i) what words / phrases could be deleted; ii) what perhaps needs to be added.**

Our results show that the inhibition of Na enzyme caused an alteration in the endocytotic pathway that interfere with entry of Zika virus into the cells. It would be interesting to use live imaging techniques that would allow us to visualize how this alteration occurs. In addition, so far this study has been performed in vitro using tumor cells, so it is extremely important to further expand this study to neuronal cells, which are the main target of Zika infection. So, if you have any suggestions or advise, I would appreciate it. Here, there is my e-mail contact.

Key:

~~Our results show~~ / We found that the inhibition of Na enzyme ~~caused an alteration in~~ altered the endocytotic path way. ~~that~~ This interfered with entry of Zika virus into the cells. ~~It would be interesting to use~~ Live imaging techniques  would ~~allow~~ help us to visualize how this alteration occurs. **If any of you have the equipment to do this imaging, it would be great to hear from you.** ~~In addition, so far this study has been performed~~ we've only tested in vitro using tumor cells., ~~so it is extremely important to further expand this~~ What we really need to study ~~to is~~ neuronal cells, ~~which especially since they~~ are the main target of Zika infection. So, if you have any suggestions ~~of advise~~ on how to do this, I would really appreciate it. Here, ~~there~~ is my e-mail ~~contact~~.

### 30 Compare the abstract and the introduction. How are they different?

*rods- barre, brittle - friabile / fragile, bent - piegato, surface - superficie*

ABSTRACT When thin brittle rods such as dry spaghetti pasta are bent beyond their limit curvature, they often break into more than two pieces, typically three or four. With the aim of understanding these multiple breakings, we study the dynamics of a bent rod that is suddenly released at one end. etc, etc.

INTRO The physical process of fragmentation is relevant to several areas of science and technology. Because different physical phenomena are at work during the fragmentation of a solid body, it has mainly been studied from a statistical viewpoint [1–5]. Nevertheless a growing number of works have included physical considerations: surface energy contributions [6], blah [7], blah [8], blah [9], Usually, etc. etc. ...

### 31 Present simple, present continuous, present perfect, present perfect continuous

1. In the last few years there **is / has been** considerable interest in ...
2. Although many different approaches **have been proposed / have been proposing**, to date there **is not / has not been** an adequate analytical model to solve this issue.
3. For more than a decade analysts **are developing / have been developing** new ways to improve learning strategies.
4. Since 2018 there **are / have been** many attempts to establish an index [Mithran 2018, Smithson 2019], but until now no one **has managed / has been managing** to solve the issue of ....
5. As yet, a solution **is not / has not been** found, although three attempts **have been made / have been making** [Slimm 2019, Fatz 2020, Yui 2021].
6. Traditionally, researchers **always see / have always seen** the time factor as a constraint.
7. In the last two years we **are investigating / have been investigating** new ways to do this.
8. This **receives / has received** much attention in the past decade.

- |                                     |                                 |
|-------------------------------------|---------------------------------|
| 1) has been                         | 5) has not been, have been made |
| 2) have been proposed, has not been | 6) have always seen             |
| 3) have been developing             | 7) have been investigating      |
| 4) have been, has managed           | 8) has received                 |

**32 The extracts below come from the 'review of the literature' section. *Alopecia areata* is the medical term for male baldness (calvizia). Analyse how the three paragraphs are structured.**

**What function does each sentence serve within the paragraph?**

1. Smith et al (2018) reported that *alopecia areata* may be cured by massaging the scalp with substances such as honey, lemon juice, black pepper and egg yolk. *However*, the application of these substances only had an 18% success rate. We prove that the placement of frozen banana skins for 3-minute periods over the bald patch has a success rate of more than 30%, in fact ...
2. In 2021, Jones et al carried out tests using coconut milk, *but* only with a relatively small sample (75 subjects). In our experiments, we used a much larger sample (600 males, average age 44.6), using a blend of almond oil and castor oil.
3. In a previous paper [23] we found that emotional anxiety and intake of fast food were the primary causes of *alopecia areata*. *In this paper, we make a further contribution* by showing that avoiding certain types of processed food of any kind not only cures *alopecia areata* but also *alopecia capitis totalis*.

