Оглавление

ВВЕДЕНИЕ

Учебно-методическое пособие разработано в соответствии с требованиями программы дисциплины «Иностранный язык в профессиональной сфере» для магистрантов всех строительных направлений подготовки.

В пособии представлен материал по четырём темам: «Academic writing in English», «Academic language for oral communication», «Professional writing in English» и «Professional language for oral communication», что соответствует тематике, отражённой в рабочей программе.

Каждая тема включает в себя несколько предметных разделов, раскрывающих основные особенности академического и профессионального стиля речи в устной и письменной коммуникации и включающих в себя аутентичные тексты и систему упражнений, нацеленных на развитие профессиональной иноязычной компетенции обучающихся. Представлены упражнения по работе с текстом не только репродуктивного, но и творческого характера, что позволяет обучающимся развивать навыки создания собственных письменных и устных текстов, являющихся основой профессионального общения.

Материалы пособия могут иметь широкое применение для организации как аудиторной, так и самостоятельной домашней работы магистрантов, а также для проведения мероприятий текущего контроля.

Unit 1. ACADEMIC WRITING IN ENGLISH

PART 1. ENGLISH FOR ACADEMIC PURPOSES (EAP): MAIN FEATURES

Specificity is one of the key issues surrounding the ways we understand and practice English for Academic Purposes (EAP). The researchers Dudley-Evans and St John (1998: 41) have included the following study activities among such a core:

– listening to lectures;
– participation in supervisions, seminars and tutorials;
– reading textbooks, scientific articles and other materials;
– writing essays, examination answers, dissertations and reports.

This approach might also comprise such activities as note taking, summary writing, compiling questionnaires and surveys, giving prepared presentations and so on as general academic practices. Students are supposed to attend lectures, workshops, seminar, sit credits and exams, take notes, deliver reports and presentations, as well as prepare written assignments. Speaking of *academic discourse*, it should be mentioned that all the disciplines share pronounced features as a register distinct from those used at home or workplace.

The most *common reasons* for academic writing include:

– reporting on a piece of research conducted by the writer;
– answering a question the writer has been given or chosen by the writer;
– summarizing research done by other writers on a topic;
– giving the writer's view or opinion;
– discussing a subject of common interest.

One of the most intimidating features of an academic register is the relatively high degree of formality in academic texts. Formality is usually achieved by such means as impersonal voice, the use of specialist vocabulary, and rather compact package of ideas. The key features of academic writing can be broken down into the following areas:

– high lexical density — a high proportion of content words in relation to grammar words such as prepositions, articles and pronouns which makes academic writing more tightly packed with information;

– high nominal style — actions and events are presented as nouns rather than verbs to package complex phenomena as a single element of a clause;

– impersonal constructions — first-person pronouns are replaced by passives, dummy "it" subjects, and "abstract rhetors", where agency is attributes rather than people.

In general, there are no fixed rules for the layout of an academic work. Various schools and departments give different formats and guidelines for written work. However, there are some general features that could be applied to most formats:

– references to sources using citation: "According to Gotlib et al. (2009)";
– the use of abbreviations to save space: "World Health Organization (WHO)";
– italics are used to show words from other languages: "Zinovieva *et al.*" (and others);
– brackets are used to give extra information or to clarify a point: "This interference occurs because of entanglement (one of the weirder aspects of quantum physics), which was predicted in the 1930s".

Task 1. Read the text and identify the underlined features. Use the words in the box.

