

TOOL-KIT FOR TRAINERS



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#Next Generation Shapes the EU's Digital Society

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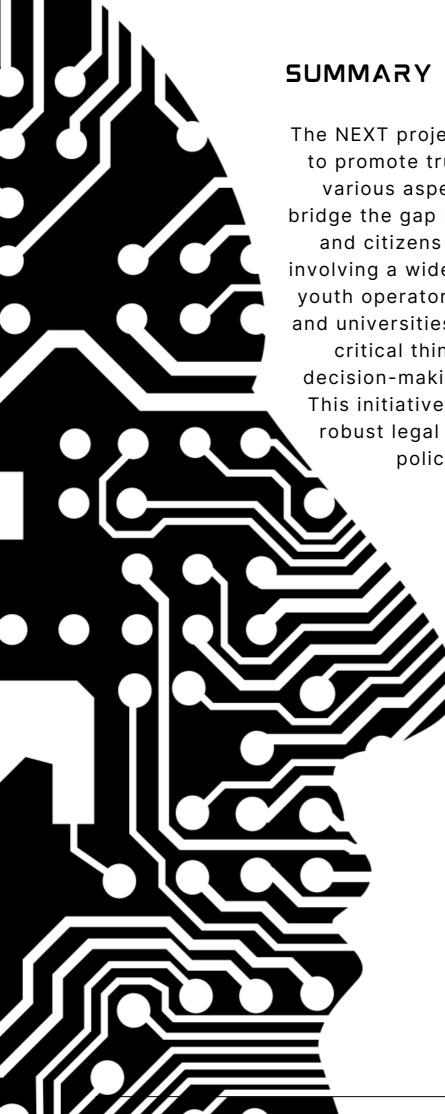
INTRODUCTION

BRIEF DESCRIPTION OF THE TOOLKIT

Introducing the Training Toolkit for Trainers in Youth Education and AI – a vital resource designed to address the evolving challenges faced by youth workers and educators in an era marked by a global pandemic and the imperative to navigate the intricacies of artificial intelligence. This inventive toolkit stands out as a comprehensive, need-based solution that is carefully designed to give professionals the tools they need to meet the dynamic demands of youth education.

This toolkit offers a proven and adaptable approach for providing learning, teaching, and training materials, suitable for both online and in-person environments, through a blended model of instructional design.

This toolkit is a flexible resource available to a broad variety of target groups, including young educators, NGOs in many disciplines, and multipliers in education and Al, because of its bilingual character, cross-country testing, and cross-sectorial usefulness. In a world that is changing quickly, it is a crucial step toward empowering the next generation.



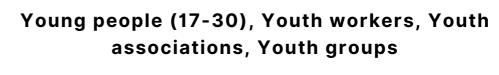
SUMMARY OF THE PROJET

The NEXT project has a multifaceted approach to promote trust in AI and its importance in various aspects of EU society. It aims to bridge the gap between research, government, and citizens for the reliable use of AI. By involving a wide range of stakeholders such as youth operators, researchers, policy-makers, and universities, the project seeks to enhance critical thinking, problem-solving, and decision-making skills among young people. This initiative also focuses on developing a robust legal infrastructure for AI through policies, ethics, and laws.

Additionally, the project will produce academic studies and an e-learning course centered around human-centric and value-oriented Al development.

Ultimately, the goal is to empower young individuals to actively participate in shaping trustworthy Al norms and policies, contributing to a more innovative, digital, and resilient Al ecosystem within the EU.

TARGET GROUPS



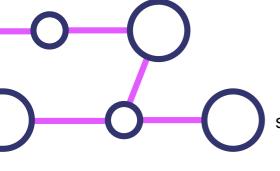
This target group is aimed at active young people aged 17-30 who are either in education, looking for a job or developing their skills. Our aim is to provide them with appropriate and easy to understand resources to guide them through the world of Al and help them understand the relevance of this technology in their current and future lives. For youth workers, youth associations and groups, our programme serves as a tool to enrich their own educational initiatives and broaden young people's horizons in the field of Al.

Youth educators, Non-profit organizations working in the field of youth/adult, Non-profit organizations in the field of IT, Non-profit organizations in the field of civic engagement, Non-profit organizations in the field of skills training

This document is prepared primarily for this target group and serves as a tool for training young people in Al. Youth educators and youth/adult non-profit organizations will gain resources and approaches to incorporate the topic of Al into their educational programs. Non-profit organisations working in IT and civic engagement will receive materials to help them spread awareness of Al and engage youth in discussions on social and technological issues. Non-profit organisations focused on skills development will have resources to provide hands-on Al training and mentoring.

In this way, the programme and materials are tailored to the needs and objectives of different groups to make the most of the benefits of Al education for the benefit of young people and their development.

ELEMENTS OF INNOVATION

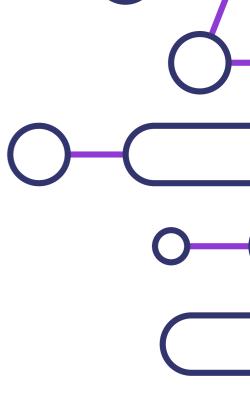


The Training Toolkit is a valuable resource designed to empower educators in effectively teaching Target Group. What this toolkit is its tailored approach, meticulously planned and systematically structured to ensure that training is not only relevant but also aligned with specific learning objectives.

At the heart of this toolkit is the blended learning model, a proven approach to instructional design. By seamlessly integrating both online and inperson components, educators can create dynamic and engaging learning experiences. This model enables a flexible delivery of content, catering to diverse learning styles and preferences.

The toolkit encompasses a rich array of learning, teaching, and training materials curated for the unique needs of Target Group 1. These resources are thoughtfully organized to cover a wide spectrum of topics related to artificial intelligence, making it accessible and comprehensible to learners of varying backgrounds and expertise levels.

Whether employed in a blended/hybrid learning environment or in traditional in-person training sessions, this toolkit serves as a versatile companion for educators. It provides them with the resources and strategies needed to deliver impactful and engaging instruction on the subject of artificial intelligence, ensuring that learning objectives are not only met, but exceeded. By utilizing this innovative toolkit, educators will not only enhance their teaching effectiveness but also inspire and equip young individuals with essential knowledge and skills in the dynamic field of artificial intelligence.



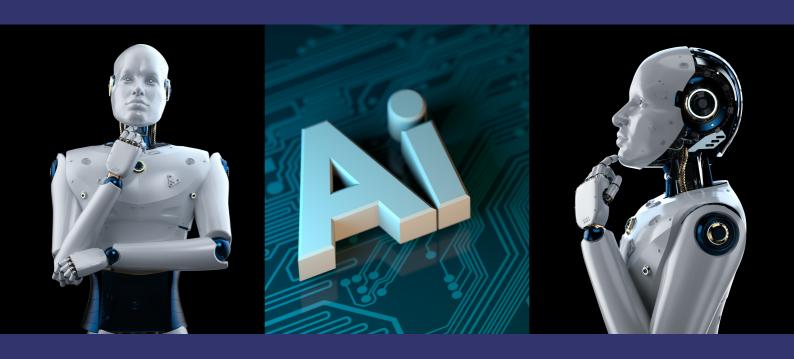
EXPECTED IMPACT

The toolkit's impact is substantial. It equips a broad audience, including operators in youth education, with concrete instruments and precise guidelines focused on Al's empowering dimensions. Through rigorous testing within the partnership, these methods and guidelines not only add tangible value but also enhance quality and refine the experiential aspect of education. This translates into a noticeable improvement, seen in both the increased quantity and elevated quality of educational programs within this domain.

SOFT SKILLS AND AI IN YOUTH EDUCATION

DEFINITION AND IMPORTANCE OF SOFT SKILLS AND AI IN YOUTH EDUCATION

When it comes to educating young people, the entire educational landscape is facing a number of challenges and formative changes, especially with regard to the increasing development of artificial intelligence (AI). Soft skills, in particular, are an important factor in preparing today's young people for the new challenges. Young people will grow up in an increasingly globalised, flexible and high-tech world. This makes it all the more important that they are able to shape their future by strengthening their soft skills.



Definition of soft skills

Soft skills are also referred to as interpersonal skills and influence behaviour in relationships with other people. Soft skills include things like problem-solving, communication and teamwork. Unlike soft skills, hard skills are very specific skills required for a job, such as technical knowledge. Soft skills are more universally applicable in all areas and are not limited to a specific field. Especially with the development of artificial intelligence, these skills are an important factor in both personal and professional development. Soft skills are not about knowledge that can replace artificial intelligence. It is about the complex and specific interpersonal relationships and ways in which people communicate and interact with other people.

Definition of soft skills

One part of soft skills, namely the ability to communicate, is particularly relevant. Not only, but especially young people should be taught to express and communicate their thoughts or feelings. They should be prepared for a world in which they are allowed to express their views, but are also able to listen carefully to others and process information. It should be noted that the ability to communicate is of course not only important for young people, but extends over the entire lifespan. However, if this group of people is already dealing with communication, the basis for avoiding conflicts or good relationships with others has been laid.

Teamwork is another important soft skill. In an increasingly interconnected world, the ability to work effectively in teams is crucial. Young people need to learn to work together on projects, respect different points of view and resolve conflicts constructively. Teamwork not only promotes cooperation, but also enables the exchange of ideas and the building of synergies.

The ability to problem solve and think critically is also an important part of soft skills. Young people need to learn to tackle challenges, find creative solutions and make decisions. This requires the ability to gather and analyse information and draw sound conclusions.

Emotional intelligence is another important cornerstone of soft skills. It is very important to teach young people to recognise and name their own feelings. They should also be taught how to deal appropriately with the emotions that sometimes arise, also with regard to dealing with other people. If this can be taught to young people, it promotes overall social understanding.

Assertiveness, self-motivation and time management are other soft skills that should be developed in youth education. These skills enable young people to set their goals, overcome obstacles and work productively.

The importance of soft skills in youth education

Soft skills are much more than just social skills. Soft skills are more than just interpersonal skills. They are the basis for personal growth, social integration and professional success. When young people have well-developed social skills, they are able to adapt to different situations, build relationships and achieve goals. For this reason, it is relevant to support the promotion of soft skills in the education of young people. Especially to prepare young people for a future in a globalised and technological world.

t is important to prepare young people for life and this includes teaching them soft skills. It is not about accumulating specialised knowledge, but primarily about creating a basis for them in soft skills that will help them to integrate well socially and professionally later on.

In addition, we must also think about the future world, which will be characterised by diversity and cultural variety. This is precisely where comprehensive soft skills are needed to get along with different people with different cultural aspects and to find a suitable basis..

Artificial intelligence (AI) in youth education

It is time for the education sector to get to grips with AI, as the impact on educators and learners is immense. A critical view is needed to be able to categorise AI tools correctly and decide which ones can also improve the entire educational process. In this way, learners' weaknesses can be better identified and they can be supported at an earlier stage. It would also benefit the entire school administration if some administrative tasks could be automated, leaving more time for working and learning with students.

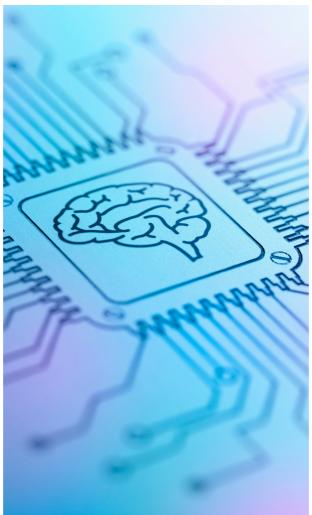
Soft skills and AI in the education of young people

Learning opportunities in the area of soft skills must also be taken into account. It is wrong to think that Al cannot be supportive in this area. For example, it is possible to use Al tools to create a safe learning environment for learners where they can try out themselves and their soft skills without harming others. Furthermore, many Al tools also offer the opportunity for teachers to check the extent to which learners have engaged with the topic of soft skills and the exercises. These results can subsequently be used to find further strategies to support learners in the best possible way.

The possibility of developing soft skills competences using AI has great potential, also to better prepare young people for the ever-advancing technologised world. It should be emphasised that social skills must not be left behind. The increasing technologisation through AI can only work if teachers also actively work with learners on soft skills and point out to them that interpersonal skills are also necessary to cope with a world outside of AI.

METHODOLOGY HOW TO USE AI IN YOUTH EDUCATION







Artificial intelligence (AI) also presents educators with new challenges when it comes to planning and organising lessons. At this point, it is particularly important that educators familiarise themselves with the possibilities that AI can also bring to the classroom. This section focuses on the use of AI tools in the education of young people and can be seen as a first insight into the methodology of AI tools.

