augMENTOR

WORK METHODOLOGIES FOR EDUCATORS

CONTENTS

OBJECTIVES

These slides will support you to:

- Understand the augMENTOR solution components
- Adapt an existing lesson to the TESA phases
- Learn about the 4Cs and how to assess them
- Structure your course and use augMENTOR more efficiently

CONTENTS

THE AUGMENTOR SOLUTION

augMENTOR weaves modern tech into teaching/learning via:

- a state-of-the-art ***pedagogical framework***

- an ***AI-boosted platform*** that supports
  - educators to design and deliver advanced courses
  - learners to maximize their performance.

THE AUGMENTOR SOLUTION

Pedagogical Framework consists of two parts:

- **Pedagogical Design Model with Emerging Technologies (PeDeMET)** – the macro-level with focus on "*what and why*"
- **Technology-augmented Educational Scenarios and e-Activities (TESA)** - micro-level with focus on "*how*"

Particular emphasis is set on the development/assessment of transversal skills through an approach that employs AI as a partner, not a replacement.

The TESA framework defines *how* to teach with AI responsibly while the platform makes it *operational*.

THE AUGMENTOR SOLUTION

- The The **AI-Driven platform deploys** the pedagogical framework through a dedicated Learner Model
- *augMENTOR is not a generic tool; it is designed to work alongside a course. It will only produce feedback based on the input from the connected course. If data is missing; queries may return little or no feedback, it will not return arbitrary responses instead.*

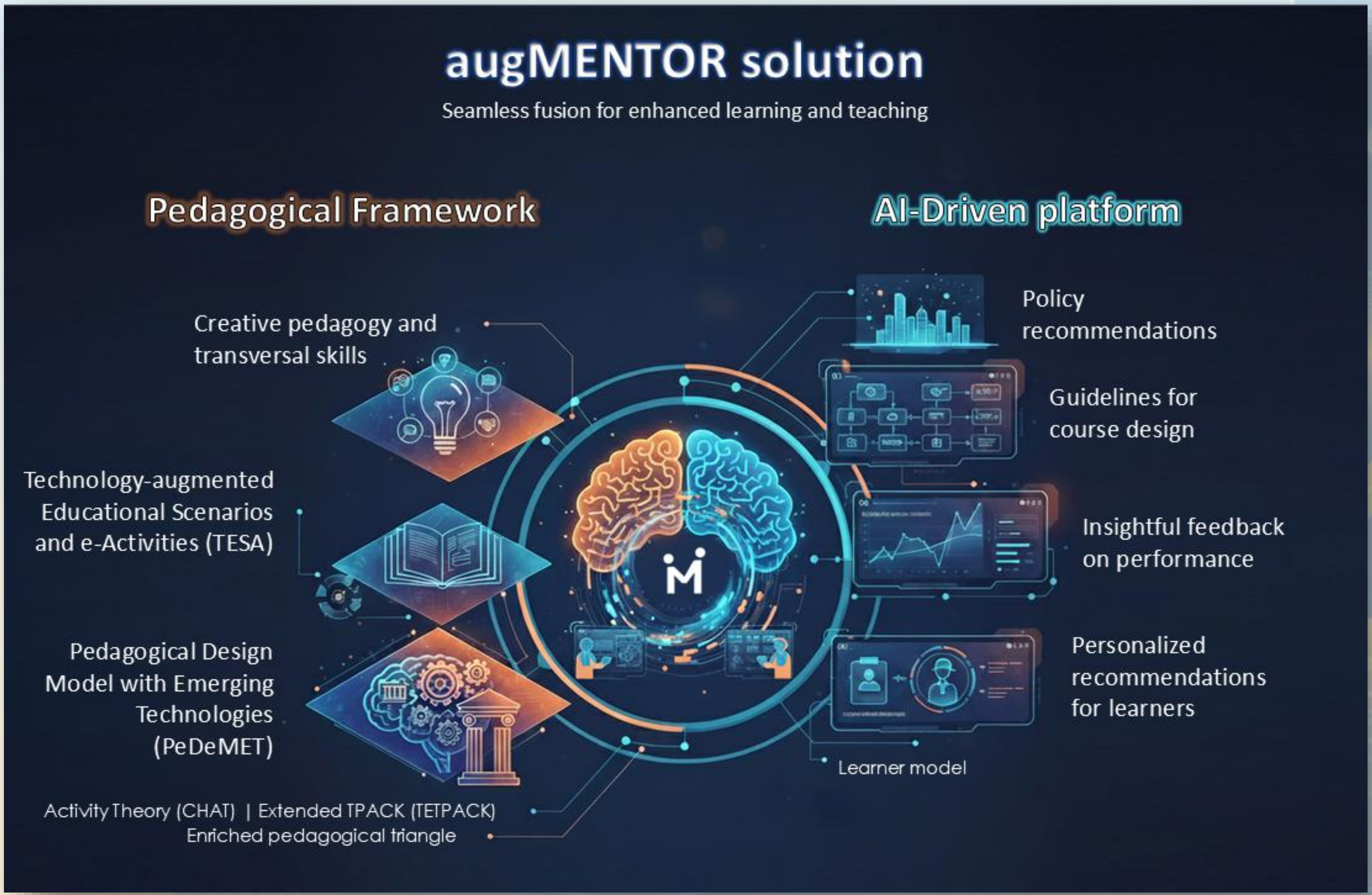
!

The platform offers educators progress-aware feedback, tailored recommendations and course design guidelines

augMENTOR is not generic AI advice; it is ***course-specific***. The better your design and input, the sharper the insights and recommendations.

The TESA framework defines *how* to teach with AI responsibly while the platform makes it *operational*.

AN OVERVIEW OF THE AUGMENTOR SOLUTION



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THE TESA FRAMEWORK

TESA – TECHNOLOGY-AUGMENTED EDUCATIONAL SCENARIOS AND E-ACTIVITIES

- TESA **details the design** of educational scenarios and pedagogical e-Activities.
- It is the product and process of **applying the PeDeMET model** in real-world settings.
- Educational scenarios designed using TESA differ from conventional 'lesson plans', emphasizing and including **diverse constructivist and collaborative strategies** for teaching and learning, considering cognitive difficulties and alternative representations with learners at their epicenter.
- **augMENTOR educational scenarios are based on TESA** so to meaningfully integrate emerging technologies to teach and learn key concepts of a subject within the existing curriculum, while also fostering high-level competencies, such as 21st-century skills.

THE TESA FRAMEWORK

TESA – Technology-Augmented Educational Scenarios and E-Activities

- An educational scenario includes:
  - teacher instructions
  - the theoretical framework supporting the approach
  - essential materials for implementation
  - 'activity sheets' for learners, and
  - additional resources considered valuable (e.g. printed materials, software files etc).

