

In this document role play is introduced as exercise to practice TA communication.

Reasoning behind roleplay

In a work session/ practicum class, there are several scenarios which occur more often. As TA you need to be able to deal with a student who

- Comes to class unprepared?
- Asks for info given in the manual?
- Reports “ I don’t understand”
- Forgets the basics, from previous sessions
- Does well and seems to not need help
- Has nice results, without any comprehension
- Works quietly, looks troubled.
- Has red Python error code, but no question

One approach to practice the above scenarios with TAs, is to show the above list to TAs, and let them:

- Choose a topic (make sure each group has a different topic)
- Think for themselves, to come up with the best things to say
- Pair with a peer and compare approaches
- Share outcomes with the whole class

The benefit of such approach is that TAs can think back at what they experienced before, and compare + share with others.

Drawback is that it is a hypothetical conversation, so TAs can think a lot on what is best to say, and they do not act on the spot. Since thinking takes more time than a natural, instinctive response, an alternative activity is designed: Roleplay

ROLEPAY introduced

Approach to roleplay

As teacher you introduce how the roleplay will take place:

- one TA takes up the role of **student**, and picks and read a card from a selected scenario.
- One TA take up the role of **Teaching Assistant**, and selects one TA description.
- One TA takes up the role of **observer**, familiarizes themselves with the observation list, which is to be filled in during the roleplay.
- If the group is bigger than 3 students:
 - add a second student (who perfectly did the preparations in scenario 1),
 - the rest of the TA group act as additional observer.

Introduce the scenario, and take time for the TAs to read their part in the scenario, and then start playing. As teacher, walk around, listen to the conversations, and give expert input if needed/ wanted. After 5-10 minutes, gather attention and ask for a brief summary. What was said, what happened, how did the TA and student feel?

Variations in roleplay

The roleplay has three possible scenarios, in which the student acts differently. Per scenario 5 or 6 different type of students are included:

- 1A-F: a student comes in class unprepared.
- 2A-E: red error code on his screen (in Python).
- 3A-E: A student in an instrumentation practicum can show nice results, but without any comprehension

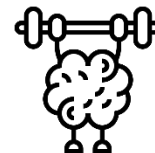
At the end of this document you find the prompts used to generate the scenarios, they might help in generating more prompts for your specific scenario / student.

Similarly 5 different TA types are given.

Observation list - explanation

Your fellow TAs will do a roleplay between a TA and an unprepared student, with an optional perfect class mate. Your role is to observe. Listen carefully, and once you hear a remarkable phrase between TA and student write it down. Analyse these phrases, while thinking about the kind of language expected towards:

- Learning agility/self regulated learning
(growth mindset, habits of min, deliberate practice)



- Self determination theory
(autonomy, competence, relatedness, purpose)



Also think about:

- Hidden agenda's & expectations
- Whether the used language opens opportunities or imposes restrictions.

Use the format:

| | |
|--------------------------------------|--|
| What does the TA say | |
| What does the student say | |
| open or close opportunities? | |
| Related to which part of the theory? | |
| What would you recommend | |

Prepared class mate – scenario 1:

Maya was renowned for her meticulous preparation and dedication to her studies. Balancing her coursework with a part-time job and volunteering commitments, Maya often found herself sacrificing personal leisure time to excel academically.

Last weekend was no exception. Determined to ace her assignment, Maya devoted her entire Saturday and Sunday to studying. She cancelled family plans, disappointed her younger sister, and missed out on a much-needed trip outdoors. Despite the sacrifices, Maya knew the importance of being fully prepared.

Entering her class on Monday morning, Maya felt a sense of satisfaction knowing she had put in the effort. However, her mood shifted when she noticed Sam, her classmate and project partner, looking visibly flustered and unprepared.

Teaching Assistant background I: Eager and Supportive

Jessica is a recent graduate who excelled in her program. Passionate about teaching, she eagerly accepted a TA position to help students navigate their academic challenges. Jessica is known for her supportive nature and always goes the extra mile to assist students. Her own experiences as a student drive her empathy, making her approachable and understanding. She often holds extra office hours and creates additional study materials to ensure everyone succeeds.

Teaching Assistant background II: Strict, Detail-Oriented

Michael has been a TA for over five years and takes his responsibilities very seriously. With a keen eye for detail, he expects students to meet high standards and come prepared. Michael believes in the importance of discipline and hard work. While he is knowledgeable and willing to help, he maintains a strict policy on deadlines and effort, pushing students to develop strong work ethics and time management skills.

Teaching Assistant background III: Friendly, Approachable

Emily Carter is known for her friendly demeanour and approachable nature. Having struggled herself during her undergraduate years, she understands the pressures students face. Emily fosters an open environment where students feel comfortable seeking help. She often uses humour and personal anecdotes to make lessons engaging and relatable. Her goal is to make learning enjoyable and accessible, ensuring students feel supported both academically and personally.

