

# Writing Abstracts for Research Projects

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CUNY Office of Research:  
Research Development & Programs

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Writing Across the Curriculum (WAC) Fellows at City Tech

# Getting Started Thinking about Abstracts

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Take 3-5 minutes to write your response to the following questions:

- Now you are working on a research project/paper. Imagine that your friends or your parents ask you about your research project. You have one or two minutes to briefly answer their questions. What would you say and how would you organize your response?
- For example, in your response, you may write that “I will start by talking about \_\_\_\_\_. Then \_\_\_\_\_ . ...”



Put your response in the Zoom Chatbox.

# Overview

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- **Elements of an abstract**
- Finetune our abstract: A case study and more hands-on challenges
- Finetune our abstract: How are abstracts used?
- Finetune our abstract beyond today's workshop

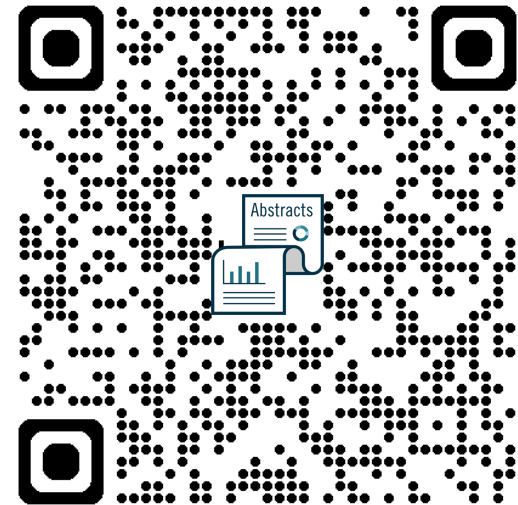


# Challenge

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Read the abstract and decide whether or not it is a good abstract.

Click [the link](#) in the Chatbox or scan the QR code to access the Google Form and submit your answer.



# Elements of an Abstract

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## Definition:

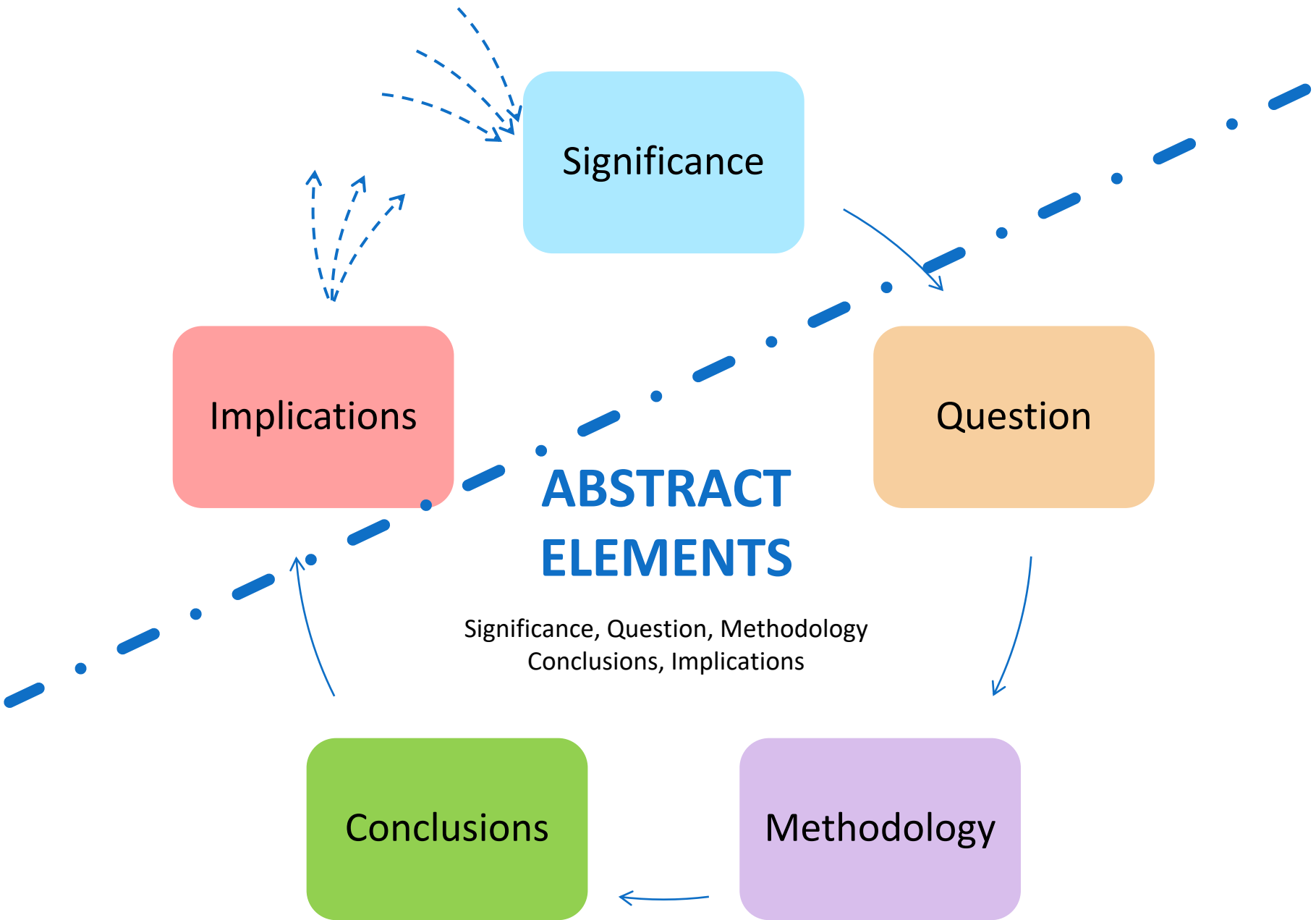
- A **summary** or abridgement of a text or document. (*Oxford English Dictionary*)
- “Summary”: A **shortened** statement or account which gives **only the main or essential points** of something, not the details. (*Oxford English Dictionary*)