Heading	Title	Subtitle	Phrase	Paragraph	Sentence

a. A medieval landmark made new.

b. An absorbing "NOVA" specials follows the efforts and frequent revelations involved in restoring Notre-Dame.

c. Introduction.

d. No one in “Rebuilding Notre-Dame” goes so far as to declare that a silver lining lay behind the April 2019 fire that nearly destroyed the place — never mind that the relevant elements are lead, iron, limestone and oak.

e. But what’s being discovered, as the fabled Notre-Dame de Paris is readied for 2024 reopening (to coincide with the Summer Olympics), is not just absorbing and revelatory but instructive: perhaps a medieval cathedral should be steam-cleaned every 850 years.

f. A presentation of “NOVA”, the special begins with the inferno that began in the “forest” — the network of ingenuously scrambled oak beams that provided support for the fabled structure’s roof since its origin in 12th and 13th centuries. Much is devoted to the rebuilding of the forest and church’s spire — a signature of the structure and the collapse of which prompted heartbreak among those watching the conflagration from around the world. Finding the proper oak trees — sound, straight, knotless — is a fascinating aspect of the show. But hardly the only one.

From Wall Street Journal, December 14, 2022

a. *Title* b. _____ c. _____ d. _____ e. _____ f. ____

Task 2. What do you know about academic writing? Complete this quiz and find out.

1. What distinguishes academic writing from normal personal writing?
   a) the usage of longer words and sentences;
   b) academic writing is more difficult for understanding;
   c) academic writing is more precise, clear cut and unbiased.
2. What is the principal difference between an essay and a project?
   a) projects are shorter;
   b) essays are shorter;
   c) students can choose the topics of projects.
3. The best time to write an introductive part is commonly …
   a) ultimate;
   b) first;
   c) before writing conclusions.
4. Give the definition of *plagiarism*.
   a) a professional academic website;
   b) a contagious disease;
   c) an academic offence.
5. Typical mistakes in academic writing are …
   a) students do not provide proper referencing;
   b) students do not answer the question fully;
   c) students do not write enough.
6. Making notes is essential for …
   a) revising for credits and exams;
   b) writing essays and projects;
   c) all types of academic work.
7. Paraphrasing a text is …
   a) adding more details to a text;
   b) make a text more compact;
   c) changing a lot of the vocabulary.
8. An introduction has a purpose of …
   a) summarizing the author’s ideas;
   b) exciting a potential reader;
   c) disclosing the author’s aims and methods.
9. Paragraph must contain …
   a) an example;
   b) six or more sentences;

c) a topic sentence.

10. Proofreading is …
    a) rewriting;
    b) getting a friend to check your work;
    c) checking for minor mistakes and correcting them.

PART 2. COMMON TYPES OF ACADEMIC WRITING

Task 1. Match the items in the left column to their definition.

1. Paper	a. The longest piece of writing done by a student under the guidance of a supervisor (more than 20 000 words), often for a higher academic degree, on a topic chosen by a student.
2. Essay	b. A piece of individual or group work research, with the topic chosen by the students.
3. Report	c. A description of something done by a student.
4. Portfolio	d. It could be just 50–100 words, often used to refer to children's work.
5. Project	e. The most common type of written work, with the volume of 1000–5000 words, the title is given by the teacher.
6. Notes	f. A general term for nominating any scholarly essay, report, presentation or article.
7. Composition	g. A record of the main points of a lecture or text written by a student for his / her personal use or for revision.
8. Dissertation / Thesis	h. A collection of individual pieces of work, not necessarily written.

Task 2. To share your experience in academic writing, discuss the following issues with your groupmates:

1. What kinds of composition courses have you done up to now?
2. What would you like to improve in your writing skills?
3. Are the rules for writing essays and articles in Russian language the same as or different from those for English writing?
4. What are your expectations of this course?
5. Do you find academic writing challenging?
6. What is another word for an academic article? Where can you read them?

Task 3. Which of the following types of written materials can be considered academic writing? Explain why.

letter to a colleague	dissertation	summary
essay	scientific article	thesis
abstract	instruction manual	annotated bibliography
report	complaint letter	essay test
cover letter	review	exam notes
statement of purpose	presentation	composition
competition entry	invitation to a concert	application for a grant
message	e-mail	lecture notes
CV or resume	invitation to a lecture	call for papers

Task 4. Read the text and match the words in **Bold** to their definitions given in the table below the text.