Firstly, there is a brief explanation of the basics of AI, followed by a closer look at AI specifically in the education of young people. AI refers to computer programmes and systems that are capable of developing human-like intelligence and learning abilities. In education, AI can be used to enable personalised learning, adaptive teaching methods, automated assessment and more.

A first step in integrating AI into youth education is to carefully analyse needs and goals. Trainers should ask themselves what specific educational goals they want to achieve and how AI can support these goals. This could include improving learning outcomes, individualising instruction or increasing efficiency in assessment.

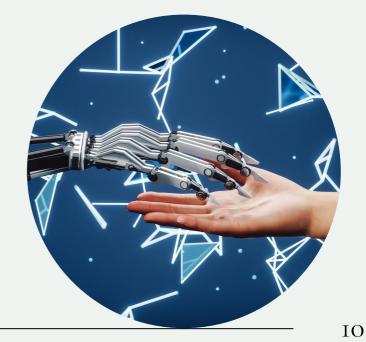


After the needs assessment, trainers should select the appropriate AI tools and resources. This could include the use of learning apps, chatbots, automated assessment systems or even virtual tutors. The selection should be based on the educational objectives and the needs of the learners. Furthermore, it is crucial to prepare learners for the use of AI. Trainers should provide training to ensure that learners can use AI tools effectively. This should also include awareness of data protection and ethics in the use of AI.

It is also important to ensure that the applicable data protection regulations are observed. Trainers should also emphasise these aspects to learners and explain to them that AI systems may also make use of their data and use it for advertising purposes. If the teachers are in dialogue with the learners and talk openly about AI tools, it is also possible to arrange restrictions in teaching. Trainers should use performance metrics and learner assessments to ensure that the goals set are being met. This data can be used to make adjustments and improvements. Learner feedback should also be taken into account. Trainers should be open to feedback and adapt the methodology accordingly. This can help to continuously optimise the use of AI.

When using AI in youth education, there are also challenges and concerns that need to be addressed. These include, among others, the aspect of data protection. The collection and storage of student data requires strict data protection measures to protect privacy.

It is also important to ensure that all young people have access to Al tools and that the appropriate digital instruments are available.

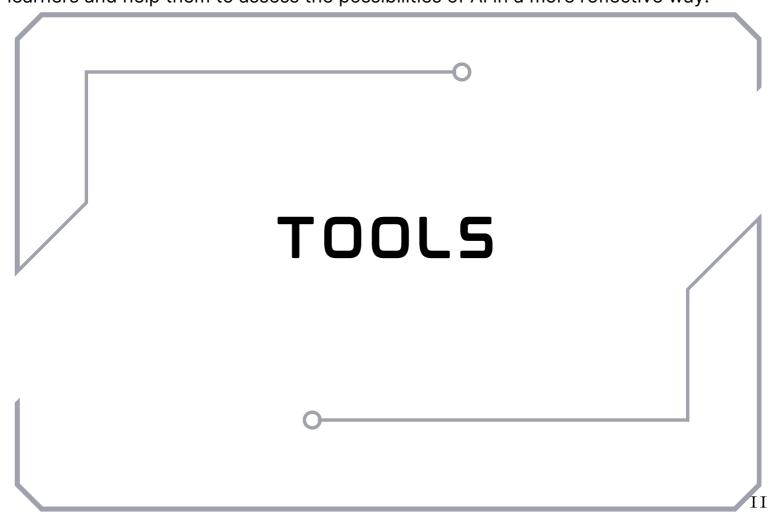


The following examples show how AI can be used in youth education. For students who do not speak the native language of instruction, AI translation and language support tools can be used. These tools can translate texts, provide pronunciation assistance and facilitate communication. For example, an English teacher could use AI translation tools to help students with different mother tongues access the teaching material. Similarly, AI can play a role in the design of gamified learning activities to increase student motivation. An AI-driven system could offer rewards and challenges based on student progress to encourage engagement and persistence.

These specific examples illustrate how diverse and powerful the use of AI can be in youth education. Coaches have the opportunity to target this technology to enhance their students' educational experience and better meet individual learning needs. However, it is important to carefully plan the methodology and consider ethical and privacy issues to achieve the best possible results.

Trainers should see AI as a complement to their role to enhance learning, not replace it. AI can increase efficiency and enable personalised learning, but it should be supported and monitored by qualified teachers.

The methodology for using AI in youth education is a dynamic process that requires continuous adjustments. Trainers and teachers are encouraged to engage with artificial intelligence and also with the tools that learners often use. If the experiences and tools are integrated into the lessons, this can have a supportive effect on the learners and help them to assess the possibilities of AI in a more reflective way.



Word chain

SOFT SKILLS

Communication, cooperation, creativity, attention and concentration, adaptability, self-confidence

LEARNING OBJECTIVES

After completing the exercise, learners will be able to express their thoughts clearly. They are able to communicate their ideas in an understandable way and ensure that what they say is precise and comprehensible. This ability to communicate clearly helps them to interact effectively in group work, discussions and other social contexts.

GROUP SIZE

5-20 participants

DURATION

10-15 minutes

TYPE

ICEBREAKER

MATERIALS

Online variant: make sure that all participants have access to a video or chat platform.

Presence variant: a circle of chairs or a suitable place for the participants to gather.

Start by explaining the exercise to the participants. Tell them that together they will create a word chain where each participant says a word that starts with the previous word of the person before them.

Online variant: If the exercise is done online, you can determine the order in which the participants should speak. For example, you can form a virtual circle of chairs where everyone speaks one after the other.

Presence variant: In a physical environment, the participants can sit in a chair circle. Start saying a simple word by yourself and then choose a participant to say the next word that starts with the last letter of the previous word.

Continuing the word chain: The exercise continues with each participant adding a word that connects meaningfully to the previous word. For example: "apple" - "spoon" - "light" - "table" etc.

Make sure participants follow the rules below:

Each word must match the previous word. The words should follow each other quickly, without long pauses. Repetitions of the same word or mismatched words are not allowed.

SUGGESTIONS FOR TRAINER

As the leader of the exercise, you should follow the word chain closely and make sure that the participants follow the rules. Provide assistance if necessary to keep the chain going. The exercise can continue as long as the group enjoys it and the energy stays high. You can end the exercise when you feel that enough interaction and looseness has been achieved.

After finishing the exercise, you can have a short reflection session to share the participants' experiences. Ask questions like:

What did you think of the exercise?
Were there any challenges in maintaining the word chain?
Which words did you remember most?

SOURCES

https://www.bedeutungonline.de/10-icebreakereisbrecher-spiele/

Role-playing game

SOFT SKILLS

Empathy, critical thinking, conflict resolution

LEARNING OBJECTIVES

After completing the game, learners will be able to...

Improve their communication skills by having learned to present their points of view and arguments clearly and effectively.

Develop empathy by slipping into other people's perspectives and developing a better understanding of different points of view.

Strengthen their critical thinking skills by evaluating different points of view and being able to challenge their own beliefs.

Build conflict resolution skills as they have learned to manage disagreements in a constructive way during the role

GROUP SIZE

4-8 participants

DURATION

30-45 minutes

TYPE

ACTIVITY TO TEACH SOFT SKILLS TO YOUNG PEOPLE

MATERIALS

Cards or pieces of paper with role descriptions.

Pens and paper for notes.

Introduction (5 minutes): Explain to the participants the aim of the exercise, which is to explore the importance of soft skills in the context of Artificial Intelligence. Emphasise that they will play different roles to understand different perspectives.

Role Assignment (5 minutes): Distribute the prepared cards or slips of paper with role descriptions to the participants. Each card contains a brief description of the role and their viewpoint on the importance of soft skills in Al.

Conducting the role plays (20-30 minutes): Participants take their roles and conduct discussions. Let them represent the different points of view and argue with each other. Emphasise that they should take notes during the discussion.

Discussion (10-15 minutes): End the role plays and initiate a group discussion. Ask the participants to share their findings and impressions. Discuss the advantages and disadvantages of the different points of view and how soft skills can influence the development and use of Al.

Reflection (5 minutes): Conclude the exercise with a short reflection. Ask participants what they have learned from the exercise and how their perspective on the importance of soft skills in Al may have changed.

SUGGESTIONS FOR TRAINER

Here are some examples of role descriptions:

Role 1 - Tech enthusiast: This participant believes that technical skills and efficiency should be the main focus in Al development, and soft skills are less important.

Role 2 - Ethics Activist: This participant emphasises the need for soft skills such as ethics and empathy to ensure that Al systems are human-centred and ethically responsible.

Role 3 - Social Scientist: This participant believes that understanding human society and social dynamics is critical to making sense of AI, as AI systems can greatly impact society.

SOURCES

https://www.handicapinternational.de/sites/de/files/pdf/s10_ein-schrittnach-vorn_lk.pdf Content Unit 4

SOFT SKILLS

The journey through the teamwork phases

Communication skills, conflict resolution skills, teamwork, time management

LEARNING OBJECTIVES

Upon completion of the exercise, learners will be able to recognise how a well-coordinated team influences efficiency and success in overcoming challenges, especially in the context of Artificial Intelligence.

Learners know the five phases of team building (Forming, Storming, Norming, Performing and Adjourning) and can recognise their importance for the development of teamwork and soft skills.

GROUP SIZE

6-12 participants

DURATION

60-90 minutes

TYPE

MATERIALS

EXERCISE TO HIGHLIGHT THE IMPORTANCE OF TEAMWORK AND SOFT SKILLS IN THE CONTEXT OF AI

Whiteboard or flipchart and markers. Cards or pieces of paper for the participants listing the phases of team building.

Pens and paper for notes.

Introduction (10 minutes): Start the exercise by explaining the importance of teamwork and soft skills in the context of AI.

Explanation of the phases (10 minutes): Explain the five phases of team building (Forming, Storming, Norming, Performing and Adjourning) and how they affect team dynamics and performance.

Participant activity (30-40 minutes): Divide participants into groups and assign each group one of the five phases of team building. Each group should discuss their assigned phase and identify what challenges and opportunities it presents for soft skills development. The groups should write down their findings on cards or pieces of paper.

Group discussion (20-30 minutes): Have each group in turn present and discuss their findings. Emphasise the importance of soft skills at each stage and how they can help resolve conflicts and make the team more effective.

Reflection and summary (10 minutes): Lead a group discussion on the importance of teamwork and soft skills in the context of AI.

SUGGESTIONS FOR TRAINER

Ask the participants about their own experiences and how they can apply the acquired knowledge in their personal and professional development.

SOURCES

The exercise is based on the contents of content unit 4.

Group puzzle on the meaning of Al

SOFT SKILLS

Empathy, responsibility, conflict resolution skills, time management

LEARNING OBJECTIVES

After completing the activity, the young people will be able to explain the importance of soft skills such as communication, teamwork and responsibility in a real context.

They can explain why collaboration and knowledge sharing within a group is important.

Learners can identify responsibility and knowledge sharing in relation to solving complex problems such as artificial intelligence.

GROUP SIZE

8-20 participants

DURATION

60-90 minutes

TYPE

SOFT SKILLS ACTIVITY

MATERIALS

Flipchart or whiteboard and markers. Slips of paper or cards for the subtopics of the group puzzle. Pens and paper for notes.

Introduction (10 minutes): Start the activity by explaining the importance of soft skills in the context of Artificial Intelligence.

Framework topic and grouping (10 minutes): Choose a frame topic in the field of Artificial Intelligence and divide it into as many sub-topics as possible. Divide the participants into groups and assign a random subtopic to each group.

Expert group formation (15 minutes): Let each group work out their respective sub-topics and become experts in that area. Each group should collect important information and make notes.

New group formation (10 minutes): Shuffle the participants and form new groups where each member brings an expertise on a different sub-topic.

Knowledge sharing and solution finding (20-30 minutes): Have the new groups work together to discuss the framework topic in the context of the different subtopics. Each group member contributes their knowledge and helps develop a common solution or discussion.

Presentation of results (15-20 minutes): Each group presents their findings and discussions to the whole group of participants.

Reflection and discussion (10 minutes): Lead a group discussion on the experiences and insights gained.

SUGGESTIONS FOR TRAINER

Encourage participants to reflect on the importance of soft skills for successful collaboration and problem solving.

SOURCES

The exercise is based on the contents of content unit 4.

Al Icebreaker: Caption This with Al

SOFT SKILLS

Communication, Collaboration, Creativity

LEARNING OBJECTIVES

- To introduce participants to the concept of artificial intelligence.
- To encourage participants to work together and brainstorm creative ideas.
- To demonstrate the practical use of AI in generating content.