Teaching Assistant background IV: Busy, Distant

Ryan is juggling his TA responsibilities with pursuing a PhD. With a packed schedule, he often finds himself stretched thin. While he is knowledgeable and capable, Ryan can sometimes be distant and hard to reach. He expects students to be self-sufficient and only seek help after making a considerable effort on their own. His time is limited, so he prioritizes students who demonstrate serious commitment to their studies.

Teaching Assistant background V: Enthusiastic, Supportive

Anna is a new TA, fresh out of her undergraduate program. Her enthusiasm for teaching is palpable, and she is excited to help students succeed. Anna remembers the challenges of being a student and is eager to provide support and guidance. She often organizes study groups and interactive sessions to make learning more dynamic. While still learning the ropes herself, Anna's enthusiasm and dedication make her a favourite among students.

STUDENT Scenario 1A: (family issues)

Sam had always prided himself on his meticulousness and dedication to his coursework. Balancing a part-time tutoring job and active participation in the robotics club, Sam managed his time with precision. However, this semester had been particularly challenging with the added pressure of a major robotics competition looming.

Last weekend, Sam's grandmother fell seriously ill, and his parents, who lived a few hours away, needed his help urgently. Sam spent the entire weekend at the hospital, supporting his family and handling household responsibilities in their absence. Exhausted and emotionally drained, he returned to campus late Sunday night, only to realize he had an important assignment due the next day.

Monday morning, Sam walked into the class with a heavy heart, his unfinished assignment still in his bag. As the professor began collecting homework, Sam felt a knot tighten in his stomach.

STUDENT Scenario 1B: (other content related activities)

Sam had always prided himself on his meticulousness and dedication to his coursework. Balancing a part-time tutoring job and active participation in the robotics club, Sam managed his time with precision. However, this semester had been particularly challenging with the added pressure of a major robotics competition looming.

Last week, Sam's robotics team faced a critical malfunction in their project. The competition rules stipulated that all repairs and programming had to be completed within a week. Determined to fix the issue, Sam and his team spent countless hours in the lab, working late into the night to troubleshoot and reprogram the robot. The intense focus on the competition caused Sam to lose track of time and neglect his other responsibilities.

Monday morning, Sam walked into the class with a heavy heart, his unfinished assignment still in his bag. As the professor began collecting homework, Sam felt a knot tighten in his stomach.

STUDENT Scenario 1C: (social distractions)

Sam was a dedicated and organized student, known for his punctuality and thoroughness. He balanced his coursework with a part-time tutoring job and leadership in the robotics club. Despite his busy schedule, he always found time to unwind by hiking on weekends.

Last Friday, Sam's friend from high school, whom he hadn't seen in years, called him unexpectedly. His friend was in town for a few days and invited Sam for a spontaneous weekend road trip to the mountains. Eager to reconnect and take a break from his hectic routine, Sam agreed. They spent the weekend hiking, reminiscing, and catching up, completely disconnected from the digital world.

Sunday evening, as Sam returned to campus, he realized he had an important assignment due the next day. He had left his textbooks and notes behind, intending to finish the work on Saturday.

Entering his class on Monday morning, Sam felt a wave of regret.

STUDENT Scenario 1D (procrastination due to mental exhaustion)

Sam was typically known for his discipline and time management in his studies. Balancing his coursework with a part-time tutoring job and active involvement in the robotics club, Sam had a reputation for being reliable and focused.

However, this semester had been particularly intense, and the constant pressure began to wear on him. Last week, after submitting a series of grueling assignments and preparing for a robotics club event, Sam found himself mentally exhausted. He decided to take a short break to unwind, telling himself he deserved a couple of hours to relax.

Sam started watching a new TV series, intending to watch just one episode. But one episode turned into several, and soon he found himself binge-watching the entire weekend. He pushed the thought of his upcoming assignment to the back of his mind, convincing himself he had plenty of time.

Sunday night rolled around, and Sam finally glanced at his calendar, realizing with a jolt that the assignment was due the next day. Panic set in as he realized he hadn't even started. Entering his class on Monday morning, Sam felt a mix of guilt and dread.

STUDENT Scenario 1E (no excuse)

Sam was a capable and organized student, known for his ability to juggle his coursework, part-time tutoring job, and leadership role in the robotics club. Despite his busy schedule, Sam had started feeling the strain of the demanding semester.

Last week, Sam received the details for an upcoming assignment. He knew it required a lot of reading and complex calculations. Feeling overwhelmed by the amount of effort needed, Sam decided to put it off, telling himself he would start the next day. Each day, however, Sam found himself making excuses.