- TESA follows seven phases, describing the rationale on which a scenario should be based (Phases A, B & C) and the way in which classroom activities are designed (Phases D & E) and how the scenario is implemented and evaluated (Phases F & G).

- In its final form, an eighth phase can be added to document the scenario after at least one full cycle of planning, implementation and evaluation.

THE 8 PHASES OF TESA

A. Teaching analysis of the subject matter
Scenario Subject, Theme, & Audience (Content Knowledge)

B. Cognitive analysis
Learners' representations of the subject matter and possible difficulties in their thinking

C. Purpose and objectives
Learning Outcomes & Goals (Outcome/ Object)

D. Development - selection of materials and Tools
ICT Tools, Emerging Technologies and materials development

E. Development of learning activities
In-Class e-Activities (In-situ & Online) (Learning Strategies)

F. Application in the classroom (implementation and evaluation)
Implementation Plan (Rules/ Division of Labor)

G. Assessment/review (student and scenario) and possible extensions of the scenario
Assessment & Feedback

H. Documentation
Scenario Documentation & Reflection (Institutional Context)

Universal Design Learning (UDL) can be a great too to assist you!
UDL is a way of planning teaching so that all learners can access and succeed, by offering multiple ways to engage with content, understand information, and show what they have learned
https://udlguidelines.cast.org/

Follow the TESA phases to design your course

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PHASE A: TEACHING ANALYSIS OF THE SUBJECT MATTER

"THE WHAT"

SCENARIO SUBJECT, THEME & AUDIENCE

Purpose of this phase

- Clarify what you are teaching and the audience of your lesson

Key design questions

- What subject area and topic will your lesson address?
- Who is your target audience (age, level, classroom context)?
- What prerequisite knowledge or experiences should your learners already have?

Concrete actions

- Define the core subject and topics
- Align with curriculum objectives
- Justify suitability for the target learners
- Establish the foundational content knowledge

UDL Tip:
When defining your target group, list major barriers to access (language, devices, reading level, sensory needs) so you can plan options from the start.

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PHASE B: COGNITIVE ANALYSIS

"THE BARRIERS"

LEARNERS' PRIOR KNOWLEDGE & MISCONCEPTIONS

Purpose of this phase

- Identify the thinking demands and problem-solving steps learners must perform
- Ensure tasks are aligned with learners' developmental level, prior knowledge, and potential misconceptions

Key design questions

- What prior knowledge must learners bring, and what gaps or misconceptions might appear?
- What support will learners need during complex tasks?

Concrete actions

- Break the learning content into cognitive steps (e.g., "interpret data → compare → draw conclusions")
- Research and anticipate common misconceptions and learning difficulties
- Lay the foundation for overcoming roadblocks

UDL Tip:
For demanding cognitive steps, plan supports in advance (checklists, worked examples, graphic organisers) – don't wait until students struggle.

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PHASE C: PURPOSE AND OBJECTIVES

LEARNING OUTCOMES & 4CS GOALS

Purpose of this phase

- Make explicit the overall purpose of your lesson/scenario
- Formulate clear, measurable objectives connecting content, 4Cs and the use of the augMENTOR solution
- Ensure everyone (educators, learners, observers) shares the same picture of success

Key design questions

- What is the main educational purpose of this lesson/scenario?
- Which objectives must learners reach by the end?
- How will these objectives be observable in learners' behaviour, products or interactions?

Concrete actions

- Write a short purpose statement describing why this lesson/scenario is worth completing.
- Define 2-3 objectives using action verbs (e.g. make use of Bloom Taxonomy)
- Define 1-2 transversal objectives linked to the fostering of the 4Cs

UDL Tip:
Keep objectives fixed, but allow different ways to meet them (oral, written, visual, digital). Note at least two formats students could use.

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PHASE D: DESIGN & DEVELOPMENT OF TOOLS

EMERGING TECHNOLOGIES & MATERIALS

Purpose of this phase

- Select the digital tools needed to implement the lesson/scenario
- Ensure these tools support the learning objectives from Phase C and the cognitive demands from Phase B

Key design questions

- What technological tools best support the lesson?
- Do the tools provide opportunities to practice the 4Cs?
- How will the tools support differentiation, accessibility, and varied learning needs?
- Which tools must be prepared in advance, and which will be generated by learners during the activity?

Concrete actions

- Identify the specific AI/LMS tools (e.g. Moodle Quiz, Assignments, SCORM) and materials
- Justify how they add value over traditional methods
- Test each tool to ensure it works smoothly in your context

UDL Tip:
For every key concept, aim for at least two representations (text + visual, demo + handout) and two ways students can respond (e.g. text OR audio).

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PHASE E: DEVELOPMENT OF LEARNING E-ACTIVITIES

"LEARNING STRATEGIES"

IN-CLASS E-ACTIVITIES

Purpose of this phase
- Transform the lesson's/scenario's goals into a concrete sequence of e-Activities
- Describe what educators and learners do in the classroom, step-by-step

Key design questions
- What is the chronological flow of the lesson? (intro, exploration, main task, wrap-up, reflection)
- Which parts of the flow will be supported by the selected digital tools?
- Where will students work individual?, and where will they collaborate with their peers?
- How do the activities foster the 4Cs?

Concrete actions
- Draft a step-by-step scenario timeline with approximate timing for each e-Activity
- For each step, specify:
  - Instructors' actions (instructions, demonstrations, facilitation points)
  - Learner actions (discuss, create, post, respond, solve, present)
  - Digital tool used and why it is pedagogically useful
- Mark which activities correspond to:
  - Psychological & cognitive preparation
  - Subject teaching
  - Consolidation
  - Assessment opportunities
  - Metacognitive reflection
- Check that the final chain of e-Activities is realistic in time, flows smoothly, and stays aligned with the objectives from Phase C and the tools from Phase D.

UDL Tip:
Add small choices into the sequence (topic, role, tool, product format). Choice boosts engagement and supports diverse learners

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PHASE F: APPLICATION IN THE CLASSROOM

"ROLES & DIVISION OF LABOUR"

IMPLEMENTATION PLAN

Purpose of this phase

- Implement in the classroom the scenarios designed in the previous phase
- Ensure that your e-Activities are carried out in a way that produces meaningful data and learning evidence

Key design questions

- How will you open the lesson to activate prior knowledge and surface difficulties?
- How will learners practice and consolidate new knowledge?
- How will you handle practical issues (e.g. time management, group organisation)?.

Concrete actions

- Write a brief implementation script for the session, structured in 5 moments:
  - Preparation: short diagnostic question/poll/discussion
  - Subject: targeted explanation
  - Consolidation: learners work on designed e-Activities
  - Assessment: Quick formative check
  - Metacognition: 2-3 reflection points and the mental-effort question at the end of the scenario.
- Detail the organisation of roles (Learner/Educator) and the practical instructions for tutors and e-sheets for learners.