**33 Complete the gaps in relation to YOUR OWN RESEARCH.**

Author et al (2022) approached the problem of \_\_\_\_\_

by doing \_\_\_\_\_

\_\_\_\_\_

A limitation of their approach is \_\_\_\_\_

\_\_\_\_\_

Our approach is to \_\_\_\_\_

\_\_\_\_\_

In fact, the advantage of our solution is \_\_\_\_\_

\_\_\_\_\_

It is a novel approach because \_\_\_\_\_

---

**34 Paraphrase the following phrase in at least two different ways. You must**

- change every word except for *Cicccone* and *Italians*.
- write using formal scientific language

Cicccone claimed that Italians do it better [1998].

**NB: 'it' refers to the sexual act.**

**35**

**Below is the script from the presenter on green chemistry.**

- What is the point of the third sentence (in italics)?
- Which sentences outline the agenda?
- Which sentences encourage the audience to think about a possible collaboration?

I study green chemistry. I want to tell you about a new way to reduce the impact of industrial processes and help sustain the environment. *But don't worry, I am not going to be giving you lots of worrying statistics on climate change.* Instead I am going to talk about catalysts and ligands, and how we can replace toxic metals with ones that are safe and also cheap and easy to find. Then I'll show you I plan to create my green catalysts. And finally, I'll explain how I think they could be applied to do x, y and z. I haven't found the perfect solution yet. So while you're listening, if any ideas come to you, then please let me know. I will

give you my email at the end. *moves to next slide*. So here is the problem. At the moment we use a lot of toxic metals – the ones you can see in the slide ...

**36 Decide in which cases below it would be difficult for the reader to establish who made the confirmation / suggestion.**

1. In 2022, we confirmed that Italian dogs are more intelligent than British dogs [25].
  2. In 2020, Carter suggested that dogs are more intelligent than cats [36].
  3. In 2019, it was suggested that that dogs are more intelligent than cats [Carter, 36].
  4. In [36], it was suggested that that dogs are more intelligent than cats.
  5. In 2018, it was suggested that dogs are more intelligent than PhD students.
- 
1. *We* clearly indicates that you are referring to your own work.
  2. The author is the subject of the verb, so it is clear to the reader.
  3. The passive form means that the reader is not sure until the end of the sentence if it was you or another author. A long literature review full of passive sentences is very heavy for the reader.
  4. This usage will depend on your chosen journal (it is accepted in some but not in others). As in Example 3, you are forcing the reader to look at the reference to check whose paper [36] is - yours or another author's.
  5. There is no reference. Readers cannot be sure if you made the suggestion or someone else.



**37 The following two sentences are from the first paragraph of a Discussion (though something very similar might also be found in an Introduction).**

**a) Is it clear whether it is the author of the paper who 'found' and 'identified'?**

Bilingual children were **found** to show a greater adaptability to new situations (e.g. change of school, change of diet) and demonstrated a greater ease in communicating confidently with adults. As result of an extensive search for bilingual children in ten European countries, 149 children were **identified**.

**b) Is this version clearer?**

Bilingual children were found to show a greater adaptability to new situations (e.g. change of school, change of diet) and demonstrated a greater ease in communicating confidently with adults. **[Simons, 2017]** As result of an extensive search for bilingual children in ten European countries, 149 children were identified **[Table 2]**.

**c) And this version?**

Bilingual children **show** a greater adaptability to new situations and **demonstrate** a greater ease in communicating confidently with adults [Simons, 2017]. ***Simons investigated children from the US and Canada. On the other hand, the focus of our study was Europe and*** as a result of an extensive search for bilingual children in ten European countries, 149 children were identified (Table 1).