Instead of studying, he spent his evenings watching TV, scrolling through social media, and hanging out with friends. The thought of the assignment loomed over him, but he couldn't muster the motivation to begin. Deep down, Sam knew he was being lazy, but the more he delayed, the harder it felt to start.

On Monday morning, reality hit as he walked into his class. Sam hadn't even looked at the assignment.

STUDENT Scenario 1F (housing issue)

Sam was known for his dedication and reliability in his program. Balancing coursework, a part-time tutoring job, and his leadership role in the robotics club, he had a reputation for being disciplined and focused.

However, this semester had been especially challenging due to a personal issue Sam kept hidden. His lease had unexpectedly ended, and he was struggling to find a new place to live. For weeks, Sam had been couch-surfing at friends' places, feeling increasingly anxious and ashamed about his situation. Despite this, he kept up appearances, not wanting anyone to know he was essentially homeless.

The constant instability took a toll on Sam's mental and physical well-being. Last weekend, overwhelmed and exhausted, he couldn't bring himself to focus on his assignment. He spent the time looking for housing options instead, but with no luck.

Monday morning arrived, and Sam walked into his class feeling defeated. As the professor collected assignments, Sam's heart sank.

| | |
|---|--|
| <p>What does the TA say</p> | |
| <p>What does the student say</p> | |
| <p>open or close opportunities?</p> | |
| <p>Related to which part of the theory?</p> | |
| <p>What would you recommend</p> | |



Autonomy



Competence



Relatedness



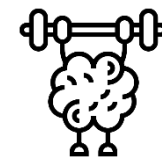
Purpose



Growth Mindset



Habits of mind



Deliberate Practice

STUDENT scenario 2A: Proficient and Confident

Alex is a seasoned programmer who enjoys the challenges that come with coding in Python. Today, he is tackling a particularly tricky project involving machine learning. As he scans his code, he notices a red error message. Rather than feeling disheartened, Alex smirks. He's encountered this type of error before – it's a syntax issue he can fix quickly. However, Alex decides to ignore it for the moment. He's deep into optimizing another part of his code, focusing on refining the algorithm's performance. Confident in his ability to resolve the error later, he prioritizes completing the more complex logic first. Just then, a TA drops by, noticing the error message on Alex's screen.

STUDENT scenario 2B: Proficient but Seeking Help

Jordan has been coding in Python for several years and is known among peers for his programming prowess. Despite his proficiency, he encounters an unexpected red error code on his screen during today's class. The error is related to a library import issue that he hasn't seen before. Normally confident in his abilities, Jordan realizes this might be a bit outside his expertise. As he's pondering the issue, a TA drops by and notices the error message on Jordan's screen.

STUDENT scenario 2C: Beginner and Lacking Confidence

Sam is new to programming and finds Python both fascinating and intimidating. Today, he encounters a red error message that sends a wave of anxiety through him. The error is cryptic, and Sam feels completely lost. Lacking confidence in his coding abilities, he hesitates, unsure of what to do next. He searches for the cause of the error message through Google, but is overwhelmed by the overly detailed, and hard to understand discussions online. Back to trial and error, but after 10 times adapting the syntax, Sam has no luck yet. At that moment, a TA drops by and notices the distressed look on Sam's face and the error message on his screen.

STUDENT scenario 2D: Beginner but Confident

Riley is relatively new to programming, having only started learning Python a few months ago. Today, she faces a red error code on her screen. Though inexperienced, Riley is confident in her problem-solving abilities. She's familiar with debugging techniques from her introductory courses. Riley takes a deep breath, examines the error message, and starts methodically checking her code. As she's working through it, a TA drops by and notices the error message on Riley's screen.

STUDENT scenario 2E: Proficient but Distracted

Taylor is a proficient Python programmer, known for his sharp coding skills and quick problem-solving. Today, he's distracted by a looming deadline for another class. As he codes, a red error message appears on his screen. Taylor glances at it briefly and recognizes it as a common indentation error. However, his mind is preoccupied with an upcoming history paper. Deciding the error can wait, he shifts his focus back to completing the critical sections of his code. Just then, a TA drops by and notices the error message on Taylor's screen.

STUDENT scenario 3A: Proficient and Relaxed

Emma is a diligent student in her instrumentation practicum. She's been steadily working through the assignments and today she has managed to produce some impressive results with her experiments. Despite the success, Emma feels puzzled; she has no idea why her setup is yielding such perfect data. She has all the time in the world to figure it out, as her schedule is quite flexible this semester. Emma decides to spend her extra time reading through her notes and consulting textbooks to gain a better understanding of the underlying principles. She hopes that with some additional study, she'll be able to explain her results more confidently.