UDL Tip:
Offer alternative participation modes (speak, type in chat, post in forum) so all students can contribute in a way that works for them.

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PHASE G: ASSESSMENT – REVIEW

“THE DATA”

EVALUATION & FEEDBACK

Purpose of this phase

- Evaluate the impact of the educational scenario from two angles:
  - Student learning (knowledge, 4Cs, engagement)
  - Scenario effectiveness (design, tools, activities, timing)
- Define how formative and summative assessment will be carried out
- Specify which 4Cs rubric will be applied (critical for AI data collection)

Key design questions

- How will you measure learning outcomes for content and 4Cs?
- Which formative assessments will run during the scenario, and which summative ones at the end?
- What 4Cs rubrics will you use, and for which activities?
- How will you collect data on student performances?

Concrete actions

- Define 1–2 summative assessment tasks aligned with your Phase C objectives
- Attach 4Cs rubrics (with proper tagging, levels 0.25–1.0) to at least one key activity per module
- After implementation, review:
  - Learner performance data
  - Engagement data
  - Qualitative feedback

UDL Tip:
When possible, assess the same objective with more than one product type (e.g. report OR video) while using the same rubric criteria.

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PHASE H: DOCUMENTATION & REFLECTION

"INSTITUTIONAL CONTEXT"

SCENARIO DOCUMENTATION

Purpose of this phase

- Systematically document the scenario: context, design, implementation, and outcomes.
- Engage in professional reflection on what worked, what didn't, and why.
- Make the scenario reusable and shareable

Key design questions

- What should be documented so that someone else could understand and reuse this scenario?
- What evidence can be found about:
  - Content learning
  - Development of the 4Cs
  - Engagement, motivation, difficulties
- What did this experience tell you about the strengths and weaknesses of this scenario?
- How did the digital tools support learning?
- What do the learners' voices reveal?
- Which specific changes should be made next time?

Concrete actions

- Document the key learnings
- Create guidelines for reuse

UDL Tip:
In your reflection, ask: "*Which students were left out by my design*?" Then adjust materials, options, and tools, not just "*student effort*".

CONTENTS

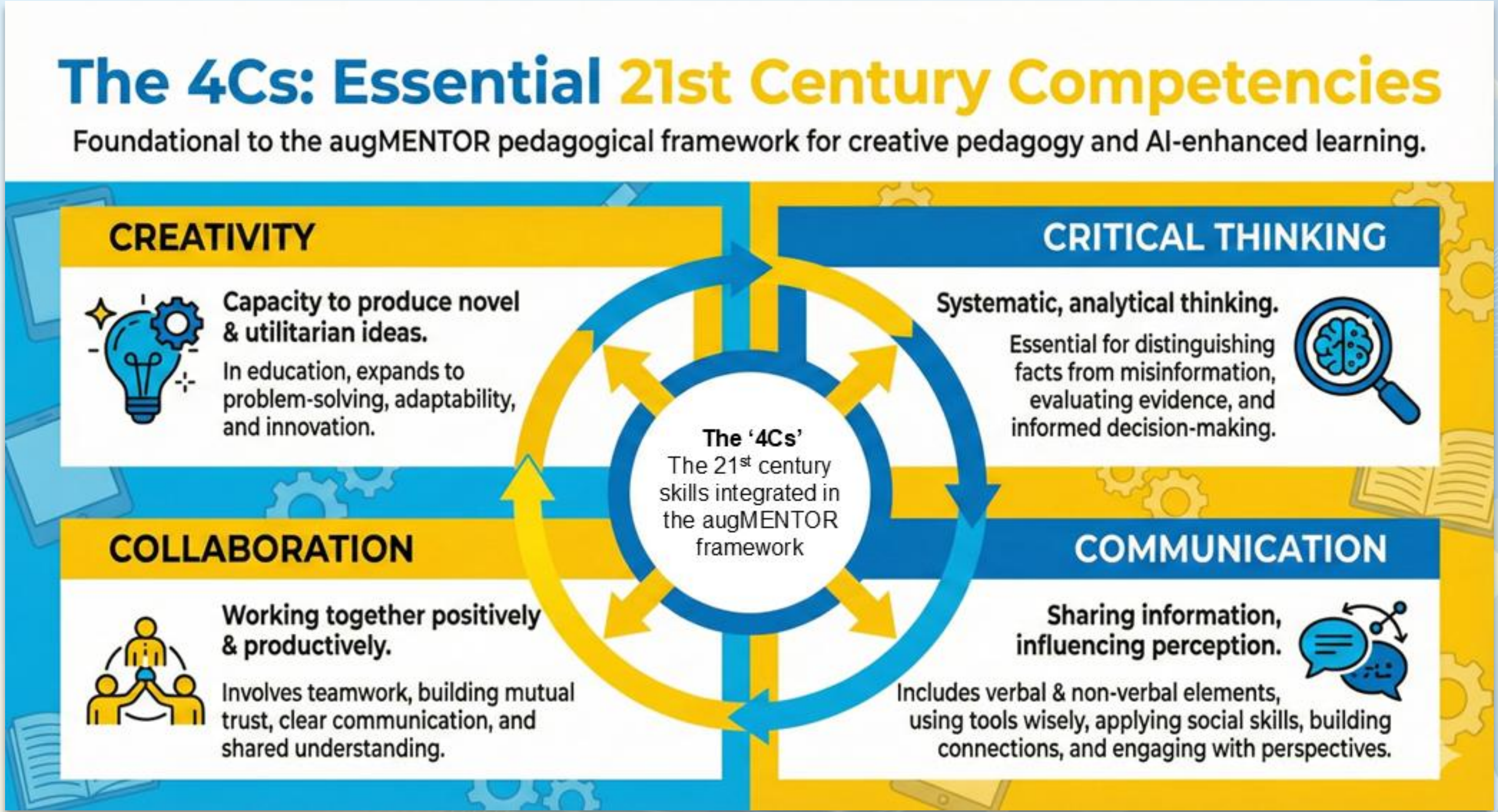
CREATIVE PEDAGOGY AND THE 4CS

- **21st century competencies** equip learners to navigate in a rapidly evolving world shaped by digitalization, complexity, and innovation.

- **C**reativity, **C**ritical thinking, **C**ollaboration and **C**ommunication, - also known as the '4Cs' - are the core competences focusing particularly on **the Learning and Innovation** part of the 21st century skills framework.

- The 4Cs are core elements of the augMENTOR framework and are supported through the **Creative pedagogy strategy.**

- Creative pedagogy is the fundamental human-centred strategy woven throughout the augMENTOR pedagogical framework; it combines **creative teaching, teaching for creativity and creative learning**.