**38 Read the example (in italics) and note the structure (1-4).**

*1) Smith et al (2020) found that PhD students had a similar level of intelligence to undergraduate students. 2) However, our study contradicts / would seem to contradict Smith's finding. 3) Our experiments proved that such PhD students have a significantly higher IQ. 4) This finding may encourage graduates who are planning to do a PhD to take an IQ test to verify whether they are sufficiently intelligent to undertake a doctoral program.*

- 1) What another author found.
- 2) Whether your findings confirm or contrast the other author.
- 3) Details on what you found.
- 4) The implications of your finding.

**Now write a similar paragraph describing YOUR OWN WORK. You can use the same structure (1-4) or you can invent your own structure.**

**39 Discuss your strategy**

Your paper has been rejected (subject to 'revisions') by one out of the three referees. The referee who rejected your paper says:

- The English is poor - *but he gives no examples. In your opinion the English is fine.*
- The figures are not clear - *you think they are very clear.*
- The bibliography does not include two important references which the referee gives you - *you think the references are irrelevant.*

How would you respond to the three requests? Discuss your strategies.

**40 Why is the paragraph below NOT good? The paragraph describes the author's limitations.**

Unfortunately, our statistical tool is not able to describe all the variables involved. Moreover, there were some discrepancies with x and y. However, the same tool was used for conducting similar research with American samples, and the results were reliable and representative.

**41 Read these ways to deal with different types of limitations.**

*Limitation: You did not study X*

We were unable to access the data on X because such data are not available in the public domain. Other studies found the same problem (e.g. Lu 2012, King 2013) and decided to focus only on Y and Z. We are currently in the process of collecting data on X, and this will be the subject of a future paper.

*Limitation: Old data*

Even though the data were collected two years ago, the stability of this sector means that such data have not changed significantly. In fact, in the last two years the percentage of x has remained exactly the same [Wang 2019, Chu Wa 2020]. In addition, more recent data are not currently available.

*Limitation: Few data*

Our data only refer to one kind of sector. However, as far as we know there are no similar studies for this sector in Italy. Thus we believe that this project opens the way for ...

**42 Describe one limitation of your research, and counter any objections to this limitation**

### 43 Compare the structure and the information given in the Abstract and Conclusions.

#### ABSTRACT

**A)** Atheists (*atei*) do not believe in an afterlife (*aldilà*). They may thus have difficulty rationalizing their purpose on earth. With the aim of understanding the perspective of atheists, **B)** we interviewed 150 UK-born couples (125 mixed, 25 same sex; average age 46) who had happily cohabited for more than 15 years. Interviewees were asked ten simple questions regarding their attitudes (*atteggiamento*) to the meaning of life. **C)** Our results revealed that there are six key strategies in an atheist's pursuit (*ricerca*) of a happy and meaningful (*significativo*) existence: i) keep everything simple, ii) have fun, iii) cultivate a sense of community, iv) delight (*trovare piacere*) in the wonder (*meraviglia*) of nature, v) find time for creativity, vi) help other people through frequent acts of kindness (*bontà*). **D)** Atheists that implement a combination of these six strategies were found to be more equipped than other non-believers to deal with the death of close ones, health problems, financial difficulties, and bad luck.

**Structure of Abstract: a) aim b) methods c) results d) more on results / implications.**

#### CONCLUSIONS

**1)** We found that six strategies are key to atheists having a satisfying life: simplicity, fun, community, a love of nature, and the importance of creativity and of helping others. **2)** In the light of the vacuous and aimless (*senza meta*) nature of Western society, our findings suggest that the six strategies should be taught in schools as part of children's philosophy or religious education lessons. **3)** Comparisons with traditional religions revealed no substantial differences in approach, apart from a believer's blind faith (*fede cieca*) in a benevolent omniscient overlord (*signore, padrone*) and the promise of an afterlife (or reincarnation). These commonalities (*punti in comune*) indicate that traditional religions should attempt to be more sympathetic (*solidale, comprensivo*) to atheists, and vice versa. **4)** Clearly, our findings need to be confirmed by further studies, possibly with a larger sample group and in other countries. **5)** In a future work, in addition to expanding our study into other countries, we also plan to investigate how the promise of an afterlife may undermine (*pregiudicare, compromettere*) the fulfilment (*compimento*) of one's true potential on earth.