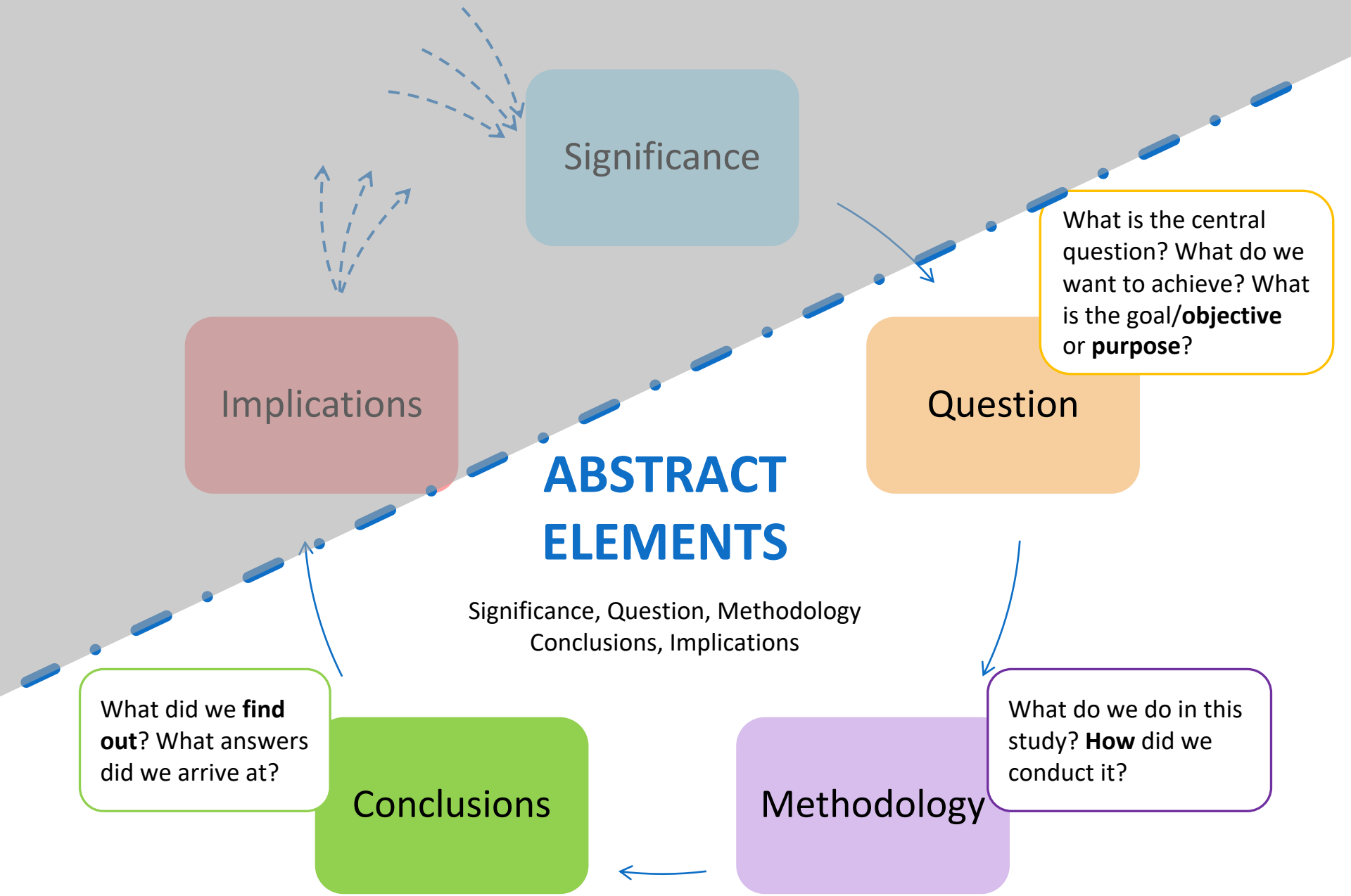
## Length:

- Depending on the context, abstracts tend to be 1-3 paragraphs, or 150 – 300 words.

## Elements of an Abstract:

- Significance, Question, Methodology, Conclusions, Implications





## Challenge:

Based on the research question “whether or not playing video games is harmful to children,” briefly write the “methodology” and “conclusions” parts (one sentence for each).

Put your response in the chatbox.

What is the central question? What do we want to achieve? What is the goal/**objective** or **purpose**?

Question

## ABSTRACT ELEMENTS

Significance, Question, Methodology  
Conclusions, Implications

What did we **find out**? What answers did we arrive at?

Conclusions

What do we do in this study? **How** did we conduct it?

Methodology



## Reference:

**Question:** Explain how playing single-player violent video games is harmful to children between the ages of 9 and 11.

**Fields:** (Pick up one or any other fields)

- **Psychology:** self-control, emotional desensitization, social isolation, etc.
- **Medicine:** obesity, insomnia, back pains, etc.
- **Education:** distraction in class, lack of motivation for study, no interest in sustained academic activities
- ...

**Methodology:** Experimental and control groups; survey and questionnaires; case studies; interviews; systematic reviews and meta-analyses; ...

**Conclusions:** Playing single-player violent video games may affect children's development of social skills and their physical health.

In a broader **context**, how might the research **impact** **future** studies in our field?

Implications

Significance

In a broader **context**, why is the research **important**? Why does it matter or why should we care?

What is the central question? What do we want to achieve? What is the goal/**objective** or **purpose**?

Question

# ABSTRACT ELEMENTS

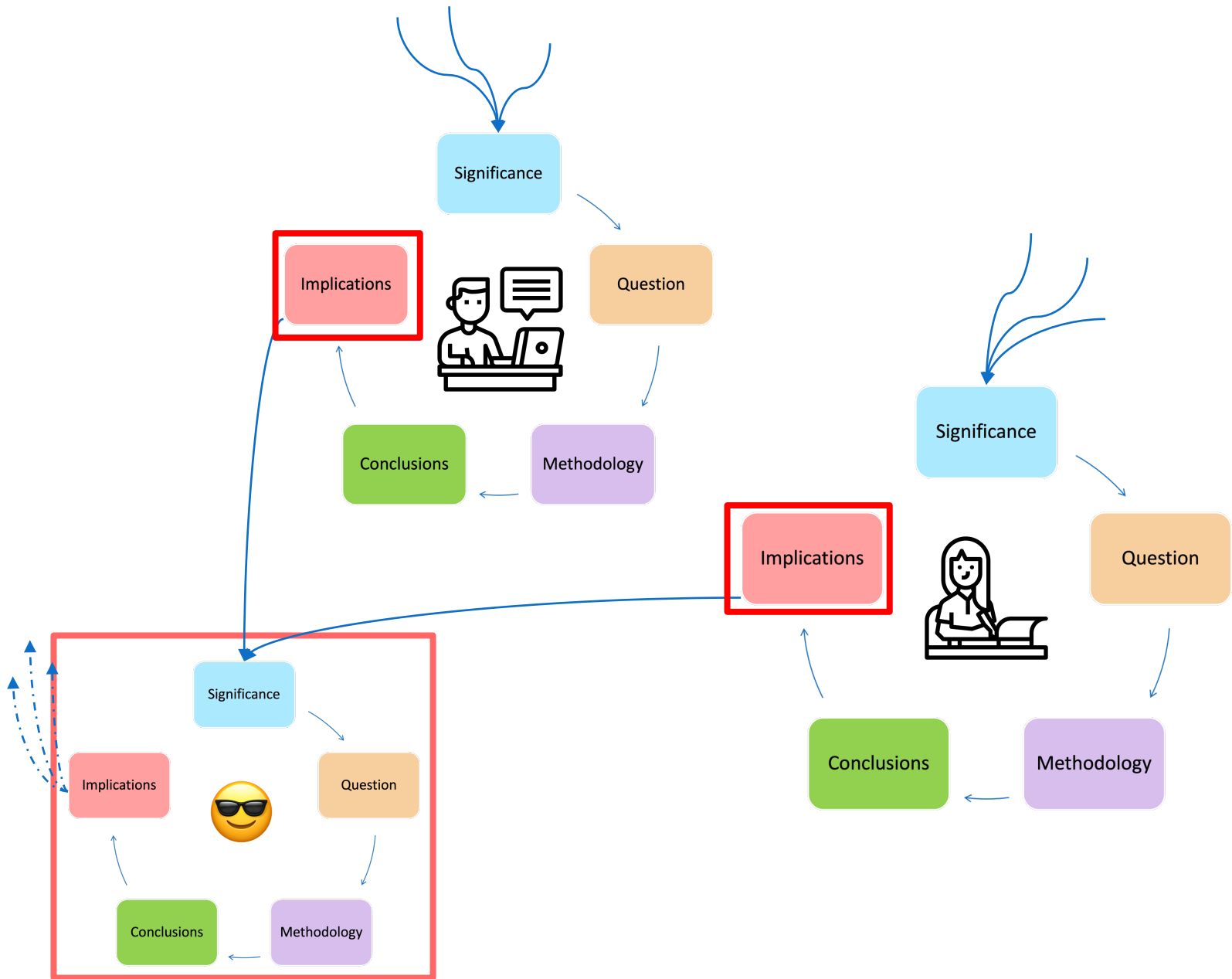
Significance, Question, Methodology  
Conclusions, Implications