The 4Cs: Essential 21st Century Competencies
Foundational to the augMENTOR pedagogical framework for creative pedagogy and AI-enhanced learning.
CREATIVITY
Capacity to produce novel & utilitarian ideas.
In education, expands to problem-solving, adaptability, and innovation.
CRITICAL THINKING
Systematic, analytical thinking.
Essential for distinguishing facts from misinformation, evaluating evidence, and informed decision-making.
The '4Cs'
The 21st century skills integrated in the augMENTOR framework
COLLABORATION
Working together positively & productively.
Involves teamwork, building mutual trust, clear communication, and shared understanding.
COMMUNICATION
Sharing information, influencing perception.
Includes verbal & non-verbal elements, using tools wisely, applying social skills, building connections, and engaging with perspectives.

EACH C IN PRACTICE

Creativity

Producing original ideas/solutions that are also useful and feasible.

Includes:

Divergent thinking;
Trying new approaches
Adapting ideas to context

Critical Thinking

Analysing problems and information in a structured, evidence-based way.

Includes:

Identifying key components;
Exploring perspectives;
Forming justified opinions

Collaboration

Working together constructively towards a shared outcome.

Includes:

Sharing understanding;
Coordinating roles;
Taking appropriate actions as a team

Communication

Expressing ideas clearly and appropriately for different audiences and contexts.

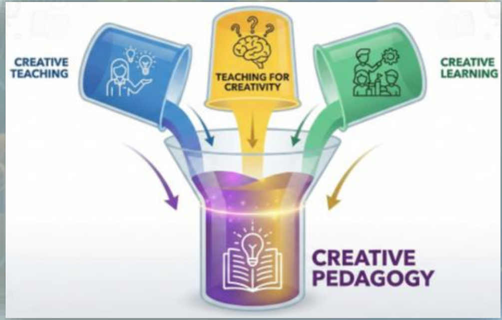
Includes:

Adapting message;
Choosing effective media;
Interacting respectfully in diverse settings

INTEGRATE 4CS DEVELOPMENT IN YOUR COURSE

While developing learning e-activities (TESA phase E) ensure that they are constructed and delivered in a way so that they promote the development of the 4Cs.

- **Creative teaching** (How you teach) – Design diverse content and deliver enabling responsiveness and flexibility
- **Teaching for creativity** (Fostering learner capacity) – Deploy student-centred approaches that promote student growth through initiative
- **Creative learning** (The learners' experience) – Promote autonomy and inquiry



WAYS TO INTEGRATE – CREATIVITY

Divergent vs Convergent	Teach students the different goals and strategies of divergent and convergent thinking
Create safe spaces	Learners need safe spaces before they will feel comfortable enough to offer truly innovative solutions
Career Role Playing	Having learners take specific roles when addressing a problem can help promote divergent and convergent thinking
Reverse engineering	Allow learners to find alternative uses for common, household items
Foster a Growth Mindset	Teach learners that intelligence and creativity are malleable skills requiring practice, hard work, and iteration
Encourage Choice	Learners will feel more empowered when they are given choices and the autonomy to see those choices through

WAYS TO INTEGRATE – CRITICAL THINKING

Ask open ended questions	Encourage students to think deeply by posing questions that don't have a single correct answer
Encourage debate	Have students consider or argue for different perspectives on a topic to develop reasoning skills
Realistic problem-solving	Set realistic expectations when asking students to address big, real-world problems by breaking larger problems into smaller ones
Implement reflection time	Allow brief periods for students to consider what they've learned and its implications
Use analogies	Ask students to draw connections between the lesson content and authentic, familiar concepts or situations
Teach evaluation of sources	Guide students in assessing the credibility and bias of information related to the lesson

WAYS TO INTEGRATE – COLLABORATION

Incorporate Group Work	Incorporate group work into your lessons to encourage collaboration and divergent thinking
Interdependence Strategy	Structuring tasks so that team members need each other to succeed
Social Skills Development	Teaching and practicing interpersonal and small group skills through a variety of group activities
Design Thinking Principles	Teach students design thinking principles which focuses on empathy and collaboration through a variety of strategies
Use Case Studies	Find engaging, authentic examples of collaboration to serve as models then give students the opportunity to dissect the case studies and pull-out strategies
Evaluate Group Work	Allow groups to self-evaluate and reflect on their collaborative work by identifying strengths and opportunities

WAYS TO INTEGRATE – COMMUNICATION

Use Active Listening	Encourage students to concentrate, understand, respond, and take notes when others are talking
Empathetic Communication	Express thoughts and feelings directly and respectfully, while considering others' opinions and contexts
Share your work	Give students plentiful opportunities to present their work or opinions to audiences and consider feedback
Nonverbal Communication	Teach students how to recognize and use nonverbal strategies when communicating
Conflict Resolution	Teach students strategies for resolving conflicts in respectful and constructive ways
Feedback Sandwich	Give students the opportunity to provide peer feedback using a feedback sandwich

CONTENTS

HOW ARE SKILLS ASSESSED?

- Unlike content knowledge, **skills cannot be assessed with quizzes** and simple scores.
- A skill isn't usually "right" or "wrong" (like a math answer), there are different **levels of proficiency** (e.g., Novice, Competent, Expert).
- A skills can have **multiple components**. To effectively assess a skill, it can be broken down into components.

HOW ARE SKILLS ASSESSED?

<u>EXAMPLE:</u>
THE DIFFERENT COMPONENTS OF CREATIVITY

NOVELTY
is the element of originality. For an idea to be novel, it must diverge from the status quo. Novelty can range from "Incremental" to "Radical"“

EFFECTIVENESS
is the element of utility. An idea must solve the specific problem it was meant to solve. In educational contexts, this is often called "appropriateness" or "relevance."“

IMPLEMENTABILITY
is the element of feasibility. This is where creativity meets reality. An idea is only truly creative in a professional context if it can be executed with the available.

CREATIVITY

HOW ARE SKILLS ASSESSED?

- A ***RUBRIC*** *is a* core tool to assess skills and the level of proficiency.

- Rubrics are **assessment grids** used to assess the level of proficiency for a **skill and each components**

- We use a rubric to assess each of the 4Cs. For all of them we use a standard proficiency level set; a 4-level numeric scale:

  - **Level 1:** Novice - 0.25
  - **Level 2:** Limited - 0.50
  - **Level 3:** Good - 0.75
  - **Level 4:** Excellent - 1.00

- Each of the 4Cs has a different set of components.

- In augMENTOR, to accommodate multiple learning settings and contexts we have produced agnostic rubrics for each of the 4Cs. These rubrics are meant to act as the starting point and main guideline for any activity-specific rubric.