The writing process and its evaluation

It is a good idea to start with a **mindmap**[1] when preparing an essay. Always write a **first draft**[2] before writing up the final version. Your essay or assignment should be all your own work. **Plagiarism**[3] is considered a very serious offence in most educational institutions and might have negative implications on your future career. There is usually a **deadline**[4] for submitting your written work. After the essay or project is **submitted**[5], it will be **assessed**[6] by a tutor or supervisor and typically you can get **feedback**[7].

Words	Definition
1. Mindmap	a) comments from a tutor
2. First draft	b) handed in (formal)
3. Plagiarism	c) diagram that lays out ideas for the topic and their connection
4. Deadline	d) stealing people's ideas
5. Submitted	e) evaluated and given a grade
6. Assessed	f) first, rough version
7. Feedback	g) date of works submission

Task 5. Correct the wrong usage of words to do with written academic work in these sentences. The wrong word is underlined.

1. His PhD assignment was 90 000 words long and was on the application of nanotechnology in construction industry.
2. Little Anastasia wrote her first dissertation in school today. It was called "My dream home".
3. Engineering students have to hand in an essay at the end of the course. It can consist of up to four different pieces of work.
4. At the end of this semester, you have to do a 5000-word thesis which will be assessed by the tutor, and the grade will contribute to your final degree.
5. I've chosen to do the portfolio instead of two exams, because I prefer to do one single piece of work where I can study something that interests me personally.
6. The tutor gave us the title of this week's project yesterday. We have to compose about 1000 words on the topic "How to pass a job interview successfully" and hand it in upcoming Tuesday.
7. I reckon I'll do a study of green chemistry application in construction for my MSc composition. The length is about 13 000 words.

PART 3. WRITING IN PARAGRAPHS

Task 1. Discuss the following questions with your groupmates:

1. Give the definition of a *paragraph*.
2. What is the typical length of a paragraph?
3. Why are texts usually divided into paragraphs?
4. Is the structure of a paragraph standard?

Task 2. Read the text below and divide it into a suitable number of paragraphs.

The scientific dogma

Modern science has no dogma. Yet it has a common core of research methods, which are all based on collecting empirical observations — those we can observe with at least one of our senses — and putting them together with the help of mathematical tools. People throughout the history collected em-

pirical observations, but the importance of these observations was usually limited. Why waste precious resources obtaining new observations when we already have all the answers we need? But as modern people came to admit that they did not know the answers to some very important questions, they found it necessary to look for completely new knowledge. Consequently, the dominant modern research method takes for granted the insufficiency of old knowledge. Instead of studying old traditions, emphasis is now placed on new observations and experiments. When present observation collides with past tradition, we give precedence to the observation. Of course, physicists analyzing the spectra of distant galaxies, archaeologists analyzing the finds from a Bronze Age city, and political scientists studying the emergence of capitalism do not disregard tradition. They start by studying what the wise people of the past have said and written. But from their first year in college, aspiring physicists, archaeologists and political scientists are taught that it is their mission to go beyond what Einstein, Heinrich Schliemann and Max Weber ever knew.

From Sapiens. A Brief History of Humankind by Yu.N. Harari, 2011

PART 4. EFFECTIVE READING: HOW TO FIND A SUITABLE SOURCE

For your research purposes, you may require to read a variety of texts, e.g. journal articles, scientific papers, websites, reviews, etc. It is extremely important to find the most suitable source texts and identify their specific features that would help you to assess their value.

Task 1. You are studying Civil Engineering. Read the following text extracts and identify the most suitable for academic use. Explain why.

Text	Suitable for academic use or not?
A	
B	
C	
D	

A. A project is underway to transform the way infrastructure assets including wind turbines and bridges are monitored and maintained. Led by Sheffield University and funded with a £ 7,7 m Programme Grant, the ROSEHIPS (Revolutionizing Operational Safety and Economy for High-value Infrastructure using Population based SHM (structural health monitoring)) project unites experts from academia and industry to solve the challenge of safely and economically safeguarding current and future infrastructure. In 2019 the cost of clearing the UK's backlog of maintenance works was valued at £ 6,7 bn. ROSEHIPS aims to solve the UK's infrastructure asset management problem through research to automate health monitoring.