GROUP SIZE

4-6 participants per group

DURATION

40 minutes

TYPE

ICEBREAKER

MATERIALS

- Computers or tablets with internet access for each group
- Access to a specific Al tool (e.g., OpenAl's GPT-3 or a similar Al text generation tool)
- A projector or screen for the trainer to demonstrate the exercise

Preparation (10 minutes prior to the exercise)

Divide participants into small groups of 4-6 students.

Ensure that each group has access to a computer or tablet with an internet connection.

Set up the AI tool on the devices or provide access to the online platform.

Exercise (30 minutes)

Part 1 - Introduction to AI and the Icebreaker (10 minutes)

Start with a brief introduction to artificial intelligence, explaining its role in generating human-like text.

Explain the icebreaker: Participants will work in teams to generate creative captions for random images using an Al tool.

Part 2 - Caption generation (15 minutes)

Instruct each group to open the AI tool and provide a simple image from the internet (e.g., a picture of a cat, a famous landmark, or a unique object).

Ask each group to generate a creative caption for their chosen image using the Al tool.

Encourage teams to be as imaginative and humorous as possible.

Part 3 - Caption sharing and voting (5 minutes per group)

Have each group present their image along with the caption they generated to the rest of the participants.

After each presentation, ask the other groups to vote on the funniest or most creative caption for that image.

Part 4 - Discussion (5 minutes)

Conclude the icebreaker by asking participants to share their thoughts on the exercise and their experiences using Al for creative tasks.

Discuss how Al tools can be harnessed for various purposes.

SUGGESTIONS FOR TRAINER

Keep the atmosphere light-hearted and fun to encourage creativity and participation.

Provide guidance on how to use the Al tool if participants are unfamiliar with it.

Emphasize that the goal is to have fun and be creative rather than aiming for technical accuracy.

SOURCES

OPEN AI GPT-3: https://openai.com/blog/gpt-3-apps

Chatbots: Unleash Your AI Creativity

SOFT SKILLS

Critical thinking, Problem-solving, Communication, Collaboration

LEARNING OBJECTIVES

- To understand the different types of Al systems, particularly chatbots.
- To explore the practical applications of Al chatbots.
- To encourage critical thinking and creativity in designing Al chatbot interactions.
- To foster collaboration and communication skills within a group.

GROUP SIZE

4-6 participants per group

DURATION

1 hour

TYPE

GROUP INTERACTIVE ACTIVITY

MATERIALS

- Computers or tablets with internet access for each group
- Access to a chatbot development platform (e.g., Dialogflow, Microsoft Bot Framework, or any other Al chatbot builder)
- Presentation tool (e.g., PowerPoint or Google Slides)

Preparation (15 minutes prior to the activity)

- 1. Divide the participants into groups of 4-6 students, ensuring a mix of skills and backgrounds within each group.
- 2. Provide each group with a computer or tablet and access to a chatbot development platform.
- 3. Prepare a brief presentation introducing different types of AI systems, with a focus on chatbots. Include examples of chatbots used in various industries.

Activity (45 minutes)

Round 1 - Understanding AI chatbots (15 minutes)

- 4. Start with a brief introduction to the activity and its objectives.
- 5. Ask each group to explore the chatbot development platform and create a basic chatbot interaction. This can be a simple greeting and response or a FAQ-style interaction.
- 6. Encourage participants to discuss and decide on the purpose and potential application of their chatbot. For example, it could be a customer support chatbot for an ecommerce website.

Round 2 - Creativity and problem-solving (15 minutes)

- 7. Challenge each group to enhance their chatbot by adding a unique feature or capability that demonstrates creativity. For example, the chatbot could tell jokes, recommend movies, or provide trivia questions.
- 8. Remind participants to consider the practicality and usefulness of their chatbot's feature.

Round 3 - Presentation and reflection (15 minutes)

- 9. Have each group present their chatbot and its unique feature to the rest of the workshop participants. Use a presentation tool to share their work.
- 10. After each presentation, facilitate a brief discussion

SUGGESTIONS FOR TRAINER

Be available to answer questions and provide guidance throughout the activity.

Encourage participants to think critically about the purpose and potential of their chatbots.

Promote collaboration within groups and ensure that all participants are actively involved.

SOURCES

Microsoft Bot Framework:
https://dev.botframework.com/
https://reintech.io/blog/how-to-use-microsoft-botframework-for-bot-development
Dialogflow: https://cloud.google.com/dialogflow/

SOFT SKILLS

Al System Synergy: Crafting the Future of Intelligent Systems

Critical thinking, Problem-solving, Teamwork, Technical Communication

LEARNING OBJECTIVES

- To gain a deep understanding of the technical architecture of AI systems.
- To apply architectural principles to design an Al system.
- To foster collaboration and teamwork in crafting a comprehensive AI system blueprint.

GROUP SIZE

approximately 5 participants per group

DURATION

2 hours

TYPE

HANDS-ON WORKSHOP

MATERIALS

- Computers with internet access for each group
- Access to a cloud-based Al platform (e.g., AWS, Google Cloud, or Azure)
- Presentation tool (e.g., PowerPoint or Google Slides)
- Whiteboard and markers
- Printed handouts with Al architectural

Preparation (15 minutes prior to the exercise)

Divide participants into groups of more or less 5, ensuring that each group includes people with varying technical skills.

Provide each group with a computer and access to a cloud-based Al platform.

Prepare a short presentation explaining the technical architecture of the AI systems, including elements such as data acquisition, model training and deployment.

Exercise (120 minutes)

Part 1 - Understanding Al system Aarchitecture (30 minutes)

- 1. Start with a presentation on the technical architecture of Al systems, highlighting key components, data flows, and dependencies.
- 2. Discuss real-world examples of Al systems in industries like healthcare, finance, and autonomous vehicles to illustrate architectural concepts.

Part 2 - Hands-on Al system design (60 minutes)

3. Provide each group with a hypothetical problem statement (e.g., designing an Al-driven recommendation system for an e-commerce platform).

Instruct groups to work collaboratively to design a technical architecture for the Al system. They should consider data sources, data preprocessing, model selection, training, and deployment.

Encourage participants to use the cloud-based Al platform to sketch out their architecture visually.

Part 3 - Presentation and peer review (30 minutes)

6. Have each group present their Al system architecture to the rest of the workshop participants. They should use a presentation tool or whiteboard to illustrate their design.

After each presentation, facilitate a discussion where other groups provide constructive feedback and ask questions about the proposed architectures.

Part 4 - Refinement and final blueprint (30 minutes)

- 8. Encourage groups to refine their AI system architecture based on the feedback received during the presentations.
- 9. Have each group create a final blueprint or diagram of their architecture, either digitally or on a whiteboard.
- 10. Emphasize the importance of documentation and clarity in

SUGGESTIONS FOR TRAINER

Be available to answer technical questions and provide guidance on architectural principles.

Use the whiteboard to illustrate concepts and facilitate discussions.

Highlight the real-world relevance of Al system architecture by referencing industry use cases.

Encourage active participation and collaboration within groups.

SOURCES

AWS: https://aws.amazon.com/ai/ Azure: https://portal.azure.com

SOFT SKILLS

Introduction to Al with TensorFlow: Building an Image Classifier

Critical thinking, Problem-solving, Collaboration, Basic Technical Proficiency

LEARNING OBJECTIVES

- To introduce the basic concepts of artificial intelligence and machine learning using TensorFlow.
- To provide hands-on experience in creating a simple image classification model.
- To encourage teamwork and problem-solving in a beginner-friendly context.

GROUP SIZE

4-6 participants per group

DURATION

1 hour

TYPE

HANDS-ON WORKSHOP

MATERIALS

- Computers with TensorFlow and a beginner-friendly integrated development environment (IDE) like Google Colab (each participant should have access to one)
- Access to a small, pre-curated image dataset (e.g., images of cats and dogs)
- Projector or screen for the trainer to demonstrate key concepts
- Printed handouts with TensorFlow basics and quidelines

Preparation (10 minutes prior to the exercise)

Divide participants into groups of 4-6 students, ensuring a mix of backgrounds and skills within each group.

Ensure that each computer has access to a beginner-friendly TensorFlow environment, such as Google Colab.

Pre-load a simple image dataset (e.g., cats and dogs) into a format that can be easily used with TensorFlow.

Exercise (60 minutes)

Part 1 - Introduction to AI and TensorFlow (15 minutes)

- 1. Start with a brief presentation introducing artificial intelligence and machine learning concepts at a beginner level.
- 2. Explain the role of TensorFlow as a tool for creating Al models.
- 3. Provide a simplified overview of image classification.

Part 2 - Hands-on image classifier (30 minutes)

- 4. Instruct participants to open their TensorFlow environment (e.g., Google Colab) and guide them through building a simple image classifier.
- 5. Ask participants to use the pre-loaded dataset of cats and dogs to create a model that can classify images into these two categories.
- 6. Emphasize the simplicity of the task and encourage experimentation with different settings.

Part 3 - Model training and evaluation (10 minutes)

- 7. Show participants how to train their models using the provided dataset and evaluate its performance based on accuracy.
- 8. Explain that the goal is to achieve the highest accuracy in distinguishing between cats and dogs.

Part 4 - Group presentation and discussion (5 minutes per group)

- 9. Have each group present their image classifier, showcasing their approach and sharing their accuracy results.
- 10. Encourage discussions on what worked well and what challenges they encountered during the exercise.

Part 5 - Wrap-up and key takeaways (10 minutes)

- 11. Summarize the main learnings, highlighting the simplicity and accessibility of Al development with beginner-friendly tools like TensorFlow in Google Colab.
- 12. Provide additional resources for participants interested in exploring Al further.

Example action in TensorFlow:

Participants will be guided to load a dataset of images of cats and dogs and use TensorFlow to create a basic image classifier that can distinguish between the two animals.

Ensure that the exercise remains beginner-friendly, and avoid delving into complex technical details.

Offer assistance to participants who may face technical challenges or need clarification on concepts.

Encourage participants to think creatively and not worry too much about perfection, emphasizing the learning experience.

Build a positive atmosphere among and between groups of learners through a learner-centred approach.

SOURCES

This exercise is based on the TensorFlow framework's official documentation and tutorials.

TensorFlow: https://www.tensorflow.org/

Implications for AI Implementation

SOFT SKILLS

Critical thinking, Ethical reasoning, Effective communication, Collaboration and teamwork, Problem-solving

LEARNING OBJECTIVES

By the end of this section, participants will be able to:

- Analyze and evaluate the social, ethical, and privacy implications of Al implementation.
- Apply critical thinking skills to Al-related challenges.
- Engage in ethical discussions and consider diverse perspectives.
- Communicate effectively about Al implications.
- Collaborate with peers to address complex Al challenges.
- Apply problem-solving techniques in Al contexts.

GROUP SIZE

10-15

DURATION

2 hours

TYPE

INTERACTIVE WORKSHOP

MATERIALS

- Whiteboard or flipchart
- Markers
- Handouts with case studies
- Laptop/projector presentations
- Access to online resources and

for

Introduction to Al Implications: Begin with an engaging introduction to the topic of Al implications. Highlight the relevance of this knowledge in today's Al-driven world.

Social Impact Analysis: Conduct a guided discussion on the potential social impact of Al. Use IBM Watson Studio to demonstrate real-world Al applications and their impact on society. Encourage critical thinking by asking participants to analyze and evaluate the societal implications.

Ethical Dilemma Exploration: Present ethical dilemmas and thought-provoking case studies related to Al. Encourage participants to apply ethical decision-making frameworks introduced in the Microsoft Al Ethics Toolkit. Promote ethical reasoning and open discussions.

Privacy Challenges: Explore privacy concerns in Al implementation. Introduce privacy impact assessments using resources and templates from the Microsoft Al Ethics Toolkit. Emphasize the importance of effective communication and collaboration when addressing privacy risks.

Interactive Group Activities: Break participants into small groups and assign them specific Al implementation scenarios. Provide tools and templates from the IBM **Ethics** Microsoft Al Toolkit Watson Studio and for participants to evaluate and document social, ethical, and implications. Encourage collaboration privacy and teamwork.

Debrief and Reflection: Reconvene the groups to share their findings, insights, and proposed solutions. Facilitate a comprehensive debriefing session to encourage reflection and critical thinking. Promote effective communication by encouraging participants to articulate their thoughts and engage in respectful dialogue.

Create a supportive learning environment that values open dialogue and diverse perspectives.

Encourage participants to think critically, question assumptions, and analyze complex situations.

Facilitate ethical discussions and prompt participants to articulate and defend their ethical stances.

Emphasize clear and effective communication, active listening, and respectful dialogue.