4CS RUBRIC COMPONENTS - CREATIVITY

Creativity			
	Novelty	**Effectiveness**	**Implementability**
0.25	Repeats given ideas; minimal variation; limited relevance.	Solution does not address the stated goal; weak logic.	Ignores constraints (time/tools/skills); plan not actionable.
0.50	1–2 new ideas but derivative or narrow; partial fit to task.	Addresses goal superficially; limited evidence of value.	Partially feasible; key steps, resources, or risks under-specified.
0.75	Original idea adapted to context; anticipates basic constraints.	Meets core goals; evidence of usefulness for stakeholders.	Feasible plan with steps, roles, and basic risk mitigation.
1.00	Distinctive, high-impact idea; clear value and transfer beyond the brief.	Optimally solves the problem; compelling evidence of value and improvement.	Detailed, resource-aware plan with contingencies and clear timeline.

4CS RUBRIC COMPONENTS – CRITICAL THINKING

Critical Thinking			
	Identification of components	**Exploration**	**Critical Perspective**
0.25	Restates the problem vaguely; misses key concepts.	Considers a single perspective; no comparison.	Opinion asserted without evidence.
0.50	Names some components; confuses or omits important ones.	Lists alternative views with minimal analysis.	Cites a source but offers limited reasoning.
0.75	Accurately decomposes problem; distinguishes facts vs. claims.	Compares perspectives using relevant criteria/evidence.	Defends a position with coherent evidence and logic.
1.00	Comprehensive model of components/relations; surfaces assumptions.	Integrates multiple perspectives; explains trade-offs and limits.	Synthesizes diverse, credible evidence; anticipates counterarguments.

4CS RUBRIC COMPONENTS - COLLABORATION

	Collaboration		
	Sharing understanding & objectives	**Taking appropriate action**	**Team organisation**
0.25	Team lacks a common goal; misunderstandings persist.	Actions unfocused; no monitoring.	Roles unclear; uneven participation.
0.50	Partial agreement on goals; limited clarification practices.	Basic plan; sporadic follow-up; deadlines slip.	Roles assigned but poorly coordinated; weak tooling.
0.75	Clear shared goal; team checks/updates understanding.	Plan–do–check cycles; adapts actions to evidence.	Clear roles; equitable workload; basic shared tools used well.
1.00	Robust shared mental model; proactive clarification and alignment.	Data-driven adjustments; sustained momentum and quality control.	Dynamic role re-balancing; effective shared tooling; smooth hand-offs.

4CS RUBRIC COMPONENTS - COMMUNICATION

Communication			
	Adaptability	**Media Effectiveness**	**Context Effectiveness**
0.25	One-size-fits-all message; purpose unclear.	Poor medium choice; visuals/data distract or mislead.	Ignores context/culture/protocols; barriers remain.
0.50	Some audience awareness; inconsistent tone/clarity.	Medium somewhat suitable; basic visual/data support.	Attempts to adapt; occasional mismatches or jargon.
0.75	Message tailored to purpose/audience; clear structure.	Appropriate medium; visuals/data reinforce key points.	Adapts register and format to context; attends to accessibility.
1.00	Precisely calibrated for audience/purpose; persuasive and concise.	Optimal media mix; visuals/data integrated cleanly and accessibly.	Fluent across diverse contexts; inclusive, ethical, and compliant.

WHAT IS THE PURPOSE OF A 4C RUBRIC?

A 4C rubric serves several purposes:

- Assess transversal skills systematically
- Increase transparency of expectations for learners
- Provide AI-ready standardised data so the augMENTOR platform may:
    - Monitor development of transversal skills over time
    - Generate feedback and recommendations for learners and tutors
    - Inform course redesign and policy-level insights
- Ensure consistency across courses thanks to the shared 0.25-1.0 scale and components

HOW TO CONSTRUCT A 4C RUBRIC?

1. Start from the skills and their components
   - Identify which C(s) are involved in the course and need to be assessed
   - For each C, use its 3 agnostic components as a starting point
2. Edit the agnostic rubric for each of Cs and their components
   - Use the proposed rubrics to create new instances adapted to your course and its subject.
3. Write rich, diverse descriptions for each component and proficiency level
   - Avoid repeating the same sentence with minor changes.
   - Make each level's description specific, clear and distinct.
4. Apply the standard scoring scale
   - Assign the numeric values: 0.25 – 0.50 – 0.75 – 1.00
5. Integrate the rubrics in the respective e-Activities
   - Integrate the respective rubrics to the e-Activities depending on what skills each activity is meant to develop.

Rubrics can be constructed for the **entire course** and used in multiple activities across the course.

Rich descriptions = higher quality AI recommendations

FORMATIVE ASSESSMENT

MONITORING PROGRESS AND PROVIDE ONGOING FEEDBACK THAT HELPS LEARNERS IMPROVE AND EDUCATORS ADJUST THEIR INSTRUCTION

- Educators can monitor progress by using the rubrics at regular time intervals
- Checking progress at regular time intervals during the course gives the opportunity to educators to aid the process and make adjustments to it so to maximize course impact
- Feedback can be shared with learners to foster communication, inclusivity and collaboration towards the common goal: maximizing skills development.

!

Formative assessment is essential to maximize course impact and address learners' needs effectively

4CS & 4C RUBRICS ACROSS THE TESA PHASES

Phase A

- Decide which 4Cs are naturally connected to your topic

Phase B

- Use pre-post surveys to explore learners' current 4C-related attitudes and skills
- Anticipate where learners may struggle cognitively and which skills need more scaffolding

Phase C

- Explicitly state 4C learning outcomes
- Decide which 4C rubric scores will provide evidence for those outcomes

Phase D

- Select tools and materials that enable and foster the development of the 4Cs
- Prepare 4C rubrics as part of your "toolkit"

Phase E

- Design your e-activities so to promote skills development
- Integrate the proper rubrics in each e-activity

Phase F

- During implementation, observe and facilitate 4C development using the rubrics as a reference.

Phase G

- Engage in formative assessment episodes using the rubrics, share input with your learners and adjust your course if needed.

Phase H

- Perform summative assessment and document 4Cs development over time using the rubrics

! The 4Cs and rubrics are not only about assessment (Phase G); They are "present" across all 8 phases.