B. For new construction, clean-energy mandates have been enacted in places such as New York City, where developers will be prohibited from installing gas hookups starting in 2024. But many of the existing households in the U.S. will require retrofits. If you've looked into this process yourself, you know it can be a labyrinth. The biggest barriers to residential energy conversion are political and psychological. Our love of gas cooking, for example, comes from industry's success in convincing us that real cooks prefer gas. Yet recent studies have shown that stoves running on natural gas and other fossil fuels create indoor air pollution and elevate risk levels for asthma and other health issues, especially in children. Meanwhile improved induction stovetop technologies (which use an electromagnetic field to heat pans directly) are widely available.

C. What we're looking for

The HNTB Bellevue (Seattle, WA) office is looking for Engineering graduates with 4 years of experience to join our Aviation Department. This is a unique opportunity to be part of a team that delivers diverse and challenging projects to serve our aviation clients in the Pacific Northwest as well as across the nation.

Primary focus will include:
– geometric design of runways, taxiways and aprons;
– bituminous and concrete pavement design;
– storm-water and utility infrastructure design;
– coordination with airport, airline, FAA and other aviation tenants.

D. Two years ago, I have graduated and received the title of Master in Civil Engineering from the Faculty of Engineering, Dhaka University. Previously I have also done undergraduate studies in Computer Science, from the same Faculty in Dhaka. After graduation I have worked for several outsourcing companies and managed to develop dozens of gadgets for commercial and home use, that save energy and produce maximal outcome.

I consider myself as well-organized professional, with sound knowledgebase about civil engineering, able to do multiple tasks at once, and manage a team. I am a good communicator, and proven leader, which is verified by several successful project implementations, listed in enclosure to this letter.

Types of texts

The present table outlines the most typical written sources of information used by students for written assignments. Discuss their advantages and disadvantages with your groupmates.

Type of the source text	Advantages	Disadvantages
Course textbook	Written for students in accessible language	Information is too general and dated
Paper in a scientific journal		
Website		
Official report (e.g. from state authorities)		
Newspaper or magazine article		
Library catalogue		

PART 5. SUMMARIZING AND PARAPHRASING

Task 1. Read the text and study the information given in it.

The aim of *summarizing* is to reduce information to a required length, make it more compact. The writer condenses lengthy sources into a concise and easy-to-read form. *Paraphrasing* is changing the vocabulary and syntactic structures of a text without distorting the meaning, so that a new text differs significantly from the original source. Both summarizing and paraphrasing are needed to eliminate the risk of plagiarism.

Summarizing is widely used in everyday life. For example, it might be used to describe the main features of the subject: a book you have read, a journey you have made, an exhibition you have recently visited.

As a flexible tool, a summary can be a one-sentence outline of a scientific article, or it can give much more detail as for a PhD thesis, depending on your needs. Summary excludes examples, quotations, excessive or supporting information and data. It is focused on main ideas and key points of a source text.

Task 2. Look at the jumbled stages of writing a summary. Put them into the correct order starting from 1 to 5:

a. Make notes of the key points of the text. Use paraphrasing.

b. Mark the key points of the source text, highlight or underline them.

c. Write the summary using the notes you have prepared. Reorganize the structure if required.

d. Check the summary, do proofreading to make sure it is accurate and no important information or details are omitted or changed.

e. Read the source text thoroughly and carefully, mark out any unknown vocabulary. Compose a glossary if necessary.

Task 3. Read the text below and summaries that follow. Which summary is the best in your opinion? Give reasons and try to write your own version.