**Structure of Conclusions** 1) Repetition of key findings, paraphrased from the Abstract

2) The fundamental meaning of the findings. 3) Implications

4) Limitations – these will probably have been mentioned in the Discussion but are recalled here as a way of introducing future work. Alternatively, the limitation could appear after point 1.

5) Areas for future research

**45 As PRECISELY as possible explain why your research is novel or at least why your approach is novel.**

**Re-read what you have written. Replace any generic words with PRECISE SPECIFIC words.**

**46 Disambiguate these sentences.**

1. They delivered food to the elderly residents living locally in a large box.
2. Like Sandra, he had dark brown hair, with enormous black eyebrows, a moustache and a short beard. [Note: *Sandra* is a female name]
3. If you take your dog in the car don't let him hang out of a window while driving.

1) They delivered food **in a large box** to the elderly residents living locally.

2) He had enormous black eyebrows, a moustache and a short beard, **and like Sandra** he had dark brown hair.  
//// **Like Sandra** he had dark brown hair. **His** eyebrows were black and enormous, and he had a moustache and a short beard

3) ... don't let him hang out of a window while **you are** driving.

**47 Decide which form in bold makes the information contained in the sentence quicker and easier for the reader to absorb by not forcing the reader to have to re-read anything.**

1. In [14], Gugerevic made a case for blah blah blah blah blah blah blah blah. Interestingly, in [15], Yang made a similar proposal to Gugerevic in which he stated that blah blah blah blah blah blah blah blah. The **former author's / Gugerevic's** findings thus illustrate that ...
2. Sometimes prion transmission occurs through blood transfusion, contaminated surgical instruments, or skin lesions. In **the first case / a blood transfusion**, a breach of the blood-brain barrier may be responsible for the disease.
3. There are two possibilities: either  $x = 1$ , or  $y = 1$ . They are mutually exclusively and blah blah blah blah blah blah blah blah. **The first one / If  $x = 1$  then this** implies that ....
4. There are several countries involved in this project: Peru, Chile, Honduras and the Philippines, all of whom had very similar initial budgets and, in addition, were all subject to the same qualifying criteria. Note that **the latter / the Philippines** were the last to join the project which meant that ...
5. Mercury is used for a variety of purposes blah blah blah. In the past, **this metal / mercury** was considered as being ..

In all cases the second form is the best because it prevents the reader from having to go back to the previous sentence in order to understand / remember what *former*, *first*, *latter*, and *metal* refer to. Note to 2): repeating *blood* several times is not a problem because it is a key word.

**48 Disambiguate the following sentences.**

1. To take our children to the party we all used our cars and then we left them there.
2. We investigated lions and tigers and elephants that are on the endangered species list.
3. The fire broke out in the forest bordering the river but was extinguished before any major damage could be done by the local fire service.
4. Instructions for use: These articles are poisonous. If there are children in the house, keep them locked up safely.
5. A full range of games were presented for the men with no balls (e.g. diving, bungee jumping).
6. Being over 500 years old, Dr Alvarez handled the painting with great care.
7. Preserved in a frozen state, Professor Chang examined the samples.

