# Generative AI assisted digital educational platform



# TurkuEval.AI

An AI evaluation tool that aligns with the evaluation criteria of the institution and learning materials, enabling the evaluation of student's and pupil's performance and providing them with personalized feedback, thus reducing the time teachers and educational institutions spend on evaluating, grading and feedback.

Teacher
(Examination)

3- Feedback

1- Question

4- Validated Feedback
AI

Student

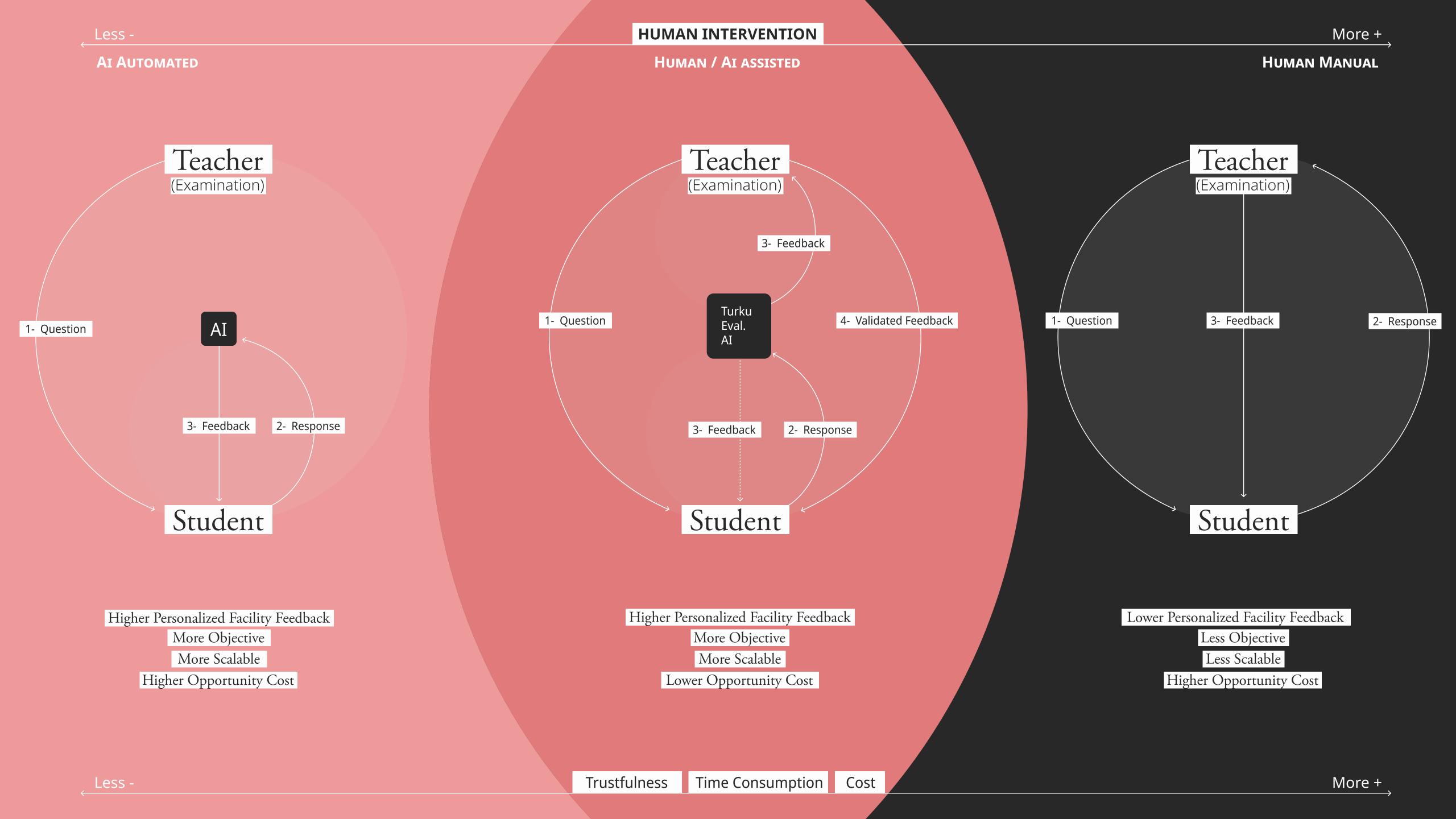
Prof. Dr. Jussi Jauhiainen / jusaja@utu.fi Agustín Garagorry Guerra / abgagu@utu.fi



**Balance human oversight with AI assistance:** TurkuEval combines human and AI collaboration, improving evaluation reliability and student learning while reducing over-reliance on AI.