How to orchestrate successful teams in the new world of work

Great teamwork is at the heart of how managers add value to organizations, but creating the conditions for it to flourish is a tougher job than ever. The fast pace of change in business today requires teams to be more creative, flexible, and agile, while pandemic driven disruptions to how and where we work have made productive collaboration more challenging. The articles that follow offer managers new insights into organizing and supporting productive, engaged teams.

In the two decades since Deborah Ancona and Henrik Bresman first wrote about a new kind of externally focused team in these pages, these so-called x-teams have helped unleash innovation and democratized leadership in some organizations, but others have found it difficult to shift their thinking to adopt this way of working. The authors' latest research looks at what factors fuel x-team success, and how to overcome the obstacles that can hobble their implementation.

Meanwhile, the remote work revolution that COVID-19 precipitated remains an experiment in progress. Jonathan Trevor and Matthias Holweg began following 20 global enterprises during the pandemic, tracking how leaders were navigating employee demands for more flexible work arrangements. They found that managers were — and continue to be — concerned about the impact of having fewer in-person interactions on organizational culture and innovation capability, and they report on the tactics practitioners are using to mitigate those challenges.

Maintaining productive and engaged teams isn't just about how employees collaborate and connect, however; in these times of heightened uncertainty over economics, politics, and public health, leaders must also manage employees' anxieties. Kristine Powers and Jessica B.B. Diaz surveyed workers about the kinds of support they need from managers — in particular, asking whether leaders are able to provide the explicit reassurance that employees seek. When there are no easy answers, leaders will need new, often individualized strategies for addressing concerns and maintaining trust.

From MIT Sloan Management Review, Winter 2023, vol. 64

Note: x-team — a cross-functional team is a group of people with different functional expertise working toward a common goal.

a. Great teamwork is of paramount importance for managers as it adds value to organizations and creates conditions for organization's flourishing. The authors of the article researched the factors affecting x-team success, their ways to overcome obstacles arising in the process of goals implementation. It was proven that x-teams facilitate innovation and democratized leadership. Work revolution of COVID-19 had an impact on organizational culture resulting in more flexible work patterns. Nowadays, organization leaders must pay attention to employees' anxieties and apply individual strategies for creating an atmosphere of trust.

b. The article deals with the contemporary managerial issue of productive collaboration achieved by creation of engaged close-knit teams or so-called x-teams. The author points out that in post COVID era only such teams can create innovative working environment, favorable for implementation of the organization's goals. Having studied the performance of many enterprises during the COVID years, researchers Trevor and Holweg came to conclusion about the necessity of introduction of flexible working schedules and changes in organization culture of an enterprise. Moreover, researchers Powers and Diaz surveyed the change of the employee's needs in the times of tough pressure and job insecurity and emphasized that leaders must address individual needs of employees and provide support.

c. Great teamwork is at the heart of how managers add value to organizations — but creating the conditions for it to flourish is a tougher job than ever. The authors' latest research looks at what factors fuel x-team success, and how to overcome the obstacles that can hobble their implementation. Jonathan Trevor and Matthias Holweg began following 20 global enterprises during the pandemic, tracking how leaders were navigating employee demands for more flexible work arrangements. When

there are no easy answers, leaders will need new, often individualized strategies for addressing concerns and maintaining trust.

Paraphrasing is aimed to restate the relevant information in other words. An effective paraphrase has the following features:

– its structure differs from the original text;

– it conveys the same meaning as the original text;

– the vocabulary is different but some key phrases can be kept.

Techniques for paraphrasing include:

– changing text vocabulary by using synonymic chains (e.g. stability → security → strength → support → assurance → backbone → constancy → endurance);

– changing word class (e.g. to explain (verb) → explanation (noun); mechanical (adj.) → mechanics (noun); to record (verb) → a record (noun));

– changing the word order (e.g. "When threats loom, managers must go beyond the tried-and-true techniques for supporting employees to address divergent concerns and build trust" → "In the times of uncertainty, managers must provide the explicit assurance that employees seek and maintain trust").