CONTENTS

DESIGNING YOUR COURSE WITH TESA

- Use the TESA framework to design your course effectively
- Deploy UDL tips to foster inclusion
- Consider inquiry-based learning and student-centred approaches
- Ensure activities promote the development of the 4Cs
- Make rich and diverse rubrics for effective formative assessment

CREATE AN AUGMENTOR COURSE

The augMENTOR workflow

PHASE I: Establish a connection between augMENTOR and your Learning Management System

PHASE II: Build your augMENTOR course

PHASE III: Have your course imported in augMENTOR

PHASE IV: Use augMENTOR while running your course

PHASE I: AUGMENTOR – LMS CONNECTION

- To get started you will need to **establish a contact** between your Learning Management System (LMS) and augMENTOR
- Contact the augMENTOR team to **receive instructions**
- Ask your IT administrator to **provide the necessary information** to the augMENTOR team
- The augMENTOR team will do the **technical setup** and verify a stable a secure connection

Once the connection is established course data will be retrieved periodically without further actions from the educator.

PHASE II: BUILD YOUR AUGMENTOR COURSE

- Once the connection with augMENTOR is set it time to build your augMENTOR course in your LMS.
- Follow the TESA framework to prepare your educational course
- Create the rubrics of your course based on the creative pedagogy strategy
- Parse your course in the LMS, following the instructions that follow.

! augMENTOR is currently aligned with Moodle. Follow these guidelines to setup an augMENTOR course in Moodle.
For other LMSs you will need to ask further assistance from the augMENTOR team.

PHASE II: BUILD YOUR AUGMENTOR COURSE

1. Activities selection

Courses should only include the following activity/resource types (linked to TESA Phase D):

- Resources (links, texts, videos)
- Assignments
- Forum
- Quiz
- SCORM
- Feedback (only for pre-post questionnaire and mental effort questions as indicated)

- Educators can reuse these in any combination and as many times as they find useful

PHASE II: BUILD YOUR AUGMENTOR COURSE

2. Setup: Pre-Post assessment and mental effort

For the AI to establish an initial learner profile and monitor cognitive factors over time, two specific elements must be included in the course design:

- Pre-post questionnaires
  - The course must start and end with the same questionnaire.
  - Linked to TESA Phase B (Cognitive Analysis).
  - Used to assess learners' current level (cognitive + 4Cs).
  - Questions may change slightly in wording, but answer options must remain identical.
  - Answers must be ordinal (e.g. Very Low – Low – Average – High – Very High)

! Use content type 'Feedback' for the pre-post questionnaires and ensure that under 'Question and submission settings' section the 'Record user names' section is not set to 'Anonymous'.

PHASE II: BUILD YOUR AUGMENTOR COURSE

2. Setup: Pre-Post assessment and mental effort

Mental effort question:
At the end of each module, a single question that measures the perceived mental effort expended to complete the thematic section needs to be included, using the following scale:

Effort level	Value	Text
Extremely Low	1	Extremely low intellectual effort
Very Low	2	Very low intellectual effort
Low	3	Low intellectual effort
Relatively Low	4	Relatively low intellectual effort
Neutral	5	Neither low nor high intellectual effort
Relatively High	6	Relatively high intellectual effort
High	7	High intellectual effort
Very High	8	Very high intellectual effort
Extremely High	9	Extremely high intellectual effort

!

Use content type ‘Feedback’ for the mental effort questions and ensure that under ‘Question and submission settings’ section the ‘Record user names’ section is not set to ‘Anonymous’.

PHASE II: BUILD YOUR AUGMENTOR COURSE

3. Implementing the 4Cs assessment (Creative Pedagogy)

- Enable Rubrics in the ‘Advance Grading’ section for the necessary activities
- Use the 4-level numeric scale indicated for the proficiency levels in the rubrics
- Mandatory tagging: Add the name of the corresponding skill written in English and enclosed in parenthesis in the title before the name of every skill/component (eg. (critical thinking) Discerning between fact and opinions.

4. Role assignment

Role information is foundational data for the platform and should be properly set:

Educators = Teacher role | Learner = Student role

! Mandatory tagging is very important for the AI model to correctly map the data.

INTEGRATING A MOODLE COURSE IN THE AUGMENTOR PLATFORM

Before integration make sure all needed elements are in place…

- **Design first**: Build your Moodle course using the TESA structure so collected data aligns with the Learner Model and augMENTOR's knowledge graph.

- **Use the supported activity set only**: Resources, Assignments (ASSIGN), Forum, Quiz, SCORM. (You can use any combination, as many times as needed.)

- **Design 4Cs assessment via rubrics**: Enable advanced grading in ≥1 activity per module; use the 4-level scale 0.25/0.5/0.75/1.0 with rich, non-repetitive descriptors; add mandatory tagging.

- **Prepare pre-post questionnaires & Mental effort**: Same items at start & end with ordinal answers; add a 1–9 mental-effort item at the end of each module.

INTEGRATING A MOODLE COURSE IN THE AUGMENTOR PLATFORM

- Once your course is complete the technical team will load it in augMENTOR.
- After you start using your course and your learners start to interact with it in the LMS, data will be generated and parsed to augMENTOR.
- You will then be able to start using augMENTOR and perform queries about your learners.
- Feedback and recommendations will be generated based on the data coming from the implementation of your course.

Data will be retrieved periodically without further actions from the educator.

CONTENTS

WHAT DOES THE AUGMENTOR PLATFORM OFFER?

It acts as an **intelligent pedagogical partner**

- It turns raw course data into actionable insights
- It does not offer just simple data display
- It provides concrete pedagogical analysis.
- It supports educators in monitoring individual students' progress

What the platform is	≠	**What the platform is NOT**
An evidence-based, course-linked AI that transforms your course data into feedback, guidelines and recommendations.		A general-purpose chatbot (e.g. ChatGPT/Gemini) and not a web search tool: it won't invent or synthesise answers beyond your designated course data.
Human-vetted i.e. educators can review/edit recommendations before sending to learners and can inspect/adjust profiles.		A replacement for teachers: augMENTOR positions AI as a supportive mechanism within a pedagogical framework; final judgment stays with the educator.

WHAT DOES THE AUGMENTOR PLATFORM OFFER?