Foster collaboration and teamwork during group activities, emphasizing the benefits of diverse perspectives.

Challenge participants with real-world Al scenarios to develop problem-solving skills, adaptability, and resilience.

SOURCES

- 1. Microsoft Al Ethics Toolkit: Microsoft Al Ethics Toolkit
- 2. https://www.microsoft.com/enus/haxtoolkit/playbook/

Interactive Activity - HAX Playbook for Human-Al Interaction Failures

SOFT SKILLS

Critical thinking, Communication, Problem-solving

LEARNING OBJECTIVES

By the end of this section, participants will be able to:

- Actively engage participants in using the HAX Tool to identify and understand common human-Al interaction failures.
- Encourage critical thinking and problem-solving in addressing these failures.
- Foster collaboration among participants to brainstorm solutions using the HAX Tool.

GROUP SIZE

Ideal for small groups of 5-8 participants.

DURATION

60-90 minutes, depending on group size and depth of discussions.

TYPE

INTERACTIVE GROUP ACTIVITY

MATERIALS

- Copies of the HAX Playbook (available online from the official source).
- Access to the HAX Tool (online or offline version).
- Sticky notes and pens.
- Whiteboard and markers (or a digital equivalent).

Introduction

- Welcome participants and explain the importance of addressing human-Al interaction failures.
- Mention the learning objectives for the interactive activity.

HAX Tool Overview

- Provide each participant with access to the HAX Tool, either online or offline.
- Briefly explain the different sections and features within the HAX Tool.

Group Brainstorming

- Divide participants into small groups.
- Assign each group a specific category or section from the HAX Tool.
- Instruct groups to use the HAX Tool to identify and list potential human-Al interaction failures related to their assigned category.

Interactive Scenario Creation

- Ask each group to select one of the identified failures and create an interactive scenario using the HAX Tool.
- Scenarios should involve role-play, problem-solving, or decision-making, utilizing the HAX Tool for guidance.

Scenario Presentations

- Have each group present their interactive scenario to the whole class.
- As each scenario unfolds, encourage the audience to actively participate, ask questions, and suggest solutions using the HAX Tool.

Group Discussion and Mitigation with HAX

- After each presentation, facilitate a group discussion on the identified failure.
- Encourage participants to collaboratively brainstorm solutions and use the HAX Tool's guidance for mitigation strategies.

Reflection and Action Planning

- Lead a brief reflection on the activity, highlighting key insights and takeaways.
- Emphasize the practical value of using the HAX Tool to address human-Al interaction challenges.
- Encourage participants to consider how they can apply the lessons learned to their own Al projects, with the assistance of the HAX Tool.

Act as a facilitator, ensuring participants effectively use the HAX Tool for identifying and mitigating failures.

Ensure that each group's scenario is interactive and integrates the HAX Tool's guidance.

Foster a positive and inclusive environment for discussion and collaboration.

SOURCES

- 1. https://www.microsoft.com/en-us/haxtoolkit/playbook/
- 2. https://microsoft.github.io/HAXPlaybook/

SOFT SKILLS

Al in Media and Society-Deepware Scanner - Detecting Deepfake Content

Critical thinking, Media literacy Analytical skills, Ethical reasoning

LEARNING OBJECTIVES

By the end of this section, participants will be able to:

- Understand the diverse applications of AI in various aspects of society.
- Develop critical thinking skills to evaluate the impact of Al on media and society.
- Enhance media literacy by recognizing Al-driven content.
- Analyze how AI influences their daily lives and interactions.
- Understand the importance of verifying media content for authenticity.
- Develop media literacy skills to discern manipulated content from genuine material.
- Gain hands-on experience using the Deepware Scanner tool to detect deepfakes.

GROUP SIZE

5-15 participants

DURATION

30-45 minutes, depending on the depth of exploration and discussion.

TYPE

INTERACTIVE DEMONSTRATION AND DISCUSSION

MATERIALS

Examples of Al-driven media content Access to the Deepware Scanner tool (online). Sample images or videos for analysis (optional).

Projector or screen for demonstration

Introduction: Begin with an overview of how AI is integrated into various aspects of media and society, from social media algorithms to content generation. Explain the significance of deepfake content and its potential impact on media and society.

Al Applications in Daily Life: Discuss real-world examples of Al use in social media, digital assistants, self-driving vehicles, email communications, web searching, stores and services, and offline experiences. Encourage participants to share their experiences.

Media Literacy and Critical Thinking: Teach participants how to identify Al-generated content and promote critical thinking when encountering Al-driven media. Use examples and case studies to illustrate the concepts.

Accessing Deepware Scanner

- Provide participants with the web address (URL) to access the Deepware Scanner tool.
- Encourage participants to open the tool in their web browsers.

Using Deepware Scanner

Demonstrate how to use Deepware Scanner step by step:

- Navigate to the tool's website.
- Upload an image or video for analysis (you may use a sample).
- Interpret the tool's analysis results, highlighting key indicators of manipulation.

Hands-on Activity

- Encourage participants to use Deepware Scanner themselves.
- They can upload sample media or provide URLs of online content for analysis.
- Ask participants to explore the tool's capabilities and share their observations.

Discussion

Facilitate a discussion on the following topics:

- What are the advantages and limitations of Deepware Scanner?
- How can this tool be useful in verifying media content?
- What are the ethical considerations when using such tools?

Q&A and Troubleshooting

- Address any questions or issues participants may have encountered while using Deepware Scanner.
- Provide guidance on effectively using the tool.

Foster critical thinking by asking open-ended questions and encouraging participants to express their opinions.

Promote media literacy by providing guidance on how to distinguish between Al-generated and human-generated content.

Encourage participants to actively use the tool during the hands-on activity to enhance their understanding.

Foster a discussion that explores the ethical implications of detecting deepfake content, including the responsibilities of content creators and consumers.

Encourage participants to share their personal experiences and observations related to Al in media

SOURCES

- 1. https://scanner.deepware.ai/
- 2.https://deepware.ai/blog/
- 3. The State of Deepfakes: Landscape, Threats, and Impact, Henry Ajder, Giorgio Patrini, Francesco Cavalli, and Laurence Cullen, September 2019.

SOFT SKILLS

Educating the Public about Al- Al4ALL Online Learning Platform

Communication, Public speaking Teaching skills, Critical thinking, problemsolving, collaboration, digital literacy

LEARNING OBJECTIVES

By the end of this section, participants will be able to:

- Understand the importance of educating the public about Al.
- Identify key areas for AI education and outreach.
- Develop effective communication and teaching skills for explaining Al concepts to diverse audiences. Gain a fundamental understanding of artificial intelligence and machine learning.
- Develop practical Al skills through hands-on projects and coding exercises.
- Explore ethical considerations and responsible AI practices.
- Engage in a diverse and inclusive Al learning community

GROUP SIZE

Any size

DURATION

2 hours

TYPE

ONLINE INTERACTIVE LEARNING PLATFORM

MATERIALS

Internet access and a compatible device (computer or mobile device)

Introduction

- Introduce the Al4ALL Online Learning Platform as a powerful resource for Al education.
- Highlight the platform's mission of democratizing AI education and fostering diversity and inclusion in the field.

Accessing the Platform

- Provide the URL to access the Al4ALL Online Learning Platform:
 Al4ALL Online Learning Platform.
- Encourage participants to sign up for a free account.

Exploring Courses and Resources

- Direct participants to explore the platform's wide range of courses and resources.
- Mention that courses are self-paced, allowing learners to choose topics that interest them the most.

Hands-On Learning

Emphasize the hands-on aspect of the platform, where learners can engage in coding exercises, data analysis, and Al model building. Highlight the practical skills participants can develop.

Community Engagement

- Discuss the value of community forums where learners can discuss Al concepts, ask questions, and collaborate with others.
- Encourage participants to join and engage in discussions.

Al for Social Good

- Showcase examples of projects on the platform that use Al for positive societal impact, such as healthcare, environment, and accessibility.
- Emphasize the ethical and responsible use of Al.

Diversity and Inclusion

- Explain how AI4ALL promotes diversity and inclusion in AI education by providing resources and opportunities for underrepresented groups.
- Encourage participants to explore these initiatives.

How to Use the Platform

• Provide tips on how to effectively use the platform for self-guided learning or integration into educational programs and workshops.

Encourage participants to explore the platform at their own pace and take advantage of the hands-on learning opportunities.

Emphasize the Importance of engaging in community discussions and exploring AI for social good projects.

Promote the value of diversity and inclusion in Al education and encourage participants to share this resource widely.

SOURCES

https://ai-4-all.org/

https://dataskeptic.com/episodes/artificial-intelligence https://www.coursera.org/learn/ai-for-everyone

SOFT SKILLS

Al in Education Leveraging ChatGPT for Enhanced Learning in Education

Adaptability, Collaboration, Problem-solving, Critical thinking, Digital literacy, Inclusivity,

LEARNING OBJECTIVES

By the end of this section, participants will be able to:

- Understand the versatile applications of ChatGPT in educational contexts.
- Learn how to incorporate ChatGPT effectively to support personalized learning.
- Promote digital literacy and critical thinking skills when using AI in education.

GROUP SIZE

All sizes

DURATION

2 hours

TYPE

INTERACTIVE ACTIVIY

MATERIALS

Internet access and compatible devices (computers, tablets, or smartphones).

Introduction to ChatGPT

- Provide an overview of ChatGPT as a conversational AI tool capable of generating human-like text responses.
- Highlight its potential for enhancing the educational experience.

Accessing ChatGPT

- Instruct participants to access ChatGPT via a web browser or a compatible chatbot platform.
- Ensure they understand how to initiate conversations with ChatGPT.

Personalized Tutoring and Support

Demonstrate how students can use ChatGPT for personalized tutoring and academic support.

Encourage educators to recommend specific use cases for their students.

Language Learning Assistant

- Illustrate how ChatGPT can aid language learners in vocabulary, grammar, pronunciation, and conversational practice.
- Share examples of language exercises that can be conducted with ChatGPT.

Research and Information Retrieval

- Showcase how ChatGPT can quickly provide information on various topics.
- Discuss how students can critically assess and verify information obtained from ChatGPT.

Creative Writing and Composition

- Emphasize ChatGPT's role in sparking creativity and assisting students with writing projects.
- Share ideas for incorporating ChatGPT into creative writing assignments.

Critical Thinking Exercises

- Engage participants in critical thinking exercises by having them evaluate ChatGPT responses for accuracy and logical reasoning.
- Discuss ethical considerations when using AI in education.

Programming and Coding Assistance

- Explain how ChatGPT can support students learning programming languages by providing code examples and explanations.
- Encourage computer science educators to integrate ChatGPT into coding lessons.

Promoting Digital Literacy

- Discuss the importance of digital literacy and responsible Al use in education.
- Provide guidelines for respectful and ethical interactions with Al.

Encourage educators and students to explore ChatGPT's capabilities within the context of their specific subjects and learning objectives.

Promote critical thinking and inquiry when using ChatGPT as an educational tool.

Foster discussions on digital ethics and Al's role in education.

SOURCES

Firat, M. (2023, January 12). How Chat GPT Can Transform Autodidactic Experiences and Open Education?. https://doi.org/10.31219/osf.io/9ge8m https://scribesense.com/

https://www.edx.org/learn/computerprogramming/edx-how-to-use-chatgpt-in-education? index=product&queryID=1b523d6e7dd298a9346e0a78 f55daf18&position=4&linked_from=autocomplete&c=au tocomplete

https://chat.openai.com/

The Hot Chair

SOFT SKILLS

Public Speaking, Active Listening, Critical Thinking.

LEARNING OBJECTIVES

To understand different perspectives about artificial intelligence, its role in modern society, its potential benefits, and challenges.

To enhance their ability to critically evaluate the potential implications, both positive and negative, of integrating Al into various aspects of society.

To learn to use collective knowledge and discussion in deepening their understanding of subjects like AI.

GROUP SIZE

minimum 10 people

DURATION

45 min - 90 min

TYPE

ACTIVITY

MATERIALS

A chair for everyone

Preparation:

Place two chairs in the center of the room, facing each other. Chose which one will be the pro chair and which one will be the contra.

Arrange sitting in a circle around the central chairs for the audience.

Print or write the sample statements on individual cards. Prepare a bell or a timer.

Introduction:

Briefly overview how the debate will proceed.

Choose two volunteers, one for each chair. If there are no volunteers, select participants at random.

Start:

The facilitator reads the first statement.

The Pro chair argues in favor of the statement for 1-2 minutes.

The Contra chair then presents a counter-argument for 1-2 minutes.

The facilitator can ring a bell or use a timer to signify when each speaker's time is up.