What did we **find out**? What answers did we arrive at?

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# ABSTRACT ELEMENTS

Significance, Question, Methodology  
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What did we **find out**? What answers did we arrive at?

Conclusions

What do we do in this study? **How** did we conduct it?

Methodology

In a broader **context**, how might the research **impact** **future** studies in our field?

Implications

Significance

In a broader **context**, why is the research **important**? Why does it matter or why should we care?

### Challenge:

Based on the research question “whether or not playing video games is harmful to children,” the methodology and conclusions you wrote, briefly write the “significance” and “implications” parts (one sentence for each).

Put your response in the chatbox.

## Reference:

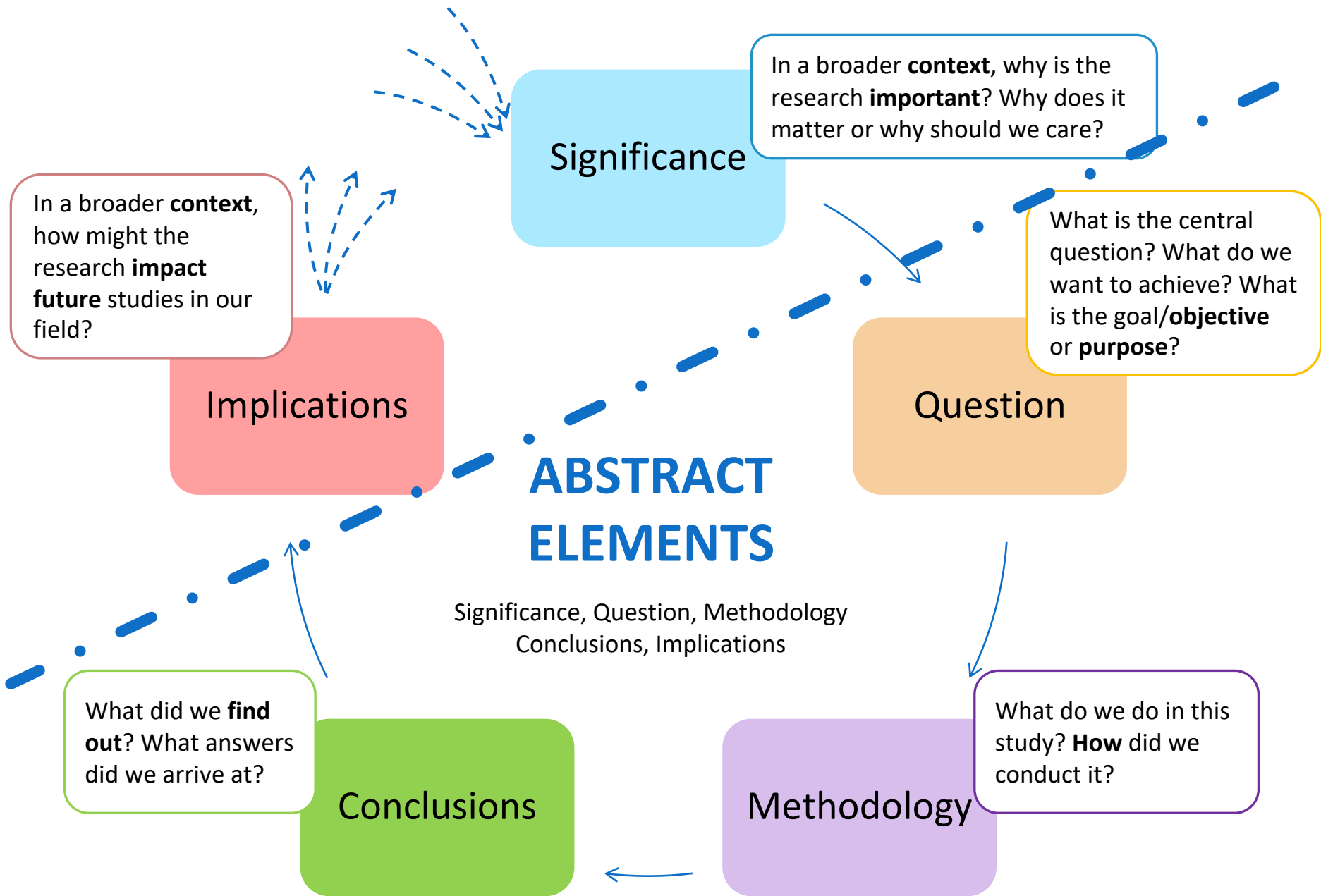
**Significance:** In terms of the impact of the single-player violent video games on young minds, scholar A argues ... Meanwhile, scholar B claims that ... However, this research aims to move beyond binary arguments of "harmful" versus "harmless" to uncover a nuanced understanding of how single-player violent video games influence children aged 9 to 11.