**Enhance personalization and objectivity:** AI implementation provides more personalized feedback and objective assessment compared to manual processes, without the drawbacks of human-only evaluations.

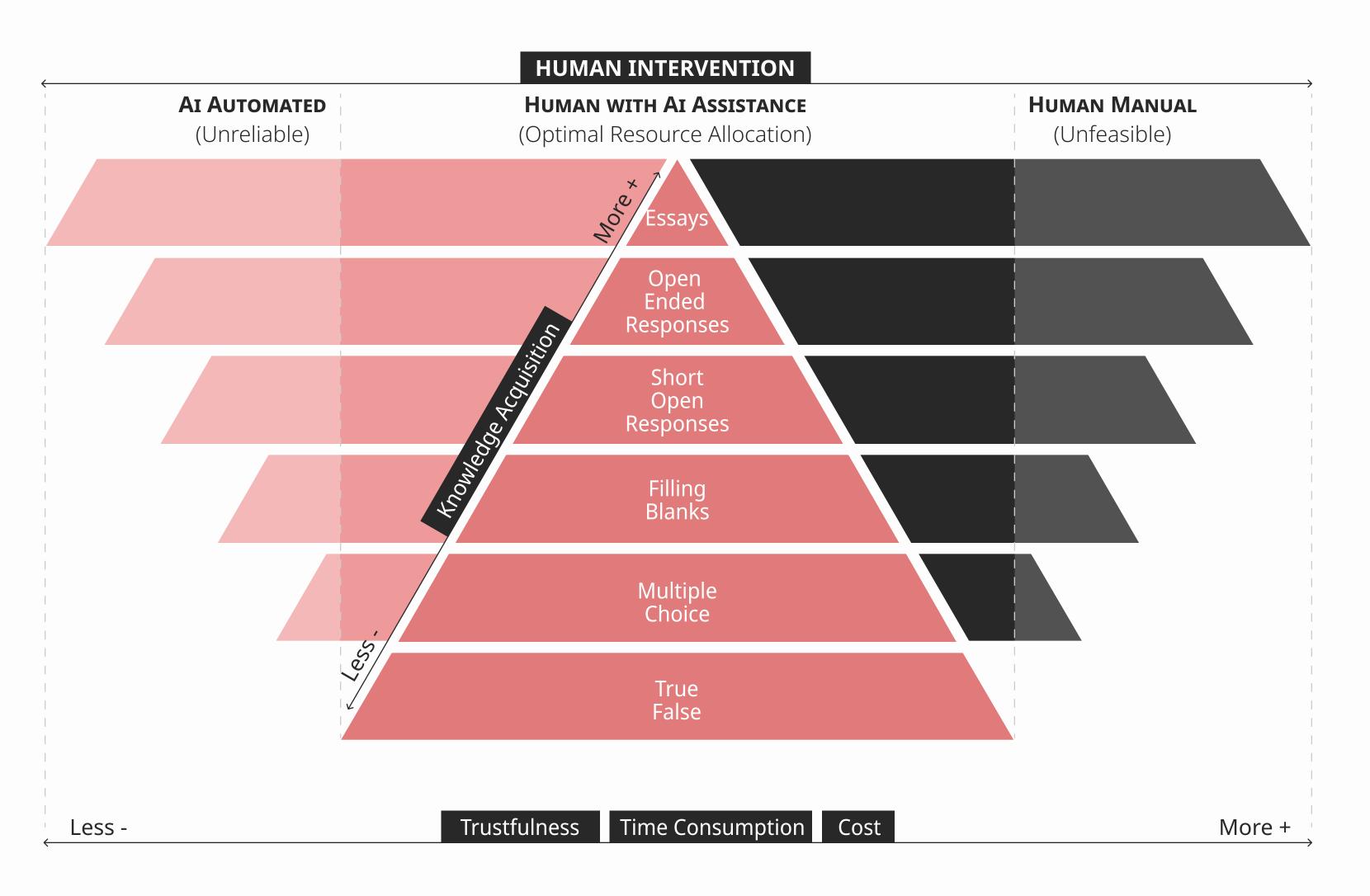
**Optimize resource allocation:** AI integration increases scalability and efficiency, allowing educators to focus on high-value interactions while automating routine tasks.



