

AI For Educators

WORKBOOK + LESSON PLANS

MODULE 1A

COMMUNICATING
WITH AI CHATBOTS

APPLIED
ARTIFICIAL
INTELLIGENCE
FOR HIGHER
EDUCATION

www.BronEager.com

Table of Contents

ACTIVITIES + LESSON PLANS

ABOUT

NOTES PAGES

ENQUIRIES

This workbook is designed for use in Bron Eager training and development workshops.

bron@broneager.com



Activities + Lesson Plans

Activity: Lost in Translation

Activity: 'Act in the Role of...'

Worksheet: 'Act in the Role of...'

Activity: Goal Breaker!

Worksheet: Goal and Task Sequencing

Activity: Prompt Writing

Worksheet: Writing Effective Prompts

Activity: Lost in Translation

"*Lost in Translation: The Challenge of Communicating with (only) Words*" is an engaging activity designed to introduce participants to the challenges of communicating clear instructions using only words. Through this hands-on activity, participants create, describe, and replicate drawings, simulating the experience of interacting with a conversation-style AI model, like ChatGPT.

Duration: 15 - 30 minutes

Materials:

- Sheets of paper (two per participant)
- Pens or pencils (one per participant)

Instructions

1. Introduction: Welcome participants to the activity and explain its purpose: to explore the challenges of clearly communicating using only words.

2. Preparation: Distribute a sheet of paper and a pen or pencil to each participant.

3. Drawing Phase: Ask participants to draw a picture (e.g., a series of geometric objects - square, circle, triangle, squiggle) on their sheet of paper. Instruct them not to show their drawings to anyone else. Encourage them to be creative, noting that there is no *right* or *wrong* way to draw their picture. Allow 60 seconds for this drawing phase.

4. Pairing Up: Instruct participants to pair up with someone else in the room. If necessary, facilitate the pairing process by helping participants find a partner. Once they are paired, ask one person in each pair to be the "describer" and the other person to be the "drawer."

5. Describing and Drawing: Explain that the drawer should take a blank piece of paper, while the describer is tasked with providing verbal (only) instructions to guide the drawer to replicate the drawing (which the describer created in Step 3). The drawer is tasked with trying to reproduce the drawing based on the describer's instructions. Encourage the describer to be as detailed and specific as possible.

6. Comparison and Reflection: After the describer finishes giving instructions, have the drawer compare their drawn image to the original drawing. Ask both participants to reflect on the experience. What challenges did they face during the communication process? Did the instructions convey the intended image accurately? What factors contributed to successful or unsuccessful communication and drawing replication?

7. Role Reversal: Instruct the participants to switch roles, with the drawer now becoming the describer and vice versa.

8. Repeat the Process: Have the new describer provide instructions to their partner, following the same guidelines as before. Again, ask the participants to compare the resulting drawing with the original and reflect on the challenges encountered.

10. Group Discussion: Gather participants together for a group discussion. Facilitate a conversation about the difficulties faced in conveying instructions accurately using only words. You might also discuss the importance of nonverbal cues, visual aids, and other forms of communication to enhance understanding. *See additional facilitator notes for further guidance.*

11. Key Takeaways: Summarise the main lessons learned from the activity, such as the significance of clear and concise communication, the limitations of using words alone, and the importance of adapting communication strategies to different contexts.

12. Conclusion: Thank the participants for their active participation and encourage them to apply the insights gained from this activity to their everyday communication practices... such as when needing to instruct an AI conversation-style chatbot.



Additional Facilitator Notes

Feel free to adapt the instructions and language according to your workshop's specific needs and audience.

Gaining insights from the Group Discussion activity, it can become evident how challenging it can be to effectively communicate instructions using only words. This exercise can serve as a metaphor for the difficulties encountered when interacting with conversation-style AI chatbots, such as ChatGPT. While ChatGPT (or similar) is a powerful language model, it may rely solely on textual input and therefore lacks the ability to interpret nonverbal or visual cues (noting that the technology is rapidly evolving, so this functionality may be available in the near future).

Key discussion points:

- Emphasise the importance of clear and concise instructions when interacting with AI models.
- Encourage participants to explore techniques to enhance communication with AI models, such as providing additional context or examples.
- Highlight the limitations of text-based communication and the importance we give to nonverbal cues, context, and visual aids, which may be absent when interacting with AI models.