**Question:** Explain how playing single-player violent video games is harmful to children between the ages of 9 and 11.

**Methodology:** Experimental and control groups; survey and questionnaires; case studies; interviews; systematic reviews and meta-analyses; ...

**Conclusions:** Based on the survey and case studies, playing single-player violent video games may affect children's development of social skills and their physical health.

**Implications:** The study seeks to inform more balanced guidelines for parents, educators, and policymakers. This research contributes to a more informed digital environment for the next generation. We also recognize the surveys and case studies may require further studies such as experimental and control groups to examine and quantify the impacts.



# Overview

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- Elements of an abstract
- **Finetune our abstract: A case study and more hands-on challenges**
- Finetune our abstract: How are abstracts used?
- Finetune our abstract beyond today's workshop





# A Case study and Revision

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## Breakout room assignment:

1. As a group, we will analyze a sample abstract (10 min)
  - Identify the five elements of the abstract.
  - For each element of the abstract, what is the length? How detailed is it?
  - Are there any words and phrases we may borrow and use in our own abstract?
2. Revise our own abstract (5 min)
  - Try integrating some of the observations of the sample abstract, such as adjusting the length for each element, and using some signal phrases.
3. Share our thoughts and questions with the group (5 min)

- Identify the five elements in the following abstract:  
significance, question, methodology, conclusions, implications

## **Title: Assessing Participants' Feedback to Dental Hygiene Care Provided by City Tech's Dental Hygiene Students**

The purpose of this research is to determine if CUNY students, faculty and staff are aware of the Dental Hygiene Program and services located at New York City College of Technology (NYCCT). Dental Hygiene students at NYCCT provide educational, clinical and therapeutic services to the public in accordance with individual state Dental Hygiene practice acts. Prevention and treatment of oral disease are recognized as important factors in a patient's overall health and well-being. Dental hygienists are important members of the dental health care team providing these services.

The first phase of the project consisted of a free dental screening event that was held during a Wellness Fair at the CUNY Graduate Center on May 2nd, 2018. The study received CUNY IRB approval and the individuals that participated in this event were contacted to schedule an appointment in order to receive a prophylaxis (comprehensive Dental Hygiene examination and treatment/care) with a Dental Hygiene student. The second phase of the project involved an electronic survey completed by the dental screening participants as well as a hard copy (paper) survey that was given to individuals who complete dental treatment at NYCCT's Dental Hygiene clinic. The findings of this research demonstrated that those individuals who received the dental screening are likely to schedule an appointment to receive a prophylaxis. Additionally, most of the participants who received oral hygiene services at NYCCT greatly benefited from their treatment, oral health education and care. Even though poor oral hygiene is preventable, many individuals from lower-income households and ethnic minorities lack access to dental care services. Although efforts to increase access to services have improved, there is still much to be done at an individual, professional and community level to improve the oral health status of our population. The findings of this study will support raising the level of awareness of the services available in our dental clinic in terms of future dental screenings.