Educators can

- Make structured queries
- Receive feedback
- Receive guidelines and editable recommendations
- Explore profiles

Learners can

- Make structured queries
- Receive feedback
- Request recommendations approved/edited by the educator

THE AUGMENTOR PLATFORM

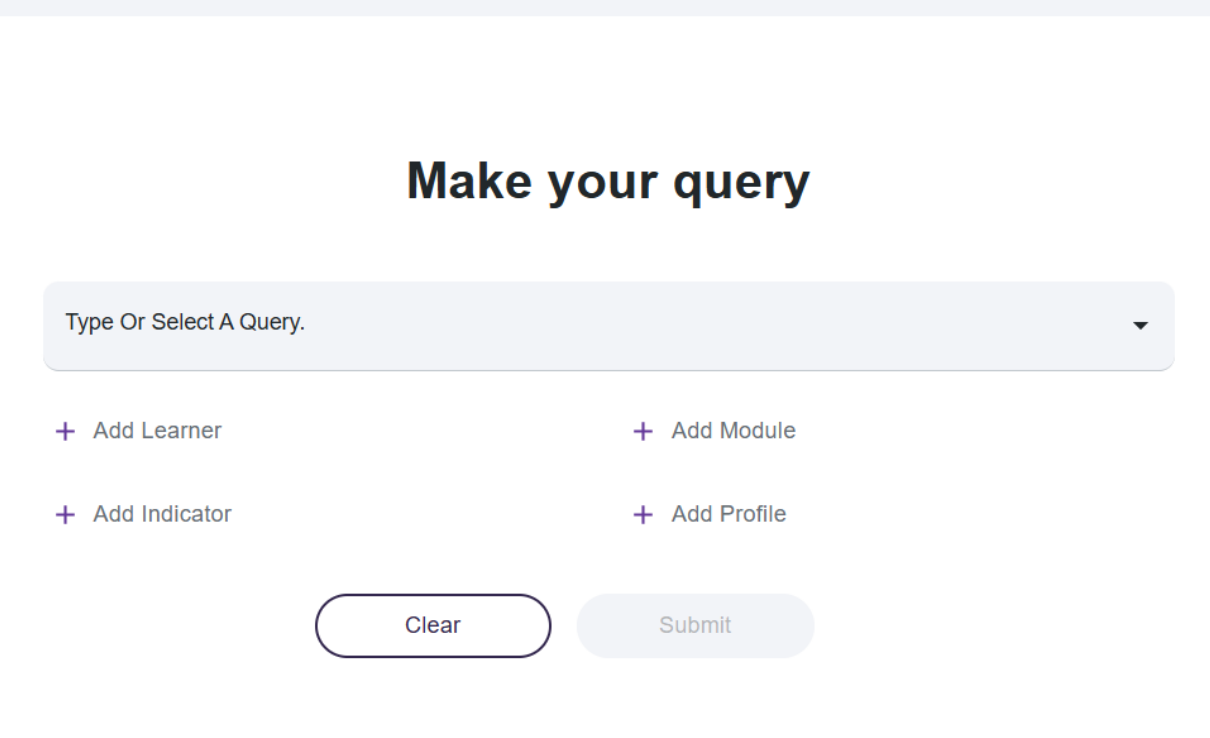
You can visit the augMENTOR platform through this link:
https://augmentor-app.eu-dev.novelcore.org/login

If you don't have an account yet, you can test augMENTOR using our demo course!

Organization: Demo course
User name: demo_educator
Password: #Abcd123

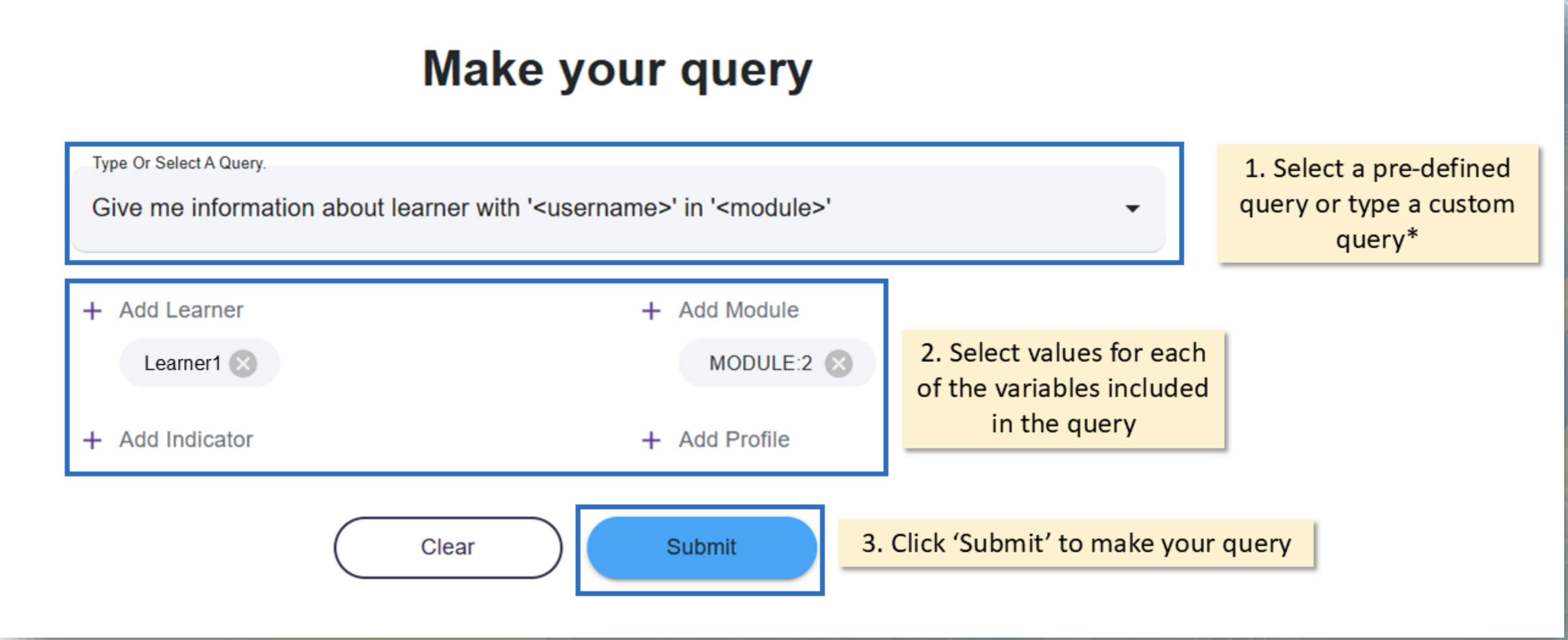
MAKING QUERIES

Once you enter augMENTOR, you are ready start using it by making queries



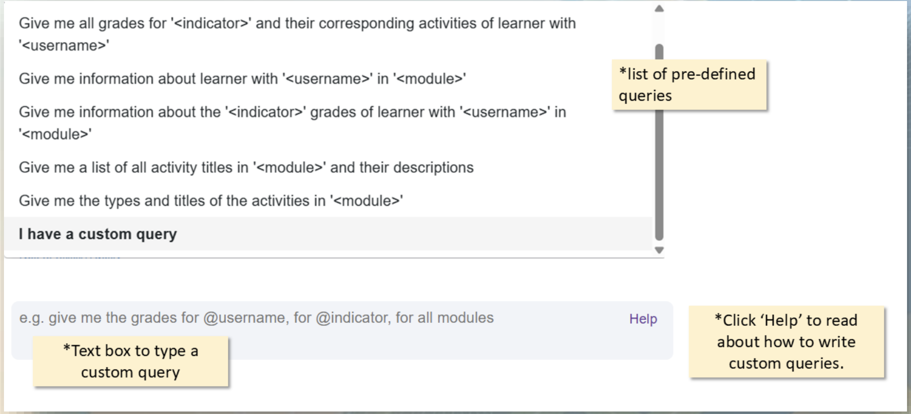
MAKING QUERIES

Once you enter augMENTOR, you are ready start using it by making queries



MAKING QUERIES

- Start by selecting a query from the predefined list or type your own
- Click the help button to learn how to properly construct custom queries.



augMENTOR is not designed as a chatbot. It is designed to provide structured feedback and recommendations based on the specifics of a course and TESA framework.