- |  |   |
|--|---|
| 1) To take our children to the party we all used our cars and then we left the <b>children</b> there.  | 4) These substances are poisonous. If there are children in the house, keep the <b>substances</b> locked up safely. |
| 2) We investigated lions and <b>tigers, and also those elephants</b> that are on the endangered species list. // We investigated lions, tigers, and elephants. <b>All three types of animals</b> are on the endangered species list. | 5) A full range of games <b>requiring no balls</b> were presented for the men (e.g. darts, diving, bungee jumping). |
| 3) The fire broke out but was extinguished <b>by the local fire service</b> before any major damage could be done.   | 6) The <b>painting</b> was over 500 years old, so Dr Alvarez handled it with great care.                            |
|  | 7) Professor Chang examined <b>the samples, which</b> were preserved in a frozen state.                             |

#### 49 Read the text below. What can you conclude?

According to a researcher at Cambridge University, it doesn't matter in what order the letters in a word are, the only important thing is that the first and last letter be at the right place. The rest can be a total mess and you can still read it without problem. This is because the human mind does not read every letter by itself, but the word as a whole.

*According to a researcher at Cambridge University, it doesn't matter in what order the letters in a word are, the only important thing is that the first and last letter be at the right place. The rest can be a total mess and you can still read it without problem. This is because the human mind does not read every letter by itself but the word as a whole.*

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## BREAKOUT ROOM DISCUSSION EXERCISES

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### Seminar 1

#### 50

First introduce yourselves to each other – one by one.

For a few minutes, think about the four points below.

Explain to your group the answer to at least one of the points.

- 1 why you chose your specific research
- 2 why this research is important to you and why it makes you HAPPY
- 3 why it is important to tell other people about your research

#### 51

Discuss three reasons why your papers need to be written simply and clearly

#### 52

What are the pros and cons of WATCHING online presentations?

Compare your experiences of your online lessons. What do your profs tend to do a) well b) badly?

#### 53

List five things that you think represent 'poor English' and/or 'poor writing skills' that would cause a research paper, project, or CV to be rejected.





## Seminar 2

55

1. What would happen if no one **did** your research?
2. What would happen if no one **read** about your research?
3. What **benefits** are there for your **audience** of hearing about your research? Why should they **listen** to you?

56

What do you hate about other people's presentations. Compile a list of between 5-8 items.

57

Discuss which ones you liked and did not like and why?

Compare their:

1. Techniques for attracting attention.
2. Techniques for involving the audience.
3. Use of examples rather than theory.
4. Speed of voice.
5. Body language.
6. Showing passion – how?

### **Seminar 3**

**58**

You have to retrieve a ping pong ball that is inside the bottom of a very thick unbendable (non piegabile) vertical steel pipe protruding about 10 cm from the floor. It is embedded in concrete – so it CANNOT be removed. The circumference of the tube is about 1mm bigger than the circumference of the ball.

Things available: magnet, paper clip, coat hanger, spanner, matches, string, corn flakes ... your massive PhD brain and imagination

**59**

The person whose FIRST name is the closest to the beginning of the alphabet (e.g. Angela, Bernardo) should present to the others.

Just present your first THREE slides max, i.e. talk for NO MORE than 90-120 seconds.

The other people in the group then give feedback.

**60**

List THREE reasons why people attend conferences (in-person and online).

List three reasons why YOU should attend a conference.

At least ONE reason why YOU should do a presentation at a conference.

**61**

Learning to communicate means knowing how to make what you say and what you write MEMORABLE to your audience / readers.

What do you remember about what you have read and heard? Why and how do you remember it?

How can you make your papers and presentations easy to remember?

**62**

What three things from this course so far do you think you will remember - why?

## **Seminar 4**

### **63**

What is an abstract?

How important is the abstract?

How many paragraphs?

How many words?

When do you write it?

### **64**

Fears of giving presentations

One in four Americans

are afraid of speaking in public: are you? Why?

What can you do to conquer your fears

### **65**

Who do you think his audience is?

Structure

Speed of voice

Length of sentences

How does he modulate his voice

What type of words does he stress in particular

What does he use in case he forgets what he is going to say?

Does he smile?

Is he a great presenter?

What aspects of his presentation and delivery could you usefully imitate / adopt?

Could you do this kind of presentation at a conference? Why? Why not?