After both initial participants have presented, open the floor to the group.

Group members can tap a seated participant's shoulder if they wish to contribute to the discussion from that viewpoint. The tapped participant then joins the audience.

The new participant provides their argument based on the chair's position.

Continue the process until several audience members have had the chance to participate or the topic has been extensively covered.

Debriefing:

Ask participants to spend a few quiet moments pondering on their personal feelings and reactions to the debate.

Invite participants to share their reflections with the larger group.

Sample Statements:

Al can more effectively solve global issues than human interventions.

The integration of Al in our daily lives invades our privacy.

Using Al for job recruitment promotes a fair and unbiased hiring process.

With the rise of Al, many traditional job roles are becoming useless.

Al-driven healthcare is more reliable than human-driven healthcare.

Al in education systems can personalize and revolutionize learning.

Al can be a powerful tool in combatting global climate change.

Trusting AI with military decisions will lead to more precise and less destructive warfare.

Al can perpetuate societal biases if not properly monitored and trained.

At the start, set clear guidelines about maintaining respect during discussions.

Emphasize the importance of focusing on arguments, not personal attacks.

Encourage everyone to voice their thoughts, especially those who may be more reserved. A diverse range of perspectives will enrich the discussion.

While you have your personal views on AI, remain neutral during the activity. This will help maintain an unbiased space for participants to explore their thoughts freely.

Let the participants drive the conversation. Step in only when needed, such as when you notice someone dominating the discussion, when the conversation goes off track, or when there are personal disagreements.

Be prepared to adapt the session based on the participants' responses. If a particular statement sparks a lot of interest, it might be worth spending more time on it. Conversely, if a topic isn't resonating, move on to the next.

SOURCES

Al Brainstorming Workshop

SOFT SKILLS

Problem solving, Teamwork, Creativity, Critical thinking

LEARNING OBJECTIVES

Learn the fundamentals of artificial intelligence and its practical uses.

Brainstorm Al concepts to improve critical thinking abilities. Talk in groups to strengthen your collaboration and teamwork abilities.

Encourage problem-solving skills when analysing Al ideas.

GROUP SIZE

15-20

DURATION

1.5 h

TYPE

ACTIVITY

MATERIALS

Handouts including data from Al, Presentation screen and projector, Markers, Sticky notes, white board

Before the activity:

Start by preparing an presentation about Al. Make it about an overview about Al, its history and its real life-applications.

Create handouts about AI, where you can include study cases and essential AI concepts. Make sure the information is easy to be understood. Include some challengers related to the AI.

Arrange the working space with chairs and tables ready for the group discussions

During the activity:

In the beginning, start by presenting to the participants more information about AI and its features and applications. After that, it's time to divide the group. Diving them into smaller groups, like 3-4 people in a group. Then provide them the created handouts, with the information and the challenges. Participant should brainstorm ideas or solutions for the challenges they received. After they are done, each group presents their ideas and solutions to the whole group. While they are presenting, make sure to encourage open discussion and feedback.

After the activity/Debriefing

Hold a conversation with the group about the issues and suggestions they made during the presentations. After that, you can list the main lessons they've learned about Al and its possibilities during this workshop, a summary of the most important take aways.

Reflect together on the significance of critical thinking, creativity, and collaboration in the creation of Al.

Give to your participants additional resources so that Al research may continue for those who are interested

Sample ideas for the challenges:

- Al in education
- Al in health care
- Al in transportation
- Al and the environment
- Al and the finances

Motivate people to think outside the box while coming up with Al concepts.

Encourage a welcoming and inclusive atmosphere for dialogue and suggestions.

Be ready to respond to inquiries and offer advice about Al theories and applicationns.

SOURCES

https://www.brookings.edu/articles/how-artificial-intelligence-is-transforming-the-world/

Al Innovators Name Game

SOFT SKILLS

Teambuilding, creativity, Presentation, communication

LEARNING OBJECTIVES

Discover the achievements and known Al innovators.

Improve presenting and creative skills

Encourage your group members to communicate effectively.

Encourage a spirit of cooperation and teamwork.

GROUP SIZE

10-30

DURATION

40 min

TYPE

ICEBREAKER

MATERIALS

Cards with the names of famous Al innovators
Projector and screen for presentations (optional)

Before the activity:

Make cards listing notable Al inventors along with a brief overview of their accomplishments. Try to make an individual card for each participant. If the group is too big, you can make 2 cards as well for the same inventor Prepare the room by placing the chairs and set up an area for the presentations.

During the activity:

As participants come into the room, distribute the cards to them. While sharing the cards, make sure their face is facing the ground so they pick a random one. Request that each person will look up and try to memorize the details about the innovator listed on their card.

Ask each participant to provide a brief introduction that includes the name and accomplishments of the inventor. Promote originality and levity in the opening statements. If there are any ambiguities in the introduction, let participants guess who invented Al.

After the activity/Debriefing

Encourage an open discussion with the participants. You can talk about how innovators in Al have shaped the field and what has changed, and how. What's their opinion on it?

Consider how well-written and funny introductions were. Ask them which one they like more and why. Stress the importance of cooperation and efficient communication.

Sample ideas for the names

- 1. Alan Turing
- 2. John McCarthy
- 3. Marvin Minsky
- 4. Herbert A. Simon
- 5. Geoffrey Hinton
- 6. Yann LeCun
- 7. Andrew Ng
- 8. Fei-Fei Li
- 9. Ray Kurzweil
- 10. Judea Pearl

To add intrigue to the game, combine well-known and lesser-known Al inventors.

Participants should be encouraged to give interesting and memorable introductions.

You can also read the materials as well before the activity and have some knowledge about the inventors.

SOURCES

https://fortune.com/2023/06/13/meet-top-aiinnovators-impact-on-business-society-chatgptdeepmind-stability/

AI Ethics Workshop

SOFT SKILLS

Group discussion, decision making, critical thinking, ethnical reasoning

LEARNING OBJECTIVES

Recognise the difficulties and ethical issues surrounding the creation of AI.

Develop critical thinking abilities when assessing Al applications.

Develop the ability to reason and make decisions ethically.

Promote frank and helpful group conversations around Al ethics.

GROUP SIZE

15 - 25

DURATION

2h

TYPE

ACTIVITY

MATERIALS

Markers and whiteboard,materials with case stories on Al ethics,Presentation screen and projector, Markers and flipcharts

Before the activity:

You can start by preparing a case study-based presentation on AI ethics. Present in a non-formal way and make the information easy to be understood. Make flyers that include issues related to ethics and some case studies related to the topic. Set up the space with chairs and tables so that groups may converse.

During the activity:

The workshop should begin with a discussion of ethical issues and case examples. after that, split the participants into smaller groups. Try to make the groups as random as possible.

Give a case study about Al ethics to every group. Participants will evaluate the case study in groups, point out moral dilemmas, and suggest fixes. After that, each group presents their findings and suggestions to the whole group. Promote frank conversations and debates on the moral implications of Al. Make a safe space for all the participants to express their ideas and opinions.

After the activity/Debriefing

Lead a conversation in the group on the ethical issues brought up in the case studies. What did they learn new?

List the main lessons learned about Al ethics and decision-making.

Stress the significance of using ethical reasoning when developing AI and making decisions.

Provide more materials so that people may learn more about AI ethics.

Sample ideas for the ethicas and study cases:

- 1. Autonomous Vehicles and Ethical Dilemmas
- 2. Al in Criminal Justice
- 3. Al in Healthcare Diagnosis
- 4. Al and Privacy
- 5. Al in the Workplace
- 6. Al and Deepfakes
- 7. Al and Job Displacement
- 8. Al and Autonomous Weapons

Establish a welcoming and safe space for talking about delicate ethical issues.

Encourage individuals to engage in ethical discussion and critical thought.

Prepare yourself to lead the conversation and bring up moral issues.

SOURCES

RESPOSIBLE AI

SOFT SKILLS

UNDERSTANDING THE PRINCIPLES OF RESPONSIBLE USE OF AI

LEARNING OBJECTIVES

- EXPLAIN THE BUSINESS CASE FOR RESPONSIBLE AI
- IDENTIFY ETHICAL CONSIDERATIONS WITH AI USING ISSUE SPOTTING BEST PRACTICES
- DESCRIBE HOW GOOGLE DEVELOPED AND PUT THEIR AI PRINCIPLES INTO PRACTICE AND LEVERAGE THEIR LESSONS LEARNED
- ADOPT A FRAMEWORK FOR HOW TO OPERATIONALIZE RESPONSIBLE AI IN YOUR ORGANIZATION
- DISCOVER NEXT STEPS TO CONTINUE YOUR RESPONSIBLE AI JOURNEY

GROUP SIZE

individual online traini

DURATION

8 hours

TYPE

TRAINING

MATERIALS

online course

As the use of enterprise Artificial Intelligence and Machine Learning continues to grow, so too does the importance of building it responsibly. A challenge for many is that talking about responsible AI can be easier than putting it into practice. If you're interested in learning how to operationalize responsible AI in your organization, this course is for you.

In this course, you will learn how Google Cloud does this today, together with best practices and lessons learned, to serve as a framework for you to build your own responsible Al approach.

Before attending this course, you should have at least a basic knowledge of Artificial Intelligence and Machine Learning. This course will focus on the operations and application of Al principles and responsible Al. The technical details of ML are not covered and beyond the scope.

- Individual course without trainer

SOURCES

https://www.cloudskillsboost.google/course_templates/388? catalog_rank=%7B%22rank%22%3A9%2C%22num_filters%22 %3A0%2C%22has_search%22%3Atrue%7D&search_id=26966 961

INTRODUCTION TO IMAGE GENERATION

SOFT SKILLS

Creating of models, pictures and immage creation

LEARNING OBJECTIVES

- How diffusion models work
- · Real use-cases for diffusion models
- Unconditioned diffusion models
- Advancements in diffusion models (text-to-image)

GROUP SIZE

individual online training

DURATION

8 hours

TYPE

TRAINING

MATERIALS

Online course

STEP BY STEP INSTRUCTIONS

This course introduces diffusion models, a family of machine learning models that recently showed promise in the image generation space. Diffusion models draw inspiration from physics, specifically thermodynamics. Within the last few years, diffusion models became popular in both research and industry. Diffusion models underpin many state-of-the-art image generation models and tools on Google Cloud. This course introduces you to the theory behind diffusion models and how to train and deploy them on Vertex AI.

SUGGESTIONS FOR TRAINER

- Individual course without trainer

SOURCES

https://www.cloudskillsboost.google/course_templates /541

TITLE

Locales

SOFT SKILLS

Learning how to work with Al Studio

Introduction to Generative AI Studio -

LEARNING OBJECTIVES

- Explain what Generative Al Studio does.
- Describe Generative Al Studio options.
- Use the Generative Al language tool.

GROUP SIZE

individual online training

DURATION

8 hours

TYPE

ICEBREAKER/ NAME GAME/ ACTIVITY

MATERIALS

Online course

STEP BY STEP INSTRUCTIONS

This course, Introduction to Generative Al Studio - Locales, is intended for non-English learners. If you want to take this course in English, please enroll in Introduction to Generative Al Studio.

This course introduces Generative AI Studio, a product on Vertex AI, that helps you prototype and customize generative AI models so you can use their capabilities in your applications. In this course, you learn what Generative AI Studio is, its features and options, and how to use it by walking through demos of the product. In the end, you will have a hands-on lab to apply what you learned and a quiz to test your knowledge.

SUGGESTIONS FOR TRAINER

- Individual course without trainer

SOURCES

https://www.cloudskillsboost.google/course_templates/59

TITLE **AI4K12** Support for the development of **SOFT SKILLS** educational Al programs **LEARNING OBJECTIVES** Not relevant **GROUP SIZE DURATION TYPE EDUCATIONAL MATERIALS**

MATERIALS Guidelines for teaching AI in K-12

STEP BY STEP INSTRUCTIONS

The AI for K-12 guidelines are organized around the 5 Big Ideas in AI. The guidelines will serve as a framework to assist standards writers and curricula developers on AI concepts, essential knowledge, and skills by grade band.

The AI4K12 draft guidelines are organized in K-12 grade band progression charts and are available in the Guidelines menu for Big Idea 1, Big Idea 2, Big Idea 3, and Big Idea 4.

SUGGESTIONS FOR TRAINER

Since 2018 the AI4K12 Initiative has been developing national guidelines for teaching AI in K-12. The AI for K-12 guidelines are organized around the 5 Big Ideas in AI. The guidelines define what every student should know about AI and what they should be able to do with it. The guidelines will serve as a framework to assist standards writers and curriculum developers on AI concepts, essential knowledge, and skills by grade band.