STUDENT scenario 3B: Proficient but Eager to Leave

Jake is a competent student in his instrumentation practicum, usually able to grasp complex concepts with ease. Today, he's managed to generate excellent results from his experiment, but he's completely stumped about why it worked so well. Normally, he would dive into the details to figure it out, but he's eager to leave early to attend a concert he's been looking forward to for weeks. Frustrated but determined to stick to his plans, Jake decides to save his work and revisit the details later. He packs up quickly, hoping that reviewing his notes the next day will shed some light on the mystery.

STUDENT scenario 3C: Beginner and Overwhelmed

Lily is new to her instrumentation practicum and finds the coursework challenging. Today, she's surprised to see that her experiment has produced near-perfect results. Despite this success, Lily is utterly confused and cannot explain any part of the process. Her understanding of the material is minimal, and the perfect data seems more like a fluke than a result of her efforts. Lily's schedule is packed with other demanding courses and extracurricular activities, leaving her little time to dig into the details. She feels overwhelmed and anxious, unsure how to proceed or even where to begin her quest for comprehension.

STUDENT scenario 3D: Beginner with Time to Spare

Sam is a beginner in his instrumentation practicum, often struggling to keep up with the material. Today, he's surprised and delighted to see impressive results from his experiment. However, he's at a complete loss when it comes to explaining how he achieved them. Fortunately, Sam has a relatively light schedule this semester, giving him ample time to focus on understanding the principles behind his experiment. He decides to take advantage of this free time by consulting with his professor, reviewing his class notes, and conducting additional research. Sam hopes that this extra effort will help him grasp the concepts and explain his results with confidence.

STUDENT scenario 3E: Intermediate and Pressured

Olivia is an intermediate student in her instrumentation practicum, with a decent grasp of the concepts but not an expert by any means. Today, she manages to get excellent results from her experiment, yet she finds herself unable to explain the outcomes. Olivia is under significant time pressure, juggling multiple assignments and upcoming exams. Despite her curiosity about the unexpected success, she feels the need to prioritize her other responsibilities. She quickly documents her results, planning to revisit the details when she has more time, perhaps over the weekend. Olivia is torn between wanting to understand the experiment fully and needing to manage her immediate workload efficiently.

How to generate prompts via ChatAI (no need to print this page)

the stories chatAI was used. Below you find the prompts used to generate the background stories of the characters.

For scenario 1 the prompts were:

- come up with a background story of a student coming unprepared to class
- please do this again, but then with then for a 2nd year STEM BSc student. The background story is as input for role play, the story needs to leave an open end, and explain why the student comes in unprepared. Write this story in max 200 words
→ **STUDENT 1A**
- please again, but now with a different (non family related reason) → **STUDENT 1B**
- please again come up with a different reason why Sam did not do his preparations for class. A reason outside family or university related → **STUDENT 1C**
- please again, now with something procrastinating
- again, now with procrastination due to not wanting to do what it takes to study. Being lazy → **STUDENT 1E**
- please rewrite the last background story into procrastination due to mental exhaustion → **STUDENT 1D**
- can you rewrite into the professor being less understanding (note: remove the interaction with the professor)
- back to the stories of a student, can you write one about a student having a hard time finding a house, and is ashamed of this (while the issue is general, and not specific for her) → **STUDENT 1F**

For the TAs the prompt were:

- you made me 5 different scenarios with a student being unprepared due to 1. family issues, 2. extracurricular activities, 3. social activities, 4. mental exhaustion, 5. no reason. I want to request for 5 background stories of a teaching assistant who will have to deal with the unprepared student. Give me 5 different 150-words background stories of such teaching assistant. Vary in eagerness to help, level of commitment, level of experience, friendliness.

For the perfect student, the prompt were:

- write a background story of a student who works together with Sam in class, who prepared in the best way (but took her her full weekend, not being able to do the family leisure originally scheduled) , is a bit annoyed with Sam not being prepared (not knowing his background story)

For scenario 2 the prompts were:

- I would like to (again) write student background stories. This time on a student in a programming class, who has red error code on his screen (in Python). Give 5 background stories of 200 words each, which vary whether the student wants help or not, whether the student is proficient in programming or not, and the student has confidence (or not) to be able to solve by his own (perhaps the error is known, and first wants to focus on another part of the code)
- rewrite the above background stories up to the point where a TA drops by (no hand raise yet)

For scenario 3 the prompts were:

- yet another scenario: A student in an instrumentation practicum can show nice results, but without any comprehension. The student has no clue, and cannot explain any of the details. write 5 background stories, vary the level of comprehension, different student expectations, time schedule (demand): the student has all the time of the world ranging to the student wants to go somewhere else sooner than later