Note: in practice, all three techniques are applied simultaneously. There is no need to paraphrase every word as some words do not have true synonyms.

Task 4. Read the following text fragment.

Heat map

Cars can chart the contours of dangerous city temperatures.

Early one May morning in 1927 researcher Wilhelm Schmidt attached a mercury thermometer to his car door and drove around Vienna for three hours, recording temperatures. His resulting thermal maps showed hotter areas that coincided with "tightly built parts of the inner city" and cooler contours tracing wooded patches, grassy parks and waterways. Schmidt's efforts were the first to map a city's "islands" of heat in a "sea" of lower-temperature surroundings.

During Europe's 2003 heat wave, such islands were linked to approximately 50 percent of heat-related deaths in parts of England and to increased deaths among the elderly in Paris. The Environmental Protection Agency cites these zones as a prominent contributor to the 702 heat-related deaths reported in the U.S. on average each year from 2004 to 2018. More than half of the world's population now lives in cities, which exacerbate the local effects of rising global temperatures — and the suffering is getting worse.

Urban heat islands occur when natural land cover is replaced with asphalt, concrete, steel, or other materials that absorb and retain more heat than their surroundings. This keeps these areas warmer, especially at night. Heat islands also affect a city's air quality by influencing humidity and how pollutants get distributed in the atmosphere. With the increase of extreme events like heat waves, city planners need to rethink how urban spaces are designed…

By Rachel Berkowitz, From Scientific American, July 2022

Task 5. Work with vocabulary. Find synonyms for the words underlined. Rewrite the paragraph using these.

Early one May morning in 1927 <u>researcher</u> Wilhelm Schmidt <u>attached</u> a mercury thermometer to his car door and drove around Vienna for three hours, recording temperatures. His <u>resulting</u> thermal maps showed hotter areas that <u>coincided with</u> "tightly built parts of the inner city" and cooler contours <u>tracing</u> wooded patches, grassy parks and <u>waterways</u>. Schmidt's <u>efforts</u> were the first to map a city's "islands" of heat in a "sea" of lower-temperature surroundings.

Task 6. Change the word class of the underlined words. Rewrite the paragraph using the changes.

During Europe's 2003 heat wave, such islands <u>were linked to</u> approximately 50 percent of heat-related deaths in parts of England and to <u>increased</u> deaths among the elderly in Paris. The Environ-

mental Protection Agency cites these zones as a prominent contributor to the 702 heat-related deaths reported in the U.S. on average each year from 2004 to 2018. More than half of the world's population now lives in cities, which exacerbate the local effects of rising global temperatures — and the suffering is getting worse.

Task 7. Change the word order of these sentences, rewriting the paragraph so that the meaning remains the same.

Urban heat islands occur when natural land cover is replaced with asphalt, concrete, steel, or other materials that absorb and retain more heat than their surroundings. This keeps these areas warmer, especially at night. Heat islands also affect a city's air quality by influencing humidity and how pollutants get distributed in the atmosphere. With the increase of extreme events like heat waves, city planners need to rethink how urban spaces are designed.

PART 6. WRITING A SCIENTIFIC ARTICLE

Task 1. Read the text and study the information given in it.

A *scientific paper* contains information presented and organized such that peers are able to:

– assess theoretical derivations or observations;

– repeat key steps and experiments;

– evaluate the discovery process.

A scientific paper must be peer reviewed, become a permanent record (published), and be available to scientists without restrictions (open access only). A scientific paper contains information written and presented in a particular format based on the path of the scientific method (Fig.).