The AI4K12 draft guidelines are organized in grade band progression charts that span K-2, 3-5, 6-8, and 9-12 grade bands.

All five of the grade band progression charts are currently available for public comment and feedback.

SOURCES

https://ai4k12.org/

TITLE

SOFT SKILLS

Embracing AI in real life Part 1: Introducing AI in a Fun Way

Critical thinking, Creativity, Problemsolving, Collaboration, Communication

LEARNING OBJECTIVES

Understand the basics of Al and its impact on society, organizations, work, and education.

Explore real-world Al applications, such as automated grading systems.

Recognize the potential for AI to customize and personalize educational content.

Gain awareness of Al's role in handling multimodal data in education.

GROUP SIZE

4-10 participants

DURATION

Approximately 1.5 to 2 hours

TYPE

ICEBREAKER ACTIVITY

MATERIALS

Whiteboard or flipchart

Markers

Post-it notes

Laptop or projector for presentations

Handouts with Al basics

STEP BY STEP INSTRUCTIONS

1.Icebreaker Activity (15 minutes): Start the session with a fun icebreaker to engage participants. You could use a quick brainstorming activity where participants list words or phrases that come to mind when they hear "Artificial Intelligence."

2.Introduction to AI (20 minutes): Provide a brief presentation or discussion on the basics of AI, its history, and its current impact on society, organizations, work, and education. Use multimedia and real-world examples to make it engaging.

3.Al Applications (20 minutes): Discuss specific Al applications in education, like automated grading systems. Explain how Al can enhance the learning experience and improve efficiency.

4.Interactive Activity (30 minutes): Break the group into smaller teams. Each team is tasked with brainstorming and presenting a creative idea for an Al-driven educational tool or application. Provide guidelines and encourage them to consider both the fun and educational aspects of their idea.

5.Group Presentations (15 minutes): Have each team present their idea to the whole group. Encourage questions and discussions after each presentation.

6.Discussion (15 minutes): Facilitate a group discussion on the potential benefits and challenges of integrating AI in education. Encourage participants to share their thoughts and concerns.

7.Wrap-up and Reflection (10 minutes): Summarize the key takeaways from the session. Ask participants to reflect on what they've learned and how they can apply this knowledge in their own educational journeys.

SUGGESTIONS FOR TRAINER

Stay updated on the latest Al trends and examples related to education to make the content relevant.

Encourage active participation and ensure that all voices are heard during group discussions.

Foster a creative and open-minded atmosphere during the interactive activity.

SOURCES

- 1. "Artificial Intelligence in Education" by Roger Nkambou, Riichiro Mizoguchi, and Jacqueline Bourdeau
- 2. "Artificial Intelligence in Education: Promises and Implications for Teaching and Learning" by the American Institutes for Research
- 3. "Machine Learning for Dummies" by John Paul Mueller and Luca
- 4. Massaron
- 5. edSurge AI in Education: (Website: edSurge AI in Education)
- 6.MIT OpenCourseWare Introduction to Deep Learning: (Website: MIT
- 7.OCW Deep Learning)
- 8. Coursera Al for Everyone: (Website: Coursera Al for Everyone)
- 9. "How Artificial Intelligence Is Changing Teaching" by EdTech Magazine
- 10. "The Use of Artificial Intelligence in Education: Challenges and
- 11. Opportunities" by EdSurge
- 12. "Why AI in Education Isn't as Advanced as It Seems" by EdSurge
- 10. "The Benefits and Risks of AI in Education" by EdTechReview

TITLE

Embracing Al in real life Part 2: Building Trust in Al

SOFT SKILLS

Critical thinking, Analytical skills, Communication, Problem-solving, Ethical reasoning

LEARNING OBJECTIVES

Understand the concept of "Trustworthy Al" and its importance in Al development.

Explore the reasons why trust in Al is essential for its successful adoption.

Learn about research areas and guidelines for developing trustworthy AI.

Discuss the impact of trust on human-Al interactions and the Al system lifecycle.

GROUP SIZE

4-20 participants

DURATION

Approximately 1.5 to 2 hours

TYPE

INTERACTIVE ACTIVITY AND DISCUSSION

MATERIALS

Whiteboard or flipchart

Markers

Handouts with key points

Access to relevant newspaper articles or research papers on trustworthy Al

Online Trust in Al Scenario Simulator

STEP BY STEP INSTRUCTIONS

- 1.Introduction to Trust in AI (15 minutes): Begin by discussing the concept of "Trustworthy AI" and why it's crucial in the development and adoption of AI systems. Use real-world examples to illustrate the impact of trust in AI on various sectors.
- 2.Exploring Trust Issues (20 minutes): Encourage participants to share their perceptions and concerns about trusting AI systems. Create an open discussion about the factors that influence trust or distrust in AI.
- 3.Research on Trustworthy AI (15 minutes): Present information on research areas and methodologies aimed at building trust in AI. Discuss how structuration theory and institutional trust play a role in this context.
- 4.Review of Newspaper Survey (20 minutes): Provide participants with access to relevant newspaper articles or surveys on trustworthy AI concepts and guidelines. Encourage them to read and summarize key findings.
- 5.Interactive Trust in Al Scenario Simulator (30 minutes): Instruct participants to access the Trust in Al Scenario Simulator through a provided web link or application. Have them explore and engage in various Al-related scenarios, making trust-related decisions.
- 6.Group Discussions (20 minutes): After participants have completed the scenarios, divide them into smaller groups to discuss their experiences, decisions, and the ethical considerations they encountered during the simulation.
- 7.Group Presentations (15 minutes): Have each group share their insights and key takeaways from the trust simulation. Encourage discussion and peer feedback.
- 8.Building Trust in AI (15 minutes): Summarize the key learnings from both the group discussions and the trust simulation. Discuss practical steps and strategies for developers and organizations to build trust in AI systems.
- 9.Wrap-up and Reflection (10 minutes): Conclude the session by asking participants to reflect on what they've learned about the importance of trust in Al and how it relates to their own interactions with Al technology.

STEP BY STEP INSTRUCTIONS

Online Tool: Trust in Al Scenario Simulator

Description: This online tool allows participants to simulate real-world scenarios involving AI systems and make decisions related to trust-building. It's designed to help participants understand the practical aspects of trustworthy AI and explore the consequences of trust-related decisions.

How to Use the Tool:

Provide participants with access to the Trust in Al Scenario Simulator through a web link or application.

Instruct participants to explore various scenarios where AI systems are involved, such as autonomous vehicles, healthcare diagnosis, or educational recommendation systems.

Participants will be presented with decision points where they must make choices related to trust in Al. These choices may include settings, data sharing, or relying on Al recommendations.

Encourage participants to discuss their decisions and the factors that influenced them with their peers.

After completing the scenarios, gather the participants and facilitate a group discussion to reflect on the decisions made, the challenges faced, and the importance of trust in AI systems.

Purpose: The Trust in Al Scenario Simulator helps participants apply the concepts discussed in the toolkit to real-world situations. It promotes critical thinking about trust-related decisions and their impact on Al interactions.

SUGGESTIONS FOR TRAINER

Encourage participants to actively engage with the Trust in Al Scenario Simulator and consider the consequences of their decisions.

Use the group discussions and presentations to foster a deeper understanding of trustt-related challenges in Al.

Simulator Suggestion: Twine (Twinery.org) - Twine is an opensource tool for creating interactive story-based simulations. It's user-friendly and allows you to design branching scenarios where participants make choices that affect the outcomes. You can create Al-related scenarios within Twine and share the web link with participants.

How to Use Twine for Trust in Al Scenarios:

Visit the Twinery website (https://twinery.org/). Create a new Twine project and start designing your Al trust scenarios with different decision points.

Add text, choices, and consequences to the scenarios to simulate trust-related decisions.

Export your Twine project to HTML format, which can be easily shared with participants through a web link. Provide participants with the web link to access and interact with the scenarios during the workshop.

SOURCES

- 1. "Building Trust in Artificial Intelligence: Lessons Learned and Strategies for Success" by Kathleen Walch and Ron Schmelzer
- 2. "Trust in Al: A Multidisciplinary Review" by Léa A. Deleris et al.
- 3. Al Trust Index (Website: Al Trust Index)
- 4. OpenAl's Trust and Safety Blog (Website: OpenAl Trust and Safety Blog)
- 5. https://twinery.org/

TITLE

The Impact of AI on Public Relations

SOFT SKILLS

Analytical skills, Communication, Adaptability, Creativity, Data interpretation

LEARNING OBJECTIVES

Understand how AI is transforming the field of Public Relations.

Explore the various applications of AI in Public Relations, including data-driven campaigns, automation, crisis prediction, and content creation.

Recognize the benefits of AI in enhancing human touch, client interactions, networking, and insights.

Learn how AI can align PR campaigns with target audience interests and improve efficiency and productivity.

GROUP SIZE

4-10 participants

DURATION

Approximately 1.5 to 2 hours

TYPE

INTERACTIVE ACTIVITY AND DISCUSSION

MATERIALS

Whiteboard or flipchart

Markers

Handouts with key points

Access to articles, case studies, or videos
on Al in Public Relations

STEP BY STEP INSTRUCTIONS

1.Introduction to AI in Public Relations (15 minutes): Begin by discussing the rising popularity of AI in Public Relations and its transformative impact on the industry. Provide an overview of the learning objectives.

- 2.Exploring Al Applications (20 minutes): Present various applications of Al in Public Relations, such as data-driven campaigns, automation, crisis prediction, and content creation. Use examples to illustrate each application's significance.
- 3.Benefits of AI (15 minutes): Discuss the benefits of integrating AI in PR, including enhancing human touch, client interactions, networking, and insights. Emphasize how AI-driven campaigns can align with target audience interests.
- 4.Interactive Case Studies (30 minutes): Share real-world case studies or scenarios where AI has been effectively used in PR campaigns. Encourage participants to analyze these cases and identify the role of AI in achieving success.
- 5.Group Discussions (20 minutes): Divide participants into smaller groups and ask each group to brainstorm and discuss how Al can be leveraged in hypothetical PR campaigns. Encourage them to consider specific objectives and outcomes.
- 6.Group Presentations (15 minutes): Have each group present their Al-driven PR campaign ideas to the whole group. Facilitate discussions and feedback after each presentation.
- 7.Best Practices and Considerations (15 minutes): Share best practices and ethical considerations when using Al in Public Relations. Discuss potential challenges and how to address them.
- 8.Wrap-up and Reflection (10 minutes): Conclude the session by asking participants to reflect on what they've learned about the impact of AI in Public Relations and how it may influence their future PR strategies.

SUGGESTIONS FOR TRAINER

Use case studies and examples from the PR industry to make the content relevant and relatable.

Encourage participants to think creatively about Al applications in PR campaigns.

SOURCES

- 1. Artificial Intelligence for PR: A User's Manual by Steve Barrett
- 2. PR Daily AI & Machine Learning Section (Website: PR Daily AI & Machine Learning)
- 3.PRovoke Media (Website: PRovoke Media)
- 4.PR Week's Technology Section (Website: PR Week Technology)
- 5. "How Al Is Changing Public Relations and What You Need to Do About It" by Todd Grossman This article discusses the impact of Al on PR strategies and provides insights into adapting to the changing landscape.
- 6. "Artificial Intelligence in Public Relations: Applications and Implications" by Mark Weiner
- 7."How AI Is Impacting the PR Industry" by Ronn Torossian
- 8 "The Role of Artificial Intelligence in Public Relations" by Tim Brown

TITLE

The Impact of AI on Public Relations

SOFT SKILLS

Analytical skills, Communication, Adaptability, Creativity, Data interpretation

LEARNING OBJECTIVES

Understand how AI is transforming the field of Public Relations.

Explore the various applications of AI in Public Relations, including data-driven campaigns, automation, crisis prediction, and content creation.

Recognize the benefits of AI in enhancing human touch, client interactions, networking, and insights.

To familiarize participants with the Meltwater platform and demonstrate how it can be used for media monitoring, sentiment analysis, and gaining insights into PR campaigns.