Remember, these discussion points are meant to stimulate conversation and encourage critical thinking about AI models and communication. Feel free to adapt them to your specific workshop context and audience.

Activity: 'Act in the Role of...'

This interactive activity is designed to familiarise participants with the concept of assigning personas (or roles) to AI chatbots. Using the provided worksheet and guided conversation exercise, participants explore the characteristics and traits they want to shape the responses from their chosen AI chatbot (e.g., ChatGPT), enabling them to personalise and enhance their interactions with conversation-style AI models.

Duration: 10 - 15 minutes, or longer if optional steps (indicated below) are included.

Materials:

- Worksheets (one per participant)
- Pens or pencils (one per participant)
- Internet-connected devices (laptops, tablets) for each participant

Instructions

1. Introduction: Start the activity by explaining the concept of using a persona (or character) when interacting with a conversation-style AI chatbot. Emphasise that instructing the chatbot to "Act in the role of..." can help shape its responses and create more engaging conversations. Discuss the importance of choosing the right persona to suit the context or topic of the conversation and task(s) you wish to achieve.

2. Exploring Personas: Engage participants in a brief discussion about personas and characters. Ask them to identify academic scholars, thought leaders, or characters from books, movies, or real life and how those personas might impact their conversations and interactions. Encourage them to consider the traits, attitudes, and behaviours that define those personas.

3. Worksheet Introduction: Distribute worksheets, pens or pencils to participants. Explain that they will be creating their own personas for later use with a conversation-style chatbot.

4. Persona Characteristics: Instruct participants to complete the first section of the worksheet (a copy is included at the end of this activity lesson plan), which focuses on defining the characteristics of their chosen persona. They should consider aspects such as expertise, tone of voice, level of formality, and any specific quirks or traits that will shape the persona's responses.

5. "Act in the role of..." Prompts: Provide participants with an example "Act in the role of..." prompt. Here's an example:

Act in the role of a seasoned educator sharing insights and advice on effective classroom management strategies for diverse student populations. Your expertise lies in fostering an inclusive and engaging learning environment. Maintain a friendly and approachable tone, using a balance of professional language and relatable anecdotes. Feel free to incorporate your personal teaching style, such as your enthusiasm for hands-on activities and your knack for building strong student-teacher relationships. Remember to share practical tips based on your years of experience. Your responses should reflect your deep understanding of the challenges educators face and provide practical guidance to help fellow teachers create positive and impactful learning environments.

6. Writing "Act in the role of..." Prompt: Instruct participants to write their "Act in the role of..." prompt. Space is provided in the worksheet. Participants may use their computer to draft the prompt. Encourage participants to be creative and specific in defining the desired persona.

7. Guided Conversation Exercise: Divide participants into pairs or small groups. Use a conversation-style chatbot (e.g., ChatGPT or Bard) to enter the "Act in the role of..." prompt and encourage participants to ask the chatbot questions.

[OPTIONAL] Alternatively, choose not to use technology and instruct participants to take turns assuming the role of a chatbot and the human participant. The human participant will provide a prompt or question, while the other person will respond as a chatbot, embodying the assigned persona. Encourage reflection to further develop the persona's characteristics.

8. Reflection and Discussion: Bring participants back together for a group discussion. Facilitate a conversation about how different personas influenced conversations and how different personas can shape responses (i.e., influence AI-generated outputs).

9. Conclusion: Wrap up the activity by summarising the importance of defining personas when interacting with chatbots. Encourage participants to explore different personas in their future interactions to enhance engagement and personalise the experience.



STEP 1. Scope Persona

JOB / CAREER / BACKGROUND

TONE / FORMALITY

QUIRKS / POINT OF VIEW (OPTIONAL)

AREA OF EXPERTISE

OTHER (OPTIONAL)

STEP 2. Draft Your Prompt

ACT IN THE ROLE OF...

Activity: Goal Breaker!