## Learning AI assisted Trade-Off Ladder









## How is the data being handled?

**Security** »Data is stored in AWS servers

**Manual Delivery:** The University of Turku collects student responses and manages evaluations. It then provides results and feedback directly to participating institutions, reducing data leakage risks associated with third-party platforms.

## Can I trust that AI evaluates correctly?

Up-to-date knowledge \*\*Up to 3 pdf, 20p

**Learning Materials:** Teachers will provide the AI with their course materials. This materials should be ideally text-based PDF files, up to 3 pdf files, shorter than 20 pages.

## What if the AI evaluation process gets interrupted?

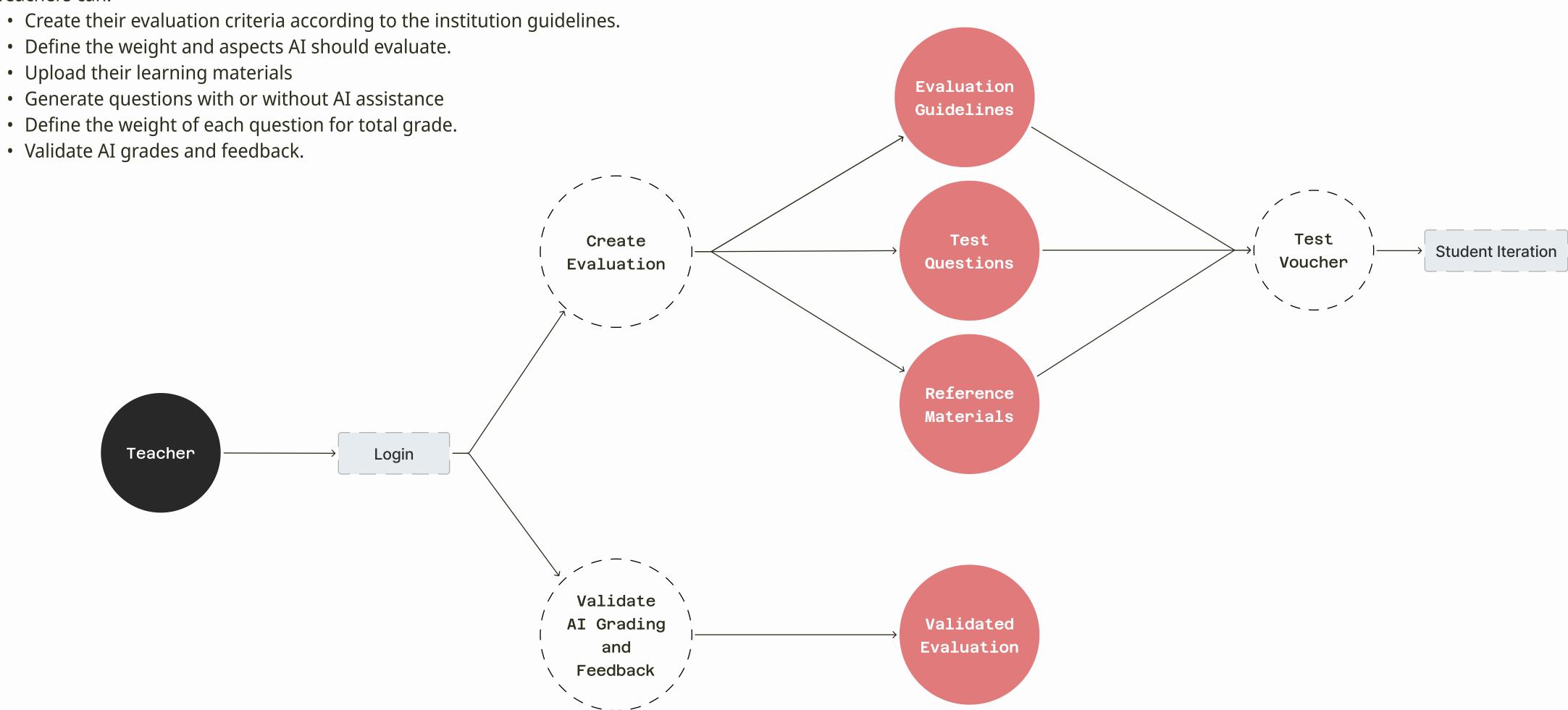
Multi-Step »Data is handled sequentially

**Secure first then evaluate:** Student data is first stored in AWS servers, and then evaluated by AI. In all cases, also the teacher can evaluate the student response in the evaluation validation process.