GROUP SIZE

4-10 participants

DURATION

Approximately 1.5 to 2 hours

TYPE

ACTIVITY: MEDIA IMPACT ANALYSIS
WITH MELTWATER

MATERIALS

Access to Meltwater (subscription or trial account)
Participants' devices (laptops or computers)
Projector or screen for demonstration

STEP BY STEP INSTRUCTIONS

- 1.Introduction (10 minutes): Begin by introducing the Meltwater platform and its capabilities for media monitoring and social listening. Explain that the activity will involve using Meltwater to analyze media impact related to a hypothetical PR campaign.
- 2.Access to Meltwater (5 minutes): Ensure that each participant has access to Meltwater, either through their own accounts or by providing them with a shared login for demonstration purposes.
- 3.Setting the Context (5 minutes): Present a fictional PR scenario or campaign to the participants. This scenario could involve a product launch, a crisis situation, or a branding effort. Explain the objectives of the campaign and the key performance indicators (KPIs) to measure its success.
- 4.Guided Demonstration (15 minutes): Conduct a live demonstration of how to use Meltwater's features for media monitoring and social listening. Show participants how to set up searches, track brand mentions, analyze sentiment, and filter relevant articles and social media conversations. Use a real-time or recent example to illustrate the process.
- 5.Hands-On Exploration (20 minutes): Ask participants to log in to Meltwater and perform media monitoring related to the provided PR scenario. Encourage them to track mentions of the campaign, identify sentiment in news articles and social media posts, and gather data on media impact.
- 6.Data Analysis and Insights (15 minutes): After the hands-on exploration, gather the participants and have them share their findings. Discuss the insights they gained from using Meltwater, such as the volume of mentions, sentiment trends, and key influencers or media outlets.
- 7.Discussion (15 minutes): Lead a discussion on the implications of the data and insights gathered. Ask participants to consider how the information they gathered could inform PR strategy and decision-making for the campaign. Discuss the importance of real-time monitoring and responding to media mentions.
- 8.Reflection (10 minutes): Conclude the activity by asking participants to reflect on the value of media monitoring and social listening in PR. Encourage them to share how they might apply the knowledge gained in their own PR work.

SUGGESTIONS FOR TRAINER

- 1.Preparation: Before the activity, ensure that you have access to Meltwater and are familiar with its features and functionalities. This will help you demonstrate effectively and troubleshoot any issues that may arise.
- 2.Clear Instructions: Begin the activity with clear and concise instructions. Clearly state the objectives, the fictional PR scenario, and the specific tasks participants need to perform with Meltwater.
- 3.Live Demonstration: During the guided demonstration, use a real-time or recent example to illustrate how to use Meltwater effectively. Share your screen and navigate through the platform while explaining each step.
- 4.Accessibility: Ensure that participants have access to Meltwater. If possible, provide login credentials for a shared account to avoid any technical hurdles.
- 5.Monitoring and Assistance: While participants are exploring Meltwater, be available to monitor their progress and provide assistance if needed. Some participants may have varying levels of technical expertise.
- 6. Data Privacy and Ethical Considerations: Remind participants to handle data and insights obtained from Meltwater with sensitivity and in accordance with privacy and ethical guidelines. Discuss the importance of respecting user privacy and data protection.
- 7.Encourage Discussion: After the hands-on exploration, foster discussion among participants. Encourage them to share their findings and insights. Prompt them with questions about what surprised them or what strategies they would recommend based on the data.
- 8.Real-World Application: Help participants connect the activity to real-world PR scenarios. Discuss how the insights gained from media monitoring and sentiment analysis can inform PR decision-making, crisis management, and campaign adjustments.
- 9.Reflect and Summarize: Conclude the activity by summarizing the key takeaways and lessons learned. Ask participants to reflect on how they can apply the knowledge gained to their own PR work.
- 10.Follow-Up Resources: Provide participants with additional resources or guides for using Meltwater effectively in their PR efforts. Encourage them to explore the platform further beyond the activity.
- 11.Feedback: Lastly, seek feedback from participants about their experience with the activity. Ask if they found it valuable and if they have any suggestions for improvement.

SOURCES

- 1. https://journal.prowly.com/
- 2. https://www.retrievergroup.com/blog/tag/guide-ebook
- 3. https://www.researchgate.net/profile/Manish-Verma-
- 4.7/publication/276882080_Public_Relations_Scope_and_Challenges_in_Dig ital_Era/links/55c8285608aeca747d668cf0/Public-Relations-Scope-and- Challenges-in-Digital-Era.pdf
- 5. Mohamed, K., & Bayraktar, Ü. A. (2022). Analyzing the role of Sentiment Analysis in Public Relations: Brand Monitoring and Crisis Management. SSRG International Journal of Humanities and Social Science, 9(3), 116-126
- 6. https://www.meltwater.com/

Meltwater Guides and Documentation:

- 1.Meltwater's Official User Guide https://help.meltwater.com/en/articles/4064534-step-by-step-tutorials
- 2.Meltwater Webinars and Tutorials https://academy.meltwater.com/collections/masterclass-webinars





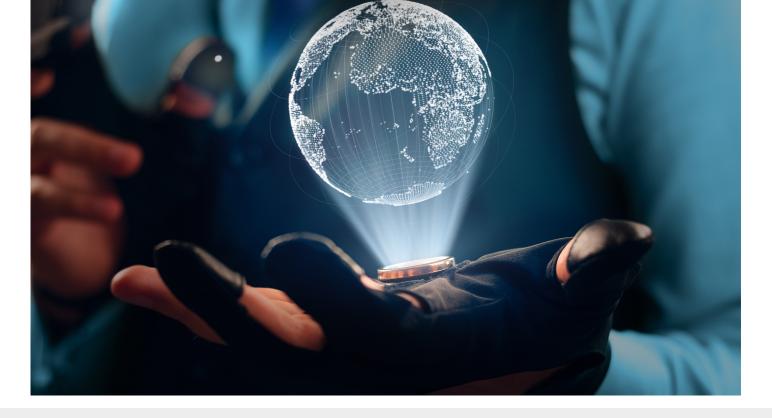
WHAT IS ASSESSMENT?

Introduction

In the realm of education, assessment stands as a pivotal process, guiding the journey of learners and educators alike. As we embark on this exploration within the context of our toolkit, it's essential to unravel the essence of assessment and its integral role in evaluating learners' understanding of Al concepts.

Key Points

Purpose of Assessment: Assessment transcends the realm of mere tests; it functions as a dynamic force shaping the educational landscape. Within the Next Toolkit, assessment assumes the role of a compass, skillfully navigating the path toward a comprehensive understanding of Al concepts. It extends beyond conventional evaluation methods, embracing a holistic approach to measure the multifaceted dimensions of learning.



Role in Toolkit: Embedded within the Next Toolkit's framework, assessment assumes a pivotal role. It stands as the litmus test for the efficacy of endeavors in enhancing learners' comprehension of Al concepts. Each assessment component is meticulously crafted, ensuring alignment with the overarching goals of the toolkit and fostering a symbiotic relationship between education and evaluation.

Types of Assessment: The Next Toolkit employs a diverse array of assessments, seamlessly blending formative and summative approaches. This dynamic combination provides a nuanced perspective on learners' progress. Formative assessments offer real-time insights, delicately guiding the learning process, while summative assessments furnish a comprehensive snapshot of achievement.

Assessment within the toolkit operates as a crucial yardstick for measuring the attainment of learning objectives, emphasizing not just what learners know but their ability to apply and articulate AI concepts. This dynamic process acts as a dialogue, fostering valuable feedback for both learners and educators and serving as a catalyst for continuous improvement and evolution of the toolkit based on insights gained from assessments. Guided by principles of fairness and equity, assessment ensures an equal opportunity for every learner to showcase their understanding of AI concepts. Aligned purposefully with the toolkit's learning objectives, each assessment component serves as a building block, contributing to the comprehensive evaluation of learners' grasp of AI concepts.

ASSESSMENT SHEETS THAT ALLOW YOUTH WORKERS TO EVALUATE LEARNERS' UNDERSTANDING OF AI CONCEPTS AND SKILLS

Dear Learner,

Welcome to the Skill Evaluation Assessment for the Next Toolkit! This assessment is designed to gather valuable insights into your perception of various skills related to Al education. Your honest feedback will play a crucial role in evaluating and enhancing the effectiveness of the

upcoming toolkit.



Instructions:

- Please carefully read each question and provide your self-assessment by marking an 'X' in the box that corresponds to your perceived proficiency.
- For questions with a rating scale (1-5), write the number you feel represents your proficiency, with 5 being the highest.
- Be honest and reflective in your responses. Your feedback is essential for shaping the future of AI education activities.

Thank you for your participation! Your input is invaluable in shaping the next toolkit for AI education!

ASSESSMENT OF ICEBREAKING ACTIVITIES

CONCEPT	QUESTION	ANSWER
Al Concept Integration	On a scale from 1 to 5, how effectively did you perceive Al concepts were integrated into the Icebreaking activities?	
Participant Engagement	Rate your level of engagement and active participation in Al- related discussions during Icebreaking activities (1 to 5).	
Alignment with Toolkit Objectives	How well do you think the Icebreaking activities aligned with the overarching goals of the toolkit in enhancing your comprehension of AI concepts?	
Post-Icebreaking Retention	How would you rate your retention and recall of Al principles post-Icebreaking activities (1 to 5)?	
Application in Subsequent Activities	Can you provide examples or observations of how you applied Al-related insights from Icebreaking activities in subsequent learning experiences?	
Individual Reflection	Share any notable reflections or insights you had on the application and impact of Al concepts post lcebreaking.	

Please put an 'X' in the box that corresponds to how you feel about your proficiency in each skill.

CONCEPT	QUESTION	ANSWER
Critical Thinking	How effectively do you believe you demonstrated critical thinking skills in applying Al concepts to problem-solving scenarios?	Not Effective () Somewhat Effective () Moderately Effective () Very Effective ()
Communication	Rate your ability to communicate complex AI concepts in a clear and understandable manner.	Not Effective () Somewhat Effective () Moderately Effective () Very Effective ()
Collaboration	Assess your level of collaboration and teamwork during group activities focused on Al discussions.	Not Effective () Somewhat Effective () Moderately Effective () Very Effective ()
Adaptability	Reflect on instances where you demonstrated adaptability in understanding and applying different Al concepts.	Not Effective () Somewhat Effective () Moderately Effective () Very Effective ()
Problem-Solving	Evaluate your proficiency in applying AI principles to solve challenges presented in various activities.	Not Effective () Somewhat Effective () Moderately Effective () Very Effective ()
Reflection and Learning	How well do you think you reflected on your understanding of AI concepts and engaged in self-directed learning?	Not Effective () Somewhat Effective () Moderately Effective () Very Effective ()

ASSESSMENT OF NAME GAMES

CONCEPT	QUESTION	ANSWER
Application Proficiency	Evaluate your ability to apply Al principles during Name Games.	
Communication Skills	Rate the effectiveness of your communication of Al-related insights during Name Games (1 to 5).	
Collaboration	Assess your level of collaboration and teamwork in Al-related discussions during Name Games (1 to 5).	
Retention of Al Principles	How would you rate your retention and recall of AI principles post- Name Games (1 to 5)?	
Application in Subsequent Activities	Provide examples or observations of how you applied Al-related insights from Name Games in subsequent communication activities	
Individual Reflection	Share any notable reflections or insights you had on the application and impact of AI concepts post-Name Games.	

Please put an 'X' in the box that corresponds to how you feel about your proficiency in each skill.

CONCEPT	QUESTION	ANSWER
Critical Thinking	How effectively do you believe you demonstrated critical thinking skills in applying Al concepts to problem-solving scenarios?	Not Effective () Somewhat Effective () Moderately Effective () Very Effective ()
Communication	Rate your ability to communicate complex AI concepts in a clear and understandable manner.	Not Effective () Somewhat Effective () Moderately Effective () Very Effective ()
Collaboration	Assess your level of collaboration and teamwork during group activities focused on Al discussions.	Not Effective () Somewhat Effective () Moderately Effective () Very Effective ()
Adaptability	Reflect on instances where you demonstrated adaptability in understanding and applying different Al concepts.	Not Effective () Somewhat Effective () Moderately Effective () Very Effective ()
Problem-Solving	Evaluate your proficiency in applying AI principles to solve challenges presented in various activities.	Not Effective () Somewhat Effective () Moderately Effective () Very Effective ()
Reflection and Learning	How well do you think you reflected on your understanding of AI concepts and engaged in self-directed learning?	Not Effective () Somewhat Effective () Moderately Effective () Very Effective ()

ASSESSMENT OF ACTIVITIES

CONCEPT	QUESTION	ANSWER
Problem-Solving Aptitude	Assess your ability to approach and solve challenges presented in Al-related activities (1 to 5).	
Creative Application	Evaluate your creative application of AI principles in problem-solving scenarios (1 to 5).	
Decision-Making Skills	Measure your decision-making skills demonstrated in Al-related activities (1 to 5).	
Reflection on Al Application	Reflect on your experience in applying Al concepts during the Activity.	
Communication of Insights	Share your personal insights and learnings related to Al concepts post-Activity.	
Collaborative Review	Measure your participation in a collaborative review session discussing Al concepts learned during the Activity (1 to 5).	