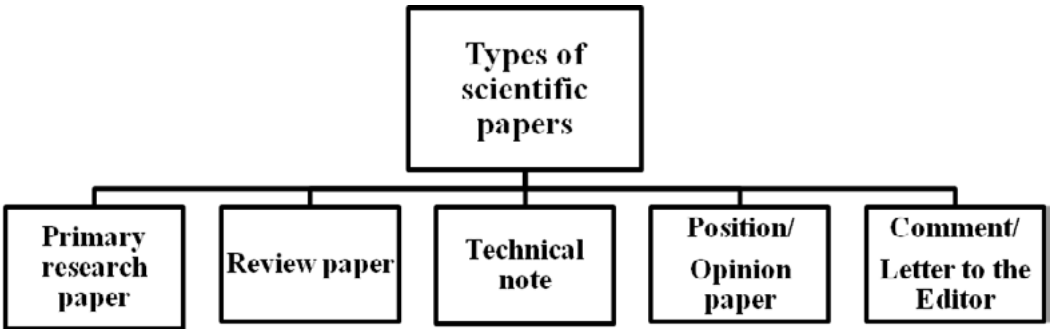

Fig. Types of scientific papers

The typical structure of a scientific paper can be composed in the following manner:

Scientific process	Section of a paper
Orienting potential readers	Title
What was done in a nutshell?	Abstract
What is the problem addressed?	Introduction / Problem Statement
How did we solve the problem?	Theory / Methods / Methodology
What did we find?	Results and Findings
What does it mean?	Discussion
What have we learned (in brief)?	Summary and Conclusions
Who supported us?	Acknowledgments
Whose previous work did we rely on?	References / Bibliography
Supplementary information	Appendices

An *Abstract* provides a summary of the entire paper in a single paragraph. An abstract must be understandable without the reference of the paper (it is the most read part after title). An abstract typically contains 150–200 words and should **not** include:

– any information not presented in the paper;
– references to tables or graphs;
– details of methods;
– referenced literature.

An *informative abstract* summarizes main elements in a paper in the following prescribed sequence:

1. The question you investigated or purpose of your research (Introduction). State the purpose very clearly in first or second sentence.

2. The experimental design and method used (Methods). Clearly express basic study design, name or briefly describe basic methodology used without going into detail (but indicate the key techniques used).

3. Major findings, key quantitative results, and trends (Results). Report results which answer the questions you were asking. Identify trends, relative changes or differences.

4. A brief summary of interpretations & conclusions (Discussion). State implications of answers supported by your results.

An *Introduction* provides sufficient background to allow a reader to understand the study without the need to refer to previous publications, and supplies the rational for the study. A good introduction presents the scope of the problem, reviews related literature, sets the stage for the methods chosen, ends with clear objectives and paper organization. An introduction uses the present tense, evaluates previous research, cites original sources only, states overall question addressed or provide simple hypotheses.

The *Materials and Methods* section explains how the research was performed. It provides sufficient detail to allow readers to evaluate appropriateness of the methods, assess validity of results, and replicate the study. In this section, the past tense is used (reporting what was done). Sometimes, the structure would follow materials, study site, numerical model, measurements or observations, procedure.

The *Results* section is where the facts are disclosed and hypotheses are tested. Report results from which significant conclusions can be drawn (even if contrary or contradict expectations). Do not selectively eliminate significant results — there is no "good" or "bad" results. Use graphs, figures and tables — do not just repeat the caption, make a point when referring to these elements in the text. Do not repeat methods (a common flaw). Use the past tense (reporting what has been done).

The *Discussion* section explains the importance and relevance of your findings.

Do	Do not
Generalize based on your results	Repeat results
Point to exceptions and inconsistencies, limitations	Digress the speculations not supported by data
	Overemphasize shortcomings
Discuss shortcomings and open issues	Discuss insignificant findings (masking important ones)
	Ignore alternative interpretations
Relate your work to previous studies	Accept a null hypothesis with non-significant results — absence of evidence is not evidence of absence

Acknowledgments are important — someone funded the research (and expect funding to be acknowledged), others may have helped with technical aspects, data collection and analyses. If you are uncertain about how much credit to give someone who helped you along the way, always err on the side of giving more credit than you are certain about… There is an opportunity to win friends, enlist advocates and solidify relationships.