## Teacher Interaction

## Teachers can:





## Student Interaction

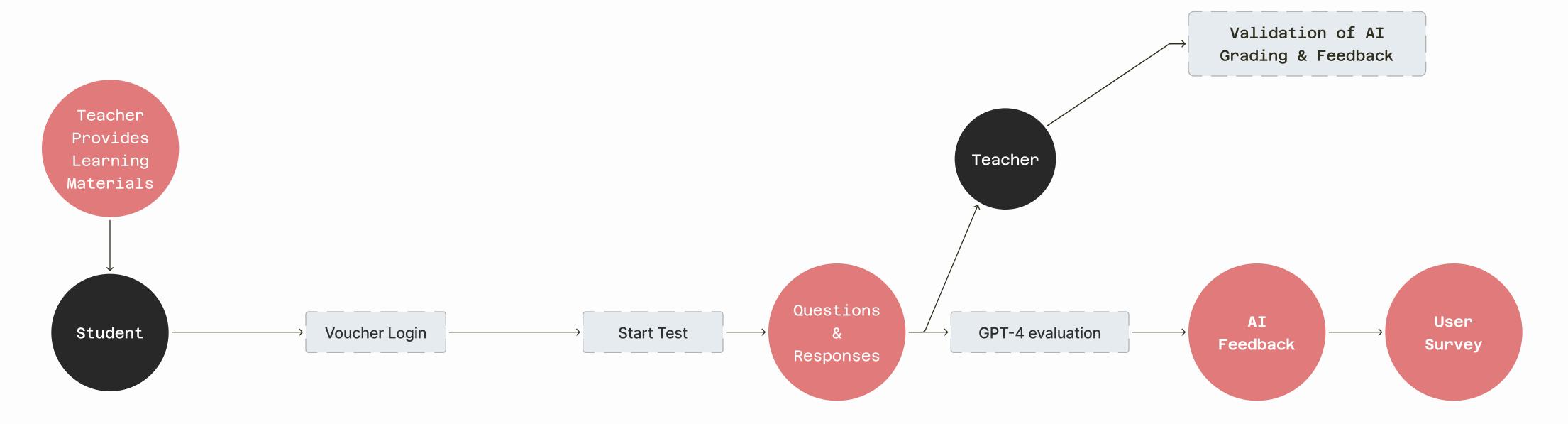
Teacher provides students with the learning materials.

Students will login with the voucher (Digital Code) only once (unless teacher resets the IP).

Students start the test and write their responses with computer (optionally with mobile phone).

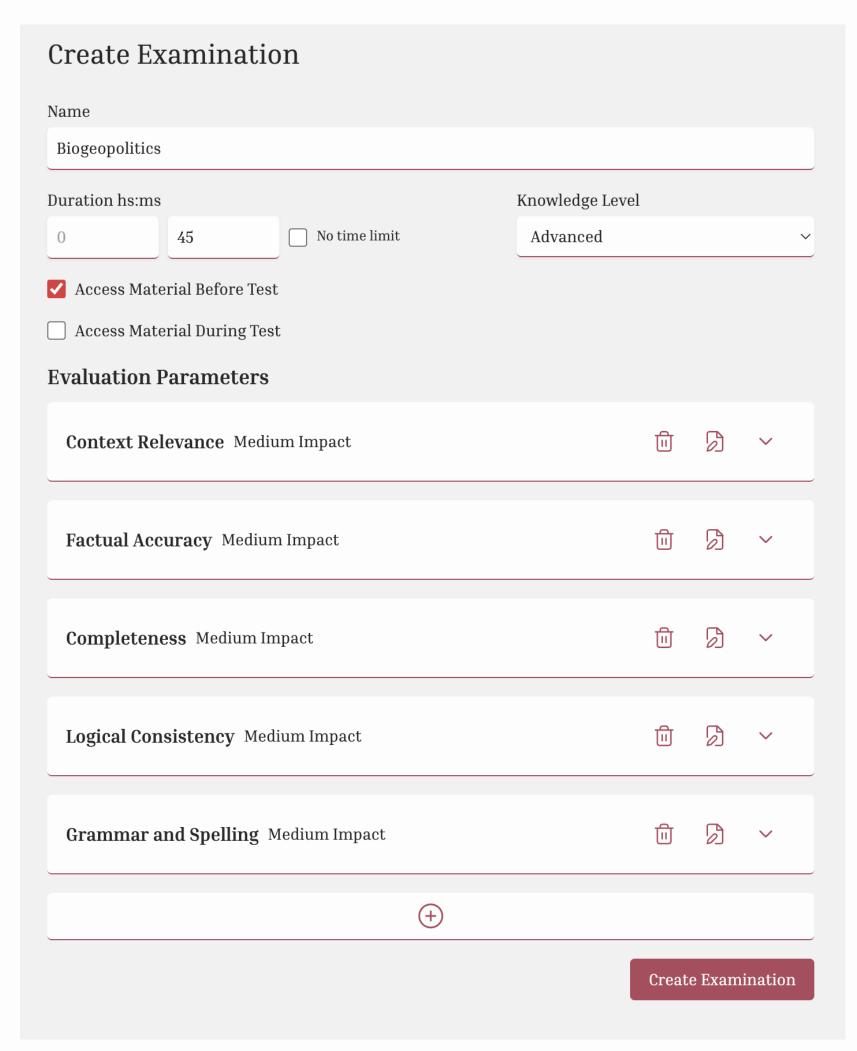
Students respond User Survey questions after finishing the exam responses.