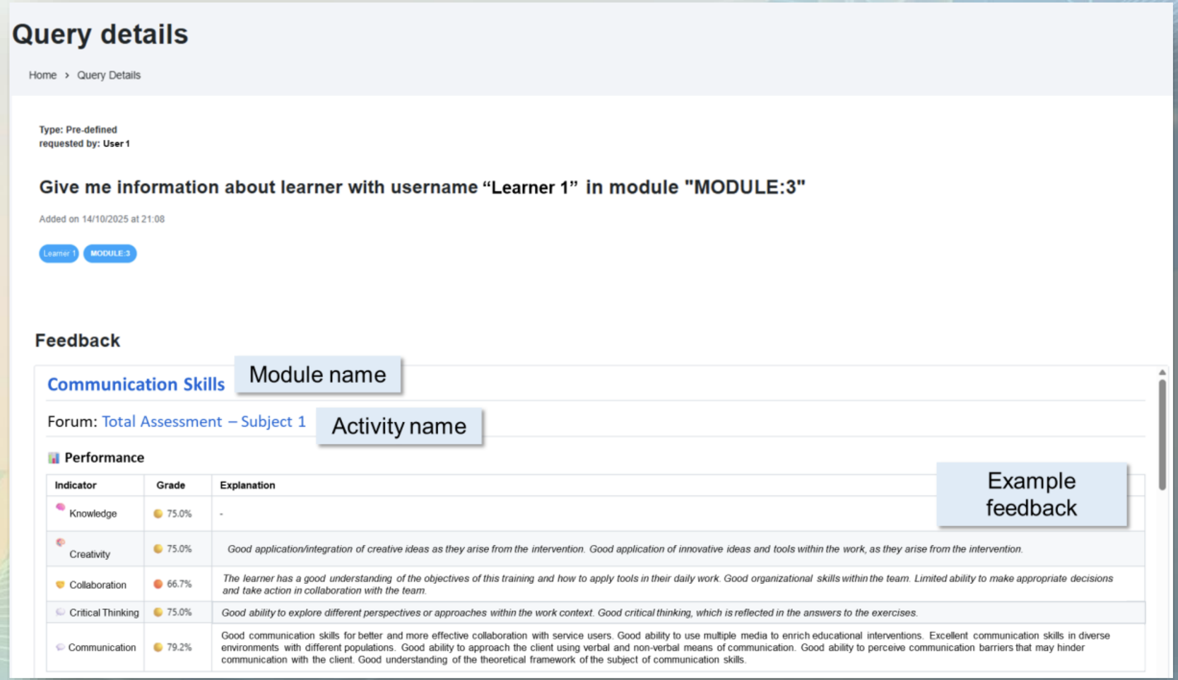
It is best used to monitor learners and personalize the learning process for them.

QUERY DETAILS PAGE

Once a query is submitted, the user is directed to the query details page which has four (4)sections:

- Feedback,
- Guidelines for course design
- Recommendations
- Notes

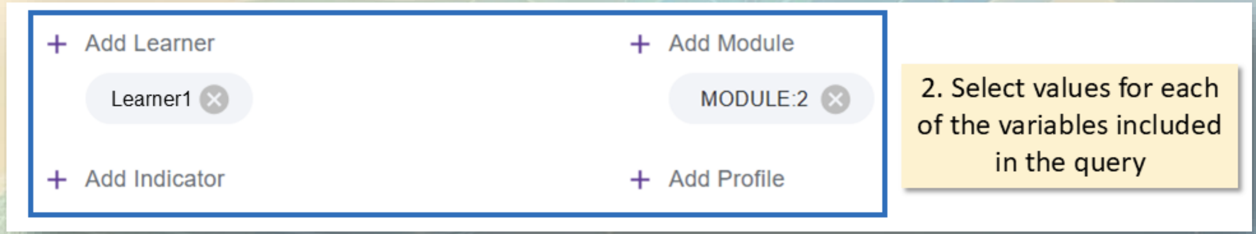
Feedback can vary depending on the query; it includes information and analytics based on the course data.



MAKING QUERIES

The variables that can be included in a query are:

- **Learner** -A list of all learners included in the course.
- **Indicator** - The learning aspects studied based on the pedagogical framework; namely: Knowledge, Creativity, Critical Thinking, Collaboration, Communication.
- **Module** - The list of module titles as retrieved from Moodle.
- **Profile** - The list of augMENTOR profiles as generated by the system.



MAKING CORRECT QUERIES

Principles for correct queries

- Use the built-in variables in your phrasing: Learner, Indicator, Module, Profile.

- Keep it short: Avoid narratives. If nothing returns, it's usually missing evidence or wording - **rephrase with variables**.

Hint for Educators:
The platform only answers from the designated course's data and no generic advice.

MAKING CORRECT QUERIES

Query patterns

When asking for information, it is important to define the values in each of the query's variables.

Example 1: Give me the "***indicator***" grades of learner with username "***learner's username***" in "***module 1***"

- Indicator: Could be "*Knowledge*", "*Creativity*", "*Collaboration*", "*Critical Thinking*", "*Communication*"
- Username: It defines the learner(s) for which someone can request information. Users are able to request data for multiple learners, not just one.
- Module: The name of the module that users request data.

!

Learners can only make queries about themselves. Educators can make queries about all learners in the course.

MAKING CORRECT QUERIES

Query patterns

When asking for information, it is significant to define the values in each of the query's variables.

- ✓ Example #2: Give me all grades for indicator 'Creativity' and their corresponding activities for learner with username 'user1'
- ✓ Example #3: Give me a list of all activity titles in "**Module 2**" and their descriptions
- ✓ Example #4: Give me the types and titles of the activities in **"Module 3"**
- ✓ Example #5: Give me information for learner with username **"Learner 12"** for indicator **"Collaboration"** in module **"Module 4"**
- × Give me recommendation for learner with username "**Learner 1**" for indicator "**Collaboration**" in module "**MODULE:1**"

Visit the
[augMENTOR user Guide]
for a detailed tour of the
platform!

ENJOY USING AUGMENTOR!

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