### **66**

1 Write the first three lines of an abstract on your research (you can invent what you like if you need to).

Share your abstract with the others in your group.

Think of ways you could improve your colleagues' abstracts.

Post your abstract on the chat.

## **Seminar 5**

**67**

Show each other your emails. Comment on them and try to improve them.

Then paste one or more of the emails into the chat.

## **Seminar 6**

**70**

Video conference

Breakout room

Social distancing rules

Art state technology

England King

Commerce Chamber

**71**


What is the main finding of your research? Invent a title that encapsulates this finding.

Be as specific as possible. Use as many key words as possible. Locate your main key word as near as possible to the beginning of the title.

Then show it to someone else – their job is to try and improve it.

Finally EMAIL it to me. Put your title in the subject line. No message required.


**Which Conclusions Slide is the best?**



What doesn't kill you,  
makes you stronger.

*Thank you  
you for your  
kind attention*


---




*Please  
contact me  
for furuther  
info.*

sara.diamanti@unimi.it


---



Conclusions: Help me (and them) get from A to C.



A                      B                      C



sara.diamanti@unimi.it

[sara.diamanti@unimi.it](#)

- Which of the three slides was most effective?
- What do you typically write on your final slide?
- Images? Why (not)?
- Logos and acknowledgements? Why?
- What info does audience want?
- So ... aim of the final slide?

**73**

Old data

Weather

Not enough money

Sample size too small

Only studied x and not y

No collaborations due to Covid

No tools, substances, equipment

Only in vitro tests done, no in vivo

Same tests, different results each time

Couldn't get authorization to do the tests

Literature and studies in another language

In what areas of your research do you need help?

How could you ask your audience for help?

**Seminar 7****74**

What is the point of the review of the literature?

What is your approach for comparing what others have done and what you are proposing to do?

What are you doing in your research that is new? How can you compare this with previous research?

**75**

How can you gain and keep audience attention online?

**76**

Discuss the three tips and whether/how you could implement them into your research.

**77**

What makes your research 'vital'?

How does your research 'change the world'?

What would happen if you're your research was NOT conducted?

**78**

Do you need an agenda slide? Why (not)?

**78**

How much and how well do you listen?

How can you encourage your audience to listen carefully?

## Seminar 8

79

How typical is the online presentation?

How could it be improved?

80

Is it a good idea to use Google Translate:

- a) to check a phrase that you have written in English?
- b) to translate a phrase from your language into English?
- c) to check the pronunciation of a text that you have written?

Which of the following do you use? How do you use them?

- a) Google Scholar b) contextreverso.com c) linguee.com d) ludwig.guru e) wordreference.com f) Grammarly h) DeepL

## Seminar 9

81

There are three leaning towers in Pisa

Designed by Bonanno Pisano

Construction begins in 1173 (ends 1370)

Galileo

14,500 tonnes

Inclination of 38 cm

Only 55.86 m high

294 steps

It leaned 5.5 degrees in 1990

One million tourists per year

Five suicides per year

Over 40,000 scientific articles written about the Tower

Features in a Superman film

**82**

Prepare a 30-second presentation about an interesting 'thing' in your town.

You can invent info if you want. Then show it to your group. You CANNOT use slides. Just talk.

**83**

Typically what kind of limitations do you have in carrying out your research? What are the limitations in the results that you have achieved so far?

Old data

No tools, substances, equipment

Weather

Only in vitro tests done, no in vivo

Not enough money

Same tests, different results each time

Sample size too small

Couldn't get authorization to do the tests

Only studied x and not y

Literature and studies in another language

No collaborations due to Covid

### **Seminar 10**

**84**

You are not allowed to take anything longer than 1.5 m. You cannot bend or cut the tube. The rules are identical for all buses. When you are back in the main room, post your answer in the chat.