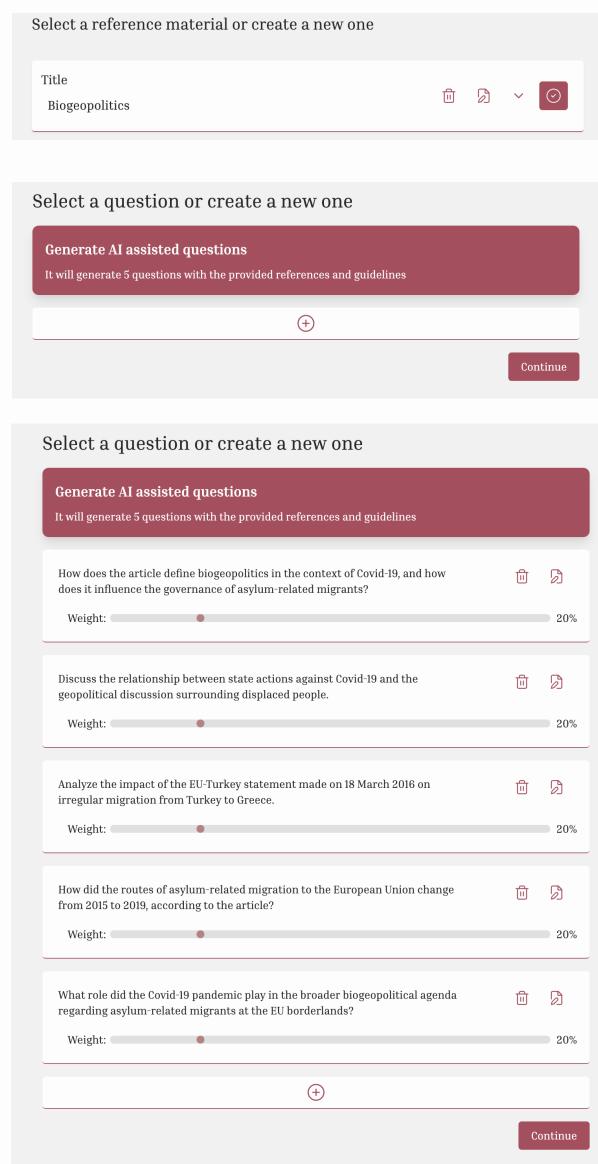
Student response length limit is 1500 characters (200 words approx).