Please put an 'X' in the box that corresponds to how you feel about your proficiency in each skill.

CONCEPT	QUESTION	ANSWER
Critical Thinking	How effectively do you believe you demonstrated critical thinking skills in applying Al concepts to problem-solving scenarios?	Not Effective () Somewhat Effective () Moderately Effective () Very Effective ()
Communication	Rate your ability to communicate complex AI concepts in a clear and understandable manner.	Not Effective () Somewhat Effective () Moderately Effective () Very Effective ()
Collaboration	Assess your level of collaboration and teamwork during group activities focused on Al discussions.	Not Effective () Somewhat Effective () Moderately Effective () Very Effective ()
Adaptability	Reflect on instances where you demonstrated adaptability in understanding and applying different Al concepts.	Not Effective () Somewhat Effective () Moderately Effective () Very Effective ()
Problem-Solving	Evaluate your proficiency in applying AI principles to solve challenges presented in various activities.	Not Effective () Somewhat Effective () Moderately Effective () Very Effective ()
Reflection and Learning	How well do you think you reflected on your understanding of AI concepts and engaged in self-directed learning?	Not Effective () Somewhat Effective () Moderately Effective () Very Effective ()



Closing tip to youth workers:

As you collect feedback from learners, contemplate hosting a debrief session to explore prevalent themes and insights. This thoughtful reflection can pave the way for refining future sessions, addressing distinct needs, and amplifying the overall effectiveness of the toolkit. Your efforts contribute immensely to the success of this educational endeavor.



TRAINER SELF-EVALUATION CHECKLIST

Trainer Self-Evaluation Checklist		Reflect on your performance during the AI education training session and assess your effectiveness in the following areas. Mark 'v' if the criteria were met, and 'X' if improvement is needed.
✓ or X	Evaluation	Questions
	Content Delivery:	Was the AI content presented in a clear and comprehensible manner?
	Engagement:	Were learners actively engaged in discussions and activities?
	Adaptability:	Did you effectively adapt to unexpected challenges or changes during the session?
	Interaction:	Were you responsive to learner questions and concerns?
	Time Management:	Did the training session adhere to the planned schedule?

SAMPLE TRAINER OBSERVATION TOOL

The purpose of an observation is to improve the overall effectiveness of trainers and to support them in their skills development. Both the trainer and the observer take an active role in the process. This form is to be used by the observer as a tool for providing feedback.

Trainer:		Training topic:		
Observer:		Date:		
Address		Tel:		
Email:				
SKILLS	RATING (1-4) 1-RARELY 2-SOMETIMES 3-OFTEN 4-ALWAYS		COMMENTS	
COMMUNICATION	I SKILLS			
The trainer effectively conveys complex Al concepts in a clear and understandable manner.				
The trainer engages learners through effective communication strategies.				
The trainer engages learners through effective communication strategies.				
INTERACTION WIT	'H LEARNERS			
The trainer demonstrates responsiveness to learner questions and concerns.				

Г		1	
The trainer actively encourages participation and engagement during discussions.			
The trainer fosters a positive and inclusive learning environment by acknowledging diverse perspectives			
ADHERENCE TO TRAINING PLAN			
The trainer effectively structures the training session to cover key Al concepts within the allotted time.			
The trainer demonstrates flexibility in adapting the session to address learners' needs and interests.			
The trainer ensures that deviations from the training plan do not compromise the overall effectiveness of the session.			
TRAINING TECHNIQUES	SHORT ANSWER		
List the training techniques used during this session. Please commeron the effectiveness of each technique.	nt		
What are the trainers' strengths? (min. 3)			
What areas require improvement?			
Observer's Signature:	Date:		
Trainer's Signature:	Date:		

TRAINING EVALUATION CHARTS



The Trainer Effectiveness Charts aim to provide a comprehensive visual representation of the effectiveness of the trainer across different training sessions for the #Next Tools. These charts are designed to help users assess and understand how the trainer's performance varies over time, offering insights into areas of strength and potential improvement. The visualizations, including the Radar Chart, offer a nuanced perspective on various aspects of trainer effectiveness, such as communication skills, engagement, and adaptability. By interpreting these charts, users can make informed decisions to enhance the overall quality of training sessions for the Next Toolkit and guide improvements for future sessions.

These charts collectively empower users to gauge the effectiveness of training sessions, identify trends, and make data-driven decisions for continuous improvement in subsequent iterations of the Next Toolkit.

- ·An upward trend indicates increasing satisfaction.
- ·Consistent high scores suggest overall effectiveness.
- ·Dips in satisfaction may signal areas for improvement in specific sessions.

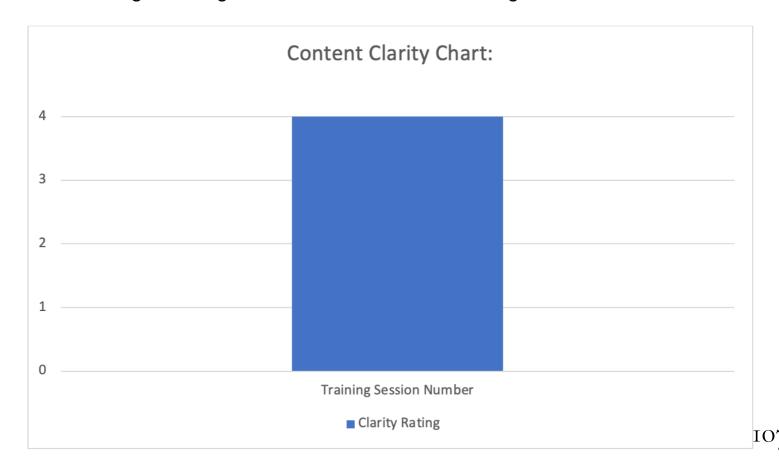
Linear Chart-Overall Satisfaction

Each number on this axis represents a specific training session. As you move along the X-axis, you can observe changes in the effectiveness of the trainer over different training sessions.



Bar Chart- Content Clarity Chart

The Y-axis represents the overall effectiveness rating of the trainer. Ratings range from 1 to 4. Higher ratings indicate more effective training



Radar Chart

The radar inside the chart represents different facets of the trainer, such as communication skills, engagement, and adaptability. Each spoke on the radar indicates how effectively the trainer represents that aspect.

veness Chart:			
Trainer Effectiveness Rating			
sion Number			

SAMPLE TRAINING EVALUATION FORMS

These sample evaluation forms are designed to gather valuable feedback from participants regarding their experience with the training sessions featured in the Next Toolkit. Each form aims to capture insights into different aspects of the training, helping trainers and organizers assess effectiveness and identify areas for improvement.

Training Session Feedback Form

QUESTIONS	ТҮРЕ	ANSWERS
Overall, how would you rate the clarity of the content?	Rate (1-4) 1-Low 4-High	
How effective was the trainer in delivering the content?	Rate (1-4) 1-Not 4-Highly	
Were the activities and exercises relevant to the content?	Yes or No	
Overall Satisfaction with the Training Session.	Rate (1-4) 1-Dissatisfied 4-Satisfied	

Trainer Performance Evaluation Form

QUESTIONS	TYPE	ANSWERS
Communication Skills	Rate (1-4) 1-Low 4-High	
Adaptability to Participants' Needs	Rate (1-4) 1-Not 4-Highly	
Interaction with Learners	Rate (1-4) 1-Low 4-High	
Overall Effectiveness as a Trainer	Rate (1-4) 1-Not 4-Highly	

Toolkit Content Relevance Form

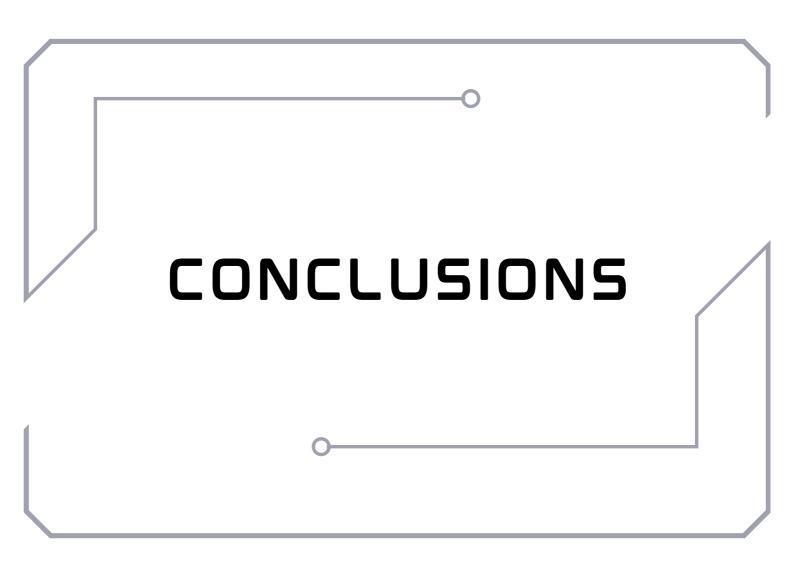
QUESTIONS	TYPE	ANSWERS	
To what extent did the toolkit content meet your specific needs?	Rate (1-4) 1-Low 4-High		
How practical do you find the toolkit content for real-world applications?	Rate (1-4) 1-Not 4-Highly		
Potential for Application in Your Context	Rate (1-4) 1-Low 4-High		
Overall Effectiveness as a Trainer	Rate (1-4) 1-Not 4-Highly		

Interactive Activity Assessment Form

QUESTIONS	TYPE	ANSWERS
Activity Name	-Icebreaking -Name games -Activity	
Level of Engagement during the Activity	Rate (1-4) 1-Not 4-Highly	
Clarity of Instructions for the Activity	Rate (1-4) 1-Unclear 4-Very Clear	
Perceived Impact of the Activity on Your Understanding	Rate (1-4) 1-Low 4-High	
Overall Effectiveness as a Trainer	Rate (1-4) 1-Not 4-Highly	

Training Summary Report Template

Training Summary Report				
Training Program:		Trainer:		
Date:		Number of Participants:		
Executive Summary	Provide a brief overview of the training program, its objectives, and the overall outcomes achieved.			
Common Themes and Insights	Summarize common feedback themes and insights gained from participant evaluations.			
Areas of Improvement	Highlight specific areas identified for improvement based on participant feedback.			
Recommendations	Provide recommendations for future training programs based on the feedback and insights gathered.			
Conclusion	Summarize the key takeaways from the training program and express gratitude to participants, trainers, and organizers.			



In the constantly changing field of artificial intelligence and youth education, our Training Toolkit has become a valuable and comprehensive resource. It embraces a symbiotic link between education and evaluation, going beyond conventional assessment techniques. It gives teachers and students the tools they need to constantly enhance the way they comprehend and present Al ideas.

An essential part of our toolset, assessment directs the learning process. A comprehensive understanding of students' development is guaranteed by the wide range of assessment forms, which include formative and summative evaluations. These tests act as a compass, guiding us in the direction of a thorough understanding of Al principles.

The Next Toolkit's success is inextricably linked to the insightful comments and important input that instructors and students provide. Their inputs support continuous development and modification, which enhances the educational process in the end.

Debriefings and observations are essential elements that support trainers' skill improvement. This introspective approach demonstrates our dedication to raising the standard of Al education.

An illustrated account of the trainer's progress during the training sessions is provided by the Trainer Effectiveness Charts. They enable the Next Toolkit to be improved over time by giving users the ability to make data-driven decisions.

Our carefully crafted example assessment forms are useful resources for gathering participant input. Their observations provide trainers and organizers with a road map for improving the efficiency of training sessions



The seamless integration of AI with soft skills appears to be a potential strategy as AI's influence on education increases. This combination gives young people the interpersonal and technical abilities they need to thrive in a world that is changing quickly.

Data security protocols, ethical concerns, and continual analysis are necessary for the thoughtful integration of Al into youth education. Al need to supplement professional instructors, not take their place.

Though it needs to be done carefully and take ethical and privacy issues into account, the use of AI in youth education has the potential to improve learning and better prepare children for the problems of the future.

The NEXT project is a comprehensive endeavor aimed at fostering confidence in artificial intelligence within the context of youth education and technology. It aims to close the knowledge gap between citizens, the government, and researchers by giving young people the tools they need to actively contribute to the development of reliable Al standards and regulations.

In conclusion, this Training Toolkit for Trainers in Youth Education and AI is a potent and flexible tool committed to raising educational standards, encouraging the growth of critical thinking abilities, and negotiating the ever-changing junction of youth education and AI. In a world that is changing quickly, it represents a revolutionary step toward empowering the next generation.



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