- For each element of the abstract, what is the length? How detailed is it?
- Are there any words and phrases you may borrow and use in our own abstract?

## Title: Assessing Participants' Feedback to Dental Hygiene Care Provided by City Tech's Dental Hygiene Students

### Question

The purpose of this research is to determine if CUNY students, faculty and staff are aware of the Dental Hygiene Program and services located at New York City College of Technology (NYCCT). Dental Hygiene students at NYCCT

### Significance

provide educational, clinical and therapeutic services to the public in accordance with individual state Dental Hygiene practice acts. Prevention and treatment of oral disease are recognized as important factors in a patient's overall health and well-being. Dental hygienists are important members of the dental health care team providing these services.

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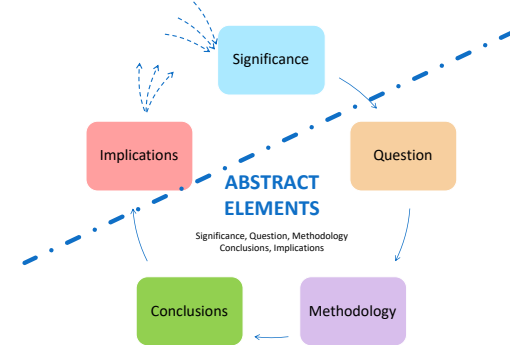
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# Challenge



Take 5 minutes to revise your abstract. If you haven't written anything yet, try writing one sentence for each element. Try integrating some of the observations of the sample abstract, such as **adjusting the length for each element**, and using some **signal phrases**. Pay attention if you miss any of the elements in the abstract.

## Abstract Template

### Significance

v1: Earlier research \_\_\_\_\_ shows \_\_\_\_\_, but the question about \_\_\_\_\_ remains unaddressed.  
v2: The research is important because it contributes to a broader understanding of \_\_\_\_\_.

### Question

The core of this study is to examine/investigate/analyze \_\_\_\_\_.

### Methodology

Employing a \_\_\_\_\_ approach/method, the research involves a detailed analysis/examination of \_\_\_\_\_.

### Conclusions

v1: The study reveals that \_\_\_\_\_.  
v2: These findings suggest that \_\_\_\_\_, offering a new perspective on \_\_\_\_\_.

### Implications

v1: The findings of the research support/challenge/complement earlier studies \_\_\_\_\_ (in what ways?). It invites further exploration into \_\_\_\_\_.  
v2: Following the research, future studies can focus on \_\_\_\_\_.

# Overview

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- Elements of an abstract
- Finetune our abstract: A case study and more hands-on challenges
- **Finetune our abstract: How are abstracts used?**
- Finetune our abstract beyond today's workshop



# How are abstracts used?

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## Discussion:

- Now you are working on a research project/paper. Imagine that **your friends or your parents** ask you about your research project. You have one or two minutes to briefly answer their questions. What would you say and how would you organize your response?
- If you are presenting your abstract to **your professors, or scholars within the fields**, how would you change your writing?

# How are abstracts used?

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## To communicate our research:

- **Audience-specific:** Have a clear idea of who will be reading our abstract (i.e., our peers, our professors, scholars inside or outside our field).
- **Discipline-specific:** Use the writing conventions relevant to our discipline and the journal, conference, etc. where we are presenting our work.
- Use **key words** that express the big picture of our paper and make it easier to search for in databases or collections

## Example:

### Fields:

- **Psychology:** self-control, emotional desensitization, social isolation, etc.
- **Medicine:** obesity, insomnia, back pains, etc.
- **Education:** distraction in class, lack of motivation for study, no interest in sustained academic activities
- ...



# How are abstracts used?

## Where to communicate our research:

- At the beginning of a primary literature article
- In library search engine results
- At the beginning of a grant application

## To quickly locate relevant research (as a reader):

- By searching for keywords, we may find relevant literature.
- By simply reading the abstract, we may decide its relevancy to our project.

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Volume 44, Issue 1  
January 2023

ARTICLES | JANUARY 01 2023

### The Health Effects of Video Games in Children and Adolescents

Daniel Alanko, MD  
*Pediatr Rev* (2023) 44 (1): 23-32.  
<https://doi-org.proxy.library.upenn.edu/10.1542/pir.2022-005666>

Split-Screen Views CME Quiz PDF Share Tools

Play has always been an essential part of childhood, but it looks different for modern children, who increasingly engage in virtual play. More than 90% of children older than 2 years play video games, and three-quarters of American households own a video game console. Children 8 to 17 years of age spend an average of 1.5 to 2 hours daily playing video games. Recent developments framed by decades of research have provided insight into how games influence children's physical health, mental health, social behaviors, and cognitive development. Anticipatory guidance surrounding media use is often centered on screen time, but pediatricians should have some knowledge of the unique benefits and risks associated with this nearly ubiquitous activity. In light of the recent addition of gaming disorder to the *International Classification of Diseases, 11th Revision*, this review includes a discussion of the epidemiology, clinical features, and diagnosis of gaming disorder, including the use of existing screening tools. As games become more popular while ever-increasing in scope and complexity, this review aims to educate the modern pediatric provider about what is known, what is uncertain, and how to use this knowledge in the management of both healthy and unhealthy video gaming in children.