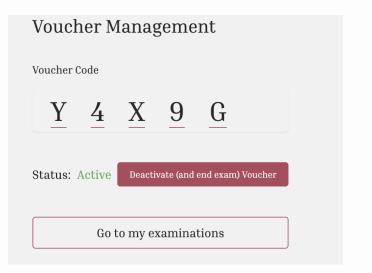


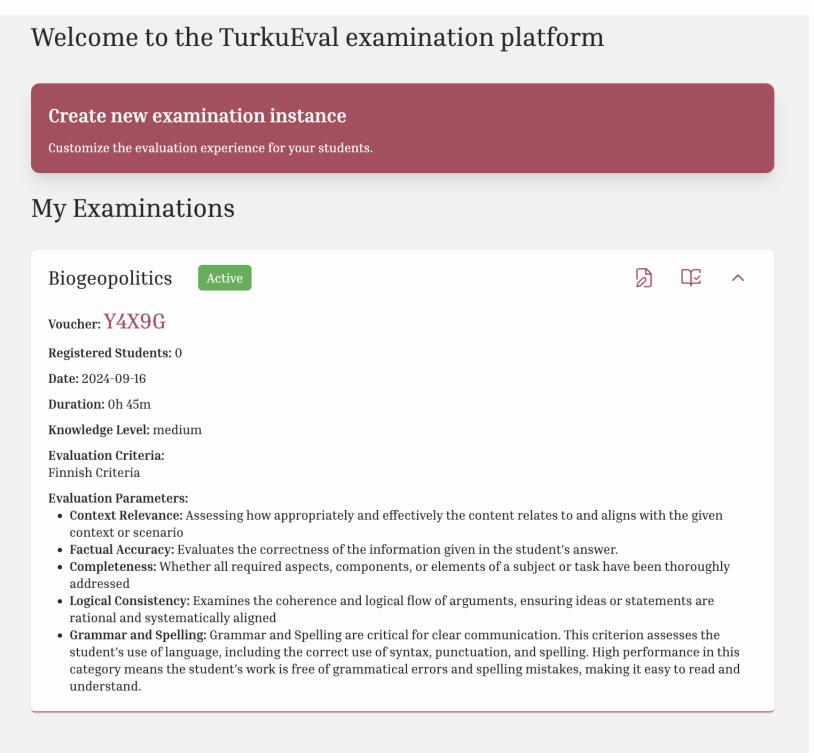


# Example of Teacher Instance











# Example of Student Instance

## Biogeopolitics

Time Remaining Oh 44m 54s Your Student Code GO

## Question 1

How does the article define biogeopolitics in the context of Covid-19, and how does it influence the governance of asylum-related migrants?

Type your answer here...

0/1500

Biogeopolitics generally refers to the intersection of biology, geography, and politics, especially in relation to public health and border control. In the context of Covid-19, it likely involves how nations use biological factors (like virus spread) to justify geopolitical decisions.

For asylum-related migrants, biogeopolitics may influence governance through:

Stricter border controls 674/1500

All is evaluating the results...
This might take a few moments, please don't close this window



# Example of Student Instance

#### **Examination Results**

Student ID | GQ Grade | Good

Question: How did the routes of asylum-related migration to the European Union change from 2015 to 2019, according to the article?

Your Answer: The Eastern Mediterranean route (Turkey to Greece) saw a significant decrease after the 2016 EU-Turkey deal. There was an increase in the use of the Western Mediterranean route (North Africa to Spain) around 2018. The Central Mediterranean route (Libya to Italy) fluctuated, with a decrease after 2017 due to Italy's policies. Some migrants began using newer, often more dangerous routes through the Balkans.

Feedback: Your review is reflective of key changes in asylum-related migration routes into the EU during the specified period, adequately aligning with the context of the migrations observed between 2015 and 2019. However, specific data or examples to underpin the trend shifts mentioned would enhance the answer's factual accuracy. Moreover, incorporating information about the implications of these changes or the number of migrants affected could provide a more complete response. Clarity and organization are strong, and the grammar presented is precise, making your answer easy to follow.

Context Relevance: Good
Factual Accuracy: Satisfactory
Completeness: Passable
Logical Consistency: Good
Grammar and Spelling: Excellent

Question Score: 11.2 / 20

Question: How does the article define biogeopolitics in the context of Covid-19, and how does it influence the governance of asylum-related migrants?

Your Answer: Biogeopolitics generally refers to the intersection of biology, geography, and politics, especially in relation to public health and border control. In the context of Covid-19, it likely involves how nations use biological factors (like virus spread) to justify geopolitical decisions. For asylum-related migrants, biogeopolitics may influence governance through: Stricter border controls Health screening requirements Quarantine policies Changes in asylum processing procedures Justification for limiting or denying entry based on health concerns These measures often aim to manage perceived health risks while also serving political agendas related to migration control.