"Goal-Breaker: Breaking Down Goals Into Smaller Tasks for AI Chatbot Conversations" challenges participants to break down larger goals into manageable tasks/objectives while practicing instructing an AI chatbot to achieve those goals. This activity fosters critical thinking, collaboration, and effective communication skills while encouraging participants to approach goal setting in a structured and strategic manner, with the added dimension of incorporating personas to personalise the instruction process.

Duration: 30-60 minutes.

Note. "Act in the Role of..." activity to be completed prior.

Materials:

- Worksheets (one per participant)
- Pens or pencils (one per participant)
- Sticky notes (one pack per 2-3 participants)
- Internet-connected devices (laptops, tablets) for each participant

Instructions

1. Introduction: Begin the activity by introducing the importance of goal setting and the challenge of breaking down larger goals into smaller, manageable tasks. Explain that in this activity, participants will engage in a series of smaller activities to explore goal-setting and practice instructing an AI chatbot to achieve specific objectives.

2. Brainstorming: Start with a brainstorming session where participants generate a list of larger goals they would like to accomplish. Request participants to think of a goal related to producing an artefact related to their work. Suggest examples, such as writing a report, crafting a job application, or generating a lesson plan. Encourage participants to think broadly and creatively, considering the types of artefacts they are required to produce in their workplace. Invite participants to share their goals with the group.

3. Goal Breakdown: Divide participants into small groups (2-3 participants per group). Groups can form around shared goals (e.g., multiple participants shared 'writing a report' as their goal) or groups can be assigned randomly. Ask participants to share their goals with their group members and instruct the group to choose one stated goal to work on for the remainder of the activity.



4. Functional Task Reflection: With a single goal selected, ask group members to brainstorm a list of sub-tasks needing to be completed to achieve the broader goal. Each sub-task should be written on a sticky note (one task per note). Encourage rapid ideation.

5. Sequencing Tasks: Ask group members to reflect on the sub-tasks and then arrange the sticky notes in the order in which those tasks should logically be carried out so as to achieve the broader goal.

6. Persona Refresher: Remind participants of the personas they created earlier in the "[Creating ChatGPT Personas](#)" activity. Encourage them to review their personas to determine whether the persona they created is suitable for use in achieving the broader goal, or whether they should create a new persona for use in this activity.

7. Defining Task Objectives: Ask groups to write their stated goal and the associated tasks (in order/sequence) in the provided [worksheet](#). Invite participants to consider the characteristics and functional nature of each task.

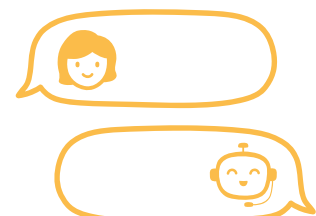
[Note. Before advancing to the next step, facilitators may wish to provide additional information about effective prompt writing, as provided in the [Prompt Writing Activity](#)]

8. Using an AI Chatbot: In their groups, use an AI chatbot, such as ChatGPT, to attempt to achieve the goal by following the steps participants documented in their worksheet. Participants may need to refine the sequence of their stated steps and objectives.

9. Reflection: Wrap up the activity by summarising the importance of breaking down large goals into smaller tasks. Encourage participants to share their experiences, lessons learned, and any adjustments they made to their instructions based on the chatbot's responses.

10. Conclusion: Summarise the key takeaways from the activity, emphasising the importance of breaking down goals into smaller, actionable objectives.

Encourage participants to continue applying these skills as they continue to experiment with AI tools.



Additional Facilitator Notes

- Before the activity, familiarise yourself with the concept of AI conversation-style chatbots and how they best operate by actioning small goals, one at a time, in a logical sequence to work towards the user's larger end goal. Understand the importance of clear instructions and how breaking down objectives can help achieve effective AI chatbot interactions.
- You could begin the session with a brief overview of AI conversation-style chatbots, emphasising their ability to perform tasks and assist users in achieving their goals.
- Guide participants to write clear and concise instructions that outline the sequence of actions for the AI chatbot to follow. Encourage them to consider the logical order, dependencies, and any necessary parameters or constraints to achieve each objective.
- Emphasise the importance of establishing a logical flow of objectives within the instruction set to ensure effective AI chatbot interactions. Encourage participants to review and revise their instructions, ensuring they maintain a coherent sequence of actions towards the larger end goal.
- Conclude the activity by summarising the key takeaways, highlighting the significance of breaking down objectives for effective AI chatbot interactions.
- Encourage participants to apply these insights and techniques when interacting with AI chatbots and to consider how breaking down objectives can enhance the effectiveness of their interactions in various contexts.