**85**

1 Year first email sent? a) 1971 b) 1976 c) 1981 d) 1986

2 For each statement (a, b, c), in an email do men (M) or women (W):

a) Ask more questions, make more offers / suggestions. M / W

b) Make diplomatic assertions, use polite expressions. M / W

c) Share more info, admit to not knowing something. M / W

3 What makes Japanese smileys different from Western smileys? Smiley = :)

4 What is **drailing**? a) emailing while **drunk** b) emailing / messaging while **driving** c) **drafting** possibly 'dangerous' emails and waiting prudently before hitting 'send'

**86**

What should you do when you have finished writing your paper?



## HOMEWORK FOR THE SECOND PART OF THE COURSE

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### ABSTRACT

- Max 150 words - if it is longer I will not read it.
- Use one of the 'templates' I showed you during the lesson (exercises 22, 23 and 24)
- You can use an existing abstract but you must adapt it to one of the styles I suggested
- The title must contain key words. The main words need to be as close as possible to the beginning of the title.
- Please **PASTE** your abstract directly into your email. Do NOT send an attachment.

### PRESENTATION

Your presentation must include the following (but it can also have other slides as well).

1) A title slide. If possible, a two-part title i) to attract general audience ii) for technical audience. It should also have a relevant image / photo

2) Introductory slide. Nothing too technical. Something that will attract the audience's attention. Interesting statistic or photo. Minimum text.

3) Final slide. Your contact details, an image / photo that will help the audience to remember you. The image can be related to your presentation or a photo of your local area, local product. Also, think of a good reason why the audience should contact you.

Good reasons include:

- helping you to solve a problem / limitation
- an instrument that you don't have so you would like to test it at their lab using their samples
- you are located in a beautiful place so a collaboration would involve them seeing some of the best of Italy (Tunisia, India, Jordan, Iran etc).

**EXTRA** The abstract below is about agricultural policy. It is quite typical of abstracts produced by researchers in various fields of the Humanities. Note that the letters (a) (b) (c) etc. are mine, not the author's.

Read the abstract and decide what percentage you really understood: a) less than 50% b) 51%-75%, c) 75-95%, d) 100% (be honest!) Are you clear about what the author did and why she did it?

The convergence of common agricultural policy reform, Green New Deal and Covid-19 represents a (a) critical conjuncture for communities in support to agriculture (CSAs). The present contribution proposes the case of CSAs in Italy as a (b) paradigmatic example of how local communities have been redesigning the agrifood production towards the bioeconomy. (c) The analysis of collective management of agriculture at the municipal level allows to investigate resilience and robustness of local food systems, to illustrate limits and potentialities of bioeconomies enhancement through rururban networks, and to advance an innovative policy approach to agriculture as a (d) leading compartment for a cross-sectoral ecologic transition.

I approached the study of CSAs through (e) the literatures of feminist political ecology, political science, labour sociology and social movement studies. Empirical data were retrieved through the mapping of the Italian CSAs networks' online media outlets together with immersive fieldwork. The latter consisted in the implementation of (f) collaborative workshops with a sample of five local communities across the national territory based on the method of Participatory Action and Learning. Results show that the community-supported agriculture is easily replicated in (g) different geographical areas and represents a viable path towards the ecological transition and the bioeconomy.

**Now look at the underlined words.**

- a) what is a *critical conjuncture*?
- b) is there are concrete difference between an *example* and a *paradigmatic example*?
- b) who made the *analysis*?
- c) who is *advancing* the policy? why is it *innovative*?
- d) what is a *leading compartment*?
- e) why did she use these *literatures*?
- f) what is the difference between a *collaborative workshop* and a *workshop*?
- g) what does she mean by *different*? (could she be more specific)?

**Sem 11**

**87**

Imagine a new person is going to join your research team. What qualities would you want this person to have?

**88**

Which of these hobbies and interests would you put on your CV and LinkedIn?

Reading

Salsa dancing

Baby sitting

Sports

Sailing

Politics (member of x party)

Travelling

Computer games

Playing the guitar

Voluntary work