Feedback: Your answer provides a substantial grounding in the definition of biogeopolitics and its relevant applications during the Covid-19 pandemic. Context relevance is maintained with a focus on governance related to asylum-seekers. However, expanding your answer to include specific examples or cases will increase factual accuracy and completeness. The response demonstrates logical coherence, moving smoothly from a general explanation to specific impacts on asylum governance. The language used is clear, concise, and free from major grammatical errors.

Context Relevance: Very Good
Factual Accuracy: Good
Completeness: Satisfactory
Logical Consistency: Very Good
Grammar and Spelling: Excellent

Question Score: 14.4 / 20



# Example of Student Instance (Survey)

The TurkuEval questionnaire is designed to have a deper understanding of the student perception about AI implementation in the educational field. All of the questions are optional. Data will be anonymous and will only be used for research purposes.

Year of Birth	
Enter year	
What is your gender?	
Select gender	
Describe your level of familiarity with AI	
Select your familiarity level	
Chat-GPT provides accurate evaluations of my answers	
O Strongly Disagree	
O Disagree	
○ Neutral	
○ Agree	
O Strongly Agree	
I trust the Chat-GPT model's assessment of my work	
O Strongly Disagree	
○ Disagree	
○ Neutral	
○ Agree	
O Strongly Agree	
Chat-GPT offers constructive feedback	
O Strongly Disagree	
O Disagree	



## Example of Teacher Instance (Evaluation and Feedback Validation)

Student ID: GQ | Examination grade: Good Pending Validation

How did the routes of asylum-related migration to the European Union change from 2015 to 2019, according to the article?

#### **Student Answer:**

The Eastern Mediterranean route (Turkey to Greece) saw a significant decrease after the 2016 EU-Turkey deal. There was an increase in the use of the Western Mediterranean route (North Africa to Spain) around 2018. The Central Mediterranean route (Libya to Italy) fluctuated, with a decrease after 2017 due to Italy's policies. Some migrants began using newer, often more dangerous routes through the Balkans.

#### Feedback:

Your review is reflective of key changes in asylum-related migration routes into the EU during the specified period, adequately aligning with the context of the migrations observed between 2015 and 2019. However, specific data or examples to underpin the trend shifts mentioned would enhance the answer's factual accuracy. Moreover, incorporating information about the implications of these changes or the number of migrants affected could provide a more complete response. Clarity and organization are strong, and the grammar presented is precise, making your answer easy to follow.

Context Relevance Good	~		
Factual Accuracy Satisfactory	~		
Completeness Passable ~			
Logical Consistency Good	~		
Grammar and Spelling Excellent	~		
Final Mark: 11.20 / 20			
	Edit Feedback	Approve Feedback	

How does the article define biogeopolitics in the context of Covid-19, and how does it influence the governance of asylum-related migrants?

#### **Student Answer:**

Biogeopolitics generally refers to the intersection of biology, geography, and politics, especially in relation to public health and border control. In the context of Covid-19, it likely involves how nations use biological factors (like virus spread) to justify geopolitical decisions. For asylum-related migrants, biogeopolitics may influence governance through: Stricter border controls Health screening requirements Quarantine policies Changes in asylum processing procedures

Justification for limiting or denying entry based on health concerns These measures often aim to manage perceived health risks while also serving political agendas related to migration control.

Student ID: GQ | Examination grade: Good Validated

How did the routes of asylum-related migration to the European Union change from 2015 to 2019, according to the article?

#### **Student Answer:**

The Eastern Mediterranean route (Turkey to Greece) saw a significant decrease after the 2016 EU-Turkey deal. There was an increase in the use of the Western Mediterranean route (North Africa to Spain) around 2018. The Central Mediterranean route (Libya to Italy) fluctuated, with a decrease after 2017 due to Italy's policies. Some migrants began using newer, often more dangerous routes through the Balkans.

#### Feedback:

Your review is reflective of key changes in asylum-related migration routes into the EU during the specified period, adequately aligning with the context of the migrations observed between 2015 and 2019. However, specific data or examples to underpin the trend shifts mentioned would enhance the answer's factual accuracy. Moreover, incorporating information about the implications of these changes or the number of migrants affected could provide a more complete response. Clarity and organization are strong, and the grammar presented is precise, making your answer easy to follow.

Context Relevance Good	~
Factual Accuracy Satisfactory	<b>&gt;</b>
Completeness Passable ~	
Logical Consistency Good	~
Grammar and Spelling Excellent	~
Final Mark: 11.20 / 20	
	Edit Feedback



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