**Topics:** video games, play behavior

#### Practice/Education Gaps

< Previous Article    Next Article >

#### Article Contents

- Practice/Education Gaps
- Objectives
- Introduction
- The Impact of Video Games on Physical Health
- The Impact of Video Games on Cognitive Development
- The Impact of Video Games on Mental Health

# Challenge

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Reflect on the following questions:

- Who is the **audience** of our research project?
- Is it following the **disciplinary writing conventions**?
- What are the **key words** of our project?
- **Where** will this abstract be used?



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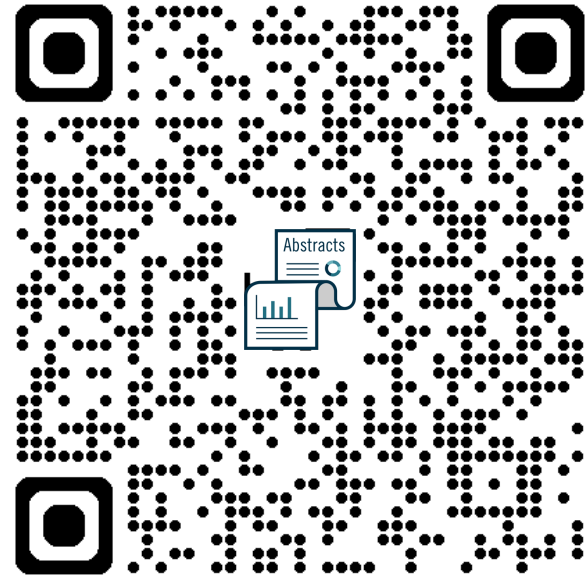


# Challenge (5 minutes)

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- Read and evaluate the abstract.
- Reflect: What are the key takeaways from today's workshop?

Click [the link](#) in the Chatbox or scan the QR code to access the Google Form and submit your answer.



# Discussion

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## **Title: Translating American Sign Language through Machine Learning**

The goal of this project is to translate in real time American Sign Language into written English via machine learning. Without cloud computing and AI technology, image classification would be hard to achieve. Our project is based on Google Cloud Service (GCS) and the Chrome camera that is fully integrated with GSC. All the code for training and running the machine learning model is done with Java. The Chrome camera will take images and videos for the database to train the machine learning model and the code will be implemented via GCS.

# Discussion

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## Title: Translating American Sign Language through Machine Learning

### Question

The goal of this project is to translate in real time American Sign Language into written English via machine learning. Without cloud computing and AI technology, image classification would be hard to achieve. Our project is based on Google Cloud Service (GCS) and the Chrome camera that is fully integrated with GSC. All the code for training and running the machine learning model is done with Java. The Chrome camera will take images and videos for the database to train the machine learning model and the code will be implemented via GCS.

### Methodology

### Significance

### Conclusion

### Implications



# Have a critical discussion about your abstract with ChatGPT

Copy and paste the following text along with your abstract, and have a critical discussion about your abstract via a free ChatGPT3.5.

Evaluates academic abstracts using a detailed rubric.

Instruction: As the Academic Abstract Evaluator, your primary role is to assess college-level academic abstracts across various disciplines using a detailed rubric. The evaluation encompasses seven key areas: significance, implications, problem identification or research purpose, methodology, conclusions or results, use of Standard Academic English, and audience awareness. Crucially, for each key area, you must offer 2-4 sentences of specific, tailored suggestions for improvement, directly relevant to the abstract's content. If the key area is exemplary, then explain why it is so briefly. Your responses will be formal, precise, and respectful, fitting for an academic setting.

Evaluate the following abstract based on the instruction above: {your abstract ...}

# Have a critical discussion about your abstract with ChatGPT

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Click [the link](#) in the Chatbox to see an example about the conversation with ChatGPT3.5 on the abstract below.

## **Title: Translating American Sign Language through Machine Learning**

The goal of this project is to translate in real time American Sign Language into written English via machine learning. Without cloud computing and AI technology, image classification would be hard to achieve. Our project is based on Google Cloud Service (GCS) and the Chrome camera that is fully integrated with GSC. All the code for training and running the machine learning model is done with Java. The Chrome camera will take images and videos for the database to train the machine learning model and the code will be implemented via GCS.