Remember, these facilitator notes are meant to guide you in delivering the activity effectively. Feel free to customise and adapt them to suit your teaching style, the workshop context, and the participants' needs.

What's my primary / overarching goal?

What (single-function) tasks need to be completed to achieve my goal?

Five empty rectangular boxes for task entry, arranged vertically. On the left side of each box, there is a curved arrow pointing downwards, indicating a sequence of tasks.

Add additional task boxes as required.

Activity: Prompt Writing

This "*Prompt Writing*" activity aims to skill participants in understanding and applying the principles of writing effective prompts for AI models, such as ChatGPT, while also experiencing the iterative process of refining prompts based on an AI chatbot's output.

Duration: 15+ minutes

Materials:

- PDF: download the journal article at <https://ro.uow.edu.au/jutlp/vol20/iss5/02/>
- Pens and paper for each participant
- A projector or large screen for displaying examples and instructions
- Internet-connected devices (laptops, tablets) for each participant and access to ChatGPT (or similar)
- Worksheet (included below)

Instructions

1. Introduction: Begin by explaining the importance of writing effective prompts for AI models. Introduce the [PDF](#), including showcasing examples from the PDF to illustrate prompt writing.

2. Discuss Prompt Components: Introduce Tables 1 and 2 in the PDF. Discuss prompt writing steps and components, as described in the tables. Encourage participants to ask questions and clarify their understanding.

3. Group Work - Prompt Crafting: If this activity builds on the earlier activities e.g., '[Goal Breaker](#)', have participants re-join into their earlier groups to craft their prompts (i.e., use earlier defined tasks as the foundation for prompt writing). Alternatively, form new groups.

4. Test Prompts: Each group inputs their prompt into ChatGPT (or similar) and evaluates the output. They should reflect on whether the output aligns with their intended goal, and if not, iterate their prompts to gain more valuable outputs from the AI tool.

5. Wrap-Up Discussion: As a class, discuss the challenges and successes experienced during the activity. Highlight the importance of iteration in crafting effective prompts. Encourage participants to practice writing prompts for ChatGPT using the steps and components in the PDF as a guide.



WORKSHEET: WRITING EFFECTIVE PROMPTS

COMPONENT	PURPOSE	HAVE A GO!
Verb	Indicates a specific action to be performed.	
Focus	Provides the process, product, or outcome of the action to be performed (in relation to the 'verb').	
Context	Explains the scope or parameters of the task.	
Focus and Condition	Provides the focus and condition for the generated output, defining the subject matter and the primary goal.	
Alignment	Instructs the AI model to align content with your desired goal.	
Constraints and Limitations	Notes any constraints or limitations that the AI model should adhere to.	

Adapted from Eager and Brunton (2023): <https://ro.uow.edu.au/jutlp/vol20/iss5/02/>



Dr Bron Eager

Globally recognised for achieving impact through AI and digital skills training for the higher education community.

- Provided training to 1000+ academic researchers and educators from 50+ Universities around the world.
- Invited speaker and presenter at the Quality Assurance Agency for Higher Education (QAA) events.
- Creator of educational resources for enhancing AI literacy, adopted globally by Universities as recommended training materials for upskilling staff to navigate the new world of AI-embedded academic work.
- Author of 'Academic Writing AI Prompts Phrasebook'.
- Awarded University Innovation Medal for digital pedagogy initiatives at her home institution, the University of Tasmania.
- Senior Lecturer in the College of Business and Economics, University of Tasmania, Australia.
- Scholarly Practitioner, with multi-disciplinary research interests spanning digital skills development, entrepreneurship, gender studies, and the scholarship of teaching and learning.
- Excellence in teaching, focusing on applied practice-based pedagogy.
- PhD (mixed-methods, business and psychology).
- Master of Entrepreneurship & Innovation (MEI).
- Graduate Certificate in Learning & Teaching (Higher Education).
- Certificate IV Training and Assessment.



Enquiries

www.BronEager.com

bron@BronEager.com