

# Addressing Teacher Resistance Critical Factors with XAI

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Education 360°



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# About us

1. Kaunas (second city in Lithuania)
2. Artes Liberales University
3. Institute for Study Innovations  
(<http://studyonline.lt>)
4. DigCompEdu, DigCompOrg
5. <http://openstudies.vdu.lt>





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# People distrust/ ignore what they



freepik

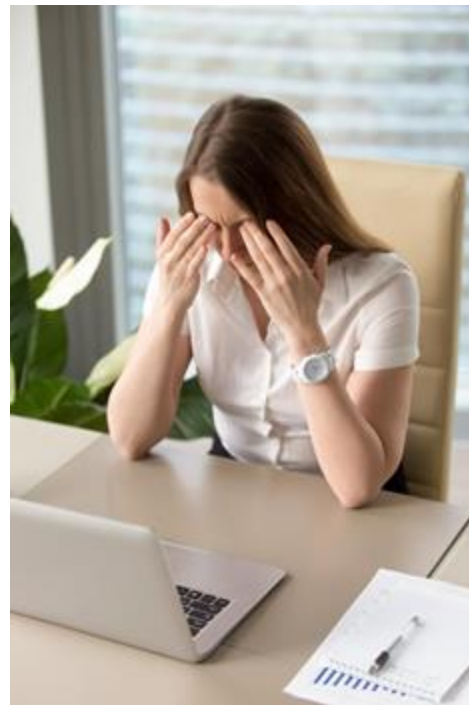
Do not understand



Wildfire and its consequences on nature

freepik

Do not control



freepik

Do not have competences to solve

# What about teachers and AI?

It is not entirely clear why teachers resist towards the use of AI:

- what kind of truth they feel is hidden from them?
- which risks they may identify?
- what conditions would make them feel confident and safe to use AI in the classroom?



# The aim and the argument

This research aims to clarify the potential of XAI to address the critical factors for teacher resistance to use AI.

We argue that teacher – supportive foundational theories of Michel Foucault's and Self-Determination Theory (SDT) once applied clarify the potential of XAI to address the critical factors for teacher resistance to use AI





# Teacher resistance critical factors to use AI in education

- a) increasing student use of AI tools, which raises dilemmas concerning academic integrity, authorship, and the assessment of original work,
- b) integrating AI-generated suggestions into curricula in the way that promotes students' critical thinking and is consistent with the didactical scenarios,
- c) teacher professional autonomy being compromised when faced with pressure to use tools whose operations they do not fully understand and whose impact they cannot completely control.

## Teacher – supportive foundational theories of Michel Foucault's and SDT argue that

- XAI is crucial for strengthening teacher agency
- Foucault's perspective reveals XAI's potential to enhance transparency, enabling teachers to critically engage with AI-driven 'regimes of truth' and resist panoptic surveillance
- SDT further explains how XAI can support teachers' fundamental psychological needs, particularly competence and autonomy, by making AI systems understandable and fostering informed decision-making.



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# AI in 1965:-)



What can we say about teacher's competence, autonomy, self-determination and confidence in this video?

How much explanatory and understandable the situation is to inform teacher's decision making?



# Research in EDU vs IT

## learning problem argument (EDU)




## persona development (IT)



### User Persona

A helpful persona builder

 <p><b>Abbey</b> The Connected University Student</p>	<p>Dr. Susan Olin   Doctor in Marketing</p> <p><b>User Story</b> Susan is using the Abbey Persona to gain insight into how her target audience, high-achieving university students, interacts with technology. She is a marketing professor at a university and is looking for ways to engage her students in a variety of ways, including using technology. She is looking for ways to engage her students in a variety of ways, including using technology.</p> <p><b>Goals</b></p> <ul style="list-style-type: none"><li>1. Engage students in a variety of ways, including using technology.</li><li>2. Increase student engagement with technology.</li></ul> <p><b>Pain Points</b></p> <ul style="list-style-type: none"><li>1. Lack of time to engage students in a variety of ways, including using technology.</li><li>2. Lack of student engagement with technology.</li></ul>
 <p><b>Sarah</b> The Motivated High School Student</p>	<p>Dr. Susan Olin   Doctor in Marketing</p> <p><b>User Story</b> Sarah is using the Sarah Persona to gain insight into how her target audience, high-achieving high school students, interacts with technology. She is a marketing professor at a university and is looking for ways to engage her students in a variety of ways, including using technology.</p> <p><b>Goals</b></p> <ul style="list-style-type: none"><li>1. Engage students in a variety of ways, including using technology.</li><li>2. Increase student engagement with technology.</li></ul> <p><b>Pain Points</b></p> <ul style="list-style-type: none"><li>1. Lack of time to engage students in a variety of ways, including using technology.</li><li>2. Lack of student engagement with technology.</li></ul>



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# Thank you for considering learning theories for the research and development of XAI!

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