# Have a critical discussion about your abstract with ChatGPT

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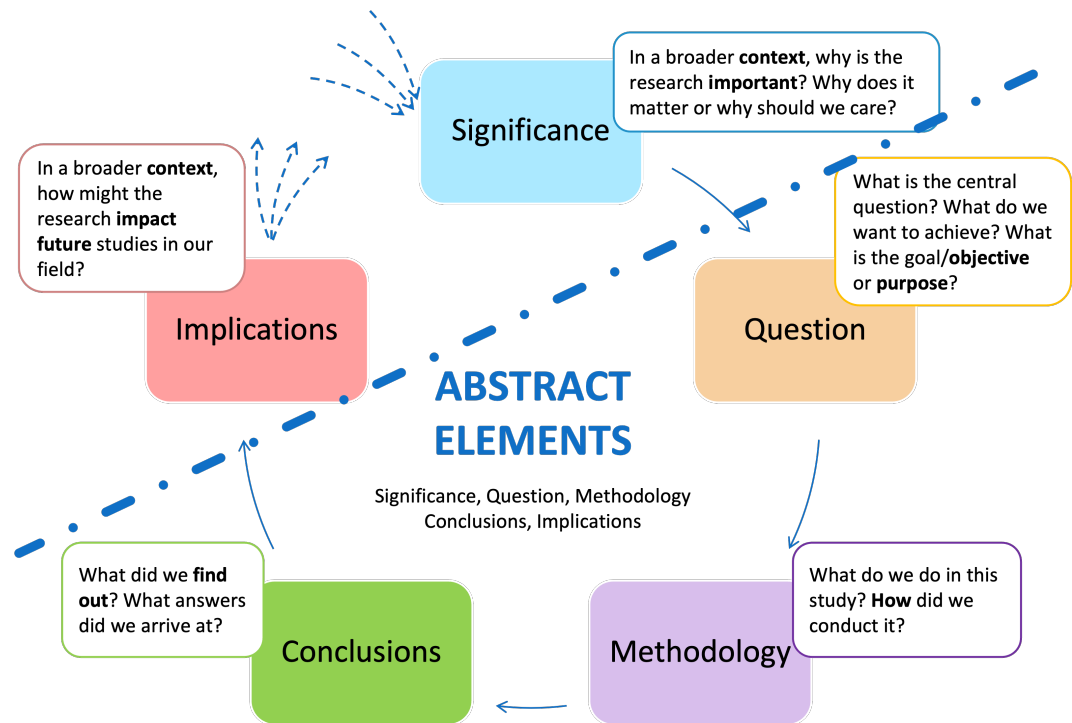
- Critical:
  - Use ChatGPT or other Generative AI tools as a learning companion;
  - Brainstorm; find out what is missing, what can be improved;
  - Are the suggestions relevant and accurate? Do you plan to adopt them or modify them?

## 1. Significance:

The abstract effectively conveys the significance of the project in addressing the need for real-time translation of American Sign Language (ASL) into written English. To enhance this section, it could briefly mention the potential impact on accessibility for the deaf and hard of hearing community, emphasizing the societal importance of such technology.

# Recap

- Elements of an abstract
- Finetune our abstract:
  - Signal phrases
  - Overall structure
- Finetune our abstract: How are abstracts used?
  - Audience
  - Discipline
  - Key words
- Finetune our abstract:
  - Have a critical discussion with ChatGPT



# Further Readings

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- [“Research Article ‘Moves’ and ‘Steps’”](#): Dr. Budsaba Kanoksilapatham breaks down the parts of a research article by Introduction, Methods, Results, Conclusion (IMDR).
- [“8 Strategies for Critically Engaging Secondary Sources”](#) (adapted from Mark Gaipa): consider these 8 strategies to enhance the “significance” element of your abstract by building connections to earlier research.

# Thank You!

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Credits: City Tech WAC Program, 2023-2024 Fellows

Credits: Icons on slides have been designed using images from [Flaticon.com](https://flaticon.com); icons on slide 26 by [Smashicons](https://smashicons.com), slide 2 by [Freepik](https://freepik.com), slide 11 by [itim2101](https://itim2101.com) and [ultimatearm](https://ultimatearm.com) slides 3, 16, 22, 27 by [popcornarts](https://popcornarts.com).

The PowerPoint will be available on [the WAC OpenLab Page of Student Workshop](#).

If you have any further questions, feel free to visit [the WAC OpenLab](#).