Task 2. Match the title of the paper to the abstract of the paper. Identify the scope of a scientific area.

title	Abstract
1. Research and mechanism analysis on dynamic compressive behavior of steel fiber reinforced concrete	a. 3D printing and additive manufacturing have been established in several industrial fields with an unprecedented increase in the building sector during the last decade. Several companies' applications of 3D construction printing and numerous scientific works demonstrate the potential of this technology. Recently, researchers are investigating both the specific 3D printing performances and the global trend of additive manufacturing production. However, the existing applications and literature reviews focused on specific issues. The present work proposes an in-depth review on the current progress of 3D construction printing by emphasizing for the first time the similarities and differences between advancements in research and in industrial applications. Source: https://doi.org/10.1080/00038628.2022.2154740
2. Exploring the potential of circular economy to mitigate pressures on biodiversity	b. Smart city rhetoric stresses both citizens' well-being and urban efficiency; however, critical perspectives suggest a worsening of existing societal inequalities for less-productive citizens, posing implications for how urban planners should incorporate smart technology. We examine the perceptions of elderly residents regarding Singapore's Smart Nation implementation in their communities. The elderly find that technological advancements deepen existing divides and suggest that true participation and social relationships are required for successful adoption of urban smart systems. We provide commentary on the tensions created between productivity and efficiency as goals of the smart nation and the inclusion and participation of older citizens in urban planning decisions. Source: https://doi.org/10.1080/10630732.2021.2001712
3. Critical perspectives on the smart city: efficiency objectives vs inclusion ideals	c. The effects of circular economy on biodiversity are poorly understood. This study provides observations on approaches for assessing circular economy and illustrates, with a Finnish case study, the potential of circular economy to mitigate pressures on biodiversity. The case study focuses on the construction and real estate sectors, as well as the forest industry. The findings imply that circular economy actions that reduce the extraction of virgin raw materials and relieve land use pressures are effective. Improving material efficiency, increasing the cascading use of wood, and optimizing the use and reuse of materials and products, as well as extending the lifetime of buildings and optimizing space use, have good potential for mitigating pressures on biodiversity in Finland. However, as forest utilization has a major impact on Finnish biodiversity, certain actions that possibly increase the use of forest resources (e.g. replacing fossil-based, concrete, or steel materials with wood-based solutions) may impair biodiversity if biodiversity-enhancing forest management practices are not utilized. Source: https://doi.org/10.1016/j.gloenvcha.2022.102625
4. Overview of 3D construction printing and future perspectives: a review of technology, companies and research progression	d. Creative cluster urban policy, aimed at regenerating parts of cities in the UK, has been linked with ameliorating social exclusion in the extant policy literature. This is paradoxical given levels of exclusion within the creative and cultural industries in the UK. Moreover, this type of policy favours more publicly funded creative and cultural organisations as opposed to creative small and medium-sized enterprises including micro-organisations (SMEs) — those who primarily trade, and who make up the bulk of the sector. This is because creative SMEs have unique labour, organisational and economic realities which might limit their levels of social inclusion practice (SIP). Source: https://doi.org/10.1016/j.ccs.2022.100493
5. Social inclusion and SMEs: the case of creative SMEs in Hackney Wick and Fish Island, London	e. This paper describes an investigation of the influence of steel fiber on the dynamic compressive behavior of steel fiber reinforced concrete (SFRC) at different strain rates, and reveals the mechanism of its change from the macro and meso levels. Meanwhile, a suitable dynamic constitutive model for SFRC is proposed. Four kinds of steel fiber contents (0 %, 1 %, 2 %, 3 %) and four kinds of high strain rates (40 s-1-220 s-1) were considered in the Split Hopkinson pressure bar (SHPB) test. Based on the designed tests, the failure pattern, the stress-strain curve, and the mechanical characteristic parameters of the SFRC under different loading conditions were obtained. The effects of steel fiber content and strain rate on the dynamic mechanical properties of concretes were analyzed. Source: https://doi.org/10.1016/j.conbuildmat.2023.130358