

Technology Design for Justice – A Role Play

Instruction Sheet

Time: 15–20 minutes

Goals

Students will:

- explore the ethical dimension of technology design and use,
- evaluate technical solutions from the perspective of affected users,
- reflect on accessibility, fairness, and inclusion as human rights issues,
- work toward a solution that is both practical and rights-based.

Materials

- role cards with design challenges and stakeholder roles,
- pens,
- whiteboard, flipchart, or digital board for notes.

Lesson Flow

1. Warm-up (about 3 minutes)

Start with a short question such as:

“We have seen that technology can support human rights. But what happens when a technology is not accessible, inclusive, or fair? Who is responsible for making technology just?”

Briefly discuss how design decisions can affect people differently and why technology is never only “technical.”

2. Group Role Play (about 10–12 minutes)

Divide the class into small groups of 3–4 students. Each group receives one scenario connected to one or two SDGs and a challenge related to fairness, access, or bias.

Suggested roles:

- **one affected user or community representative,**
- **one developer / designer,**
- **one ethics, policy, or rights representative,**
- **optional:** one investor / budget manager.

Task:

Act out the situation. The user explains the problem or their needs. The developer suggests a technical solution. The ethics or policy representative checks whether the idea respects fairness, accessibility, and human rights. Together, try to find a design that is realistic and just.

3. Sharing and Reflection (about 3–5 minutes)

Each group briefly presents the scenario, the solution they discussed, and the main challenge.

Possible discussion questions:

- What trade-offs had to be made?
- What was the biggest ethical challenge?
- How can designers make products more inclusive?
- What does sustainability mean in technology and human rights?

Activity Cards***Activity Card 1: Smart City for Everyone***

A city wants to introduce a new smart-city system with an app for transport, appointments, and public services. A group of older residents does not use smartphones and worries about exclusion.

Roles:

Older Resident

City Planner / App Developer

Data Protection or Ethics Officer

Your task:

Discuss how the city can modernize its services without excluding people who have limited digital access.

Focus questions:

1. What is the main problem?
2. Which rights or principles are involved?
3. What could make the system more inclusive?

Activity Card 2: Learning Software with Limited Internet

A technology company develops learning software for schools in rural areas. Many students have weak internet access and only basic devices.

Roles:

Student from a Rural Area

Software Developer

Education Expert / Rights Representative

Your task:

Create a solution that supports education but also works under difficult technical conditions.

Focus questions:

1. What barriers do students face?
2. How can the software be adapted?
3. What would fair access look like here?

Activity Card 3: AI Job Platform and Fairness

A start-up develops an AI-based hiring platform. Applicants from disadvantaged backgrounds worry that the system may reproduce social bias or unfairly filter candidates.

Roles:

Job Applicant

AI Developer

Equality Officer / Policy Representative

Your task:

Discuss how the platform can be designed so that it is efficient but does not discriminate.

Focus questions:

1. What kind of unfairness could happen?
2. How can the system be checked or improved?
3. What should matter more: speed, cost, or fairness?

Reflection Worksheet

Name: _____

Scenario: _____

Role: _____

1. The main design problem was:

2. One need or right that must be protected is:

3. Our group's solution was:

4. One compromise or challenge was:

5. Final thought:

A just technology should _____.