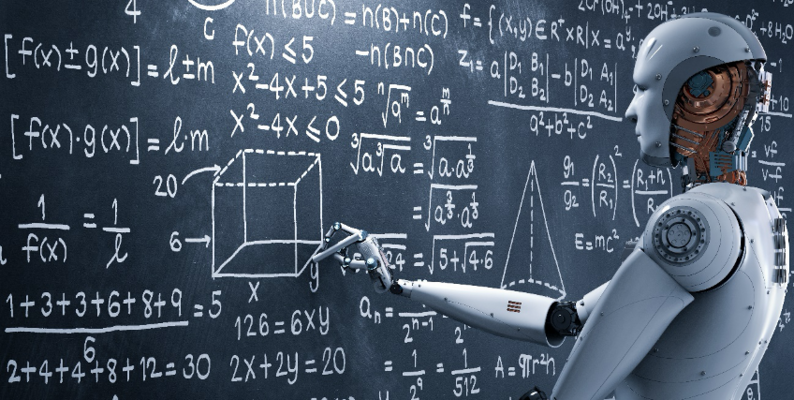
**🤖 Students' Perceptions of AI in Education**

Exploring the Attitudes and Perspectives of Cybernetics Students on AI



**About Dataset**

**Questionnaire**

This dataset contains the results of a survey conducted on **undergraduate students enrolled in the 2nd and 3rd year of study at the Faculty of Cybernetics, Statistics and Economic Informatics**. The survey was conducted online and distributed through social media groups. The aim of the survey was to gather insights into students' perceptions of the role of **artificial intelligence in education**.

**Question 1**: On a scale of 1 to 10, how informed do you think you are about the concept of artificial intelligence? (1-not informed at all, 10-extremely informed)

**Question 2**: What sources do you use to learn about the concept of artificial intelligence?

Internet  
Books/Scientific papers (physical/online format)  
Social media  
Discussions with family/friends  
I don't inform myself about AI

**Question 3**: Express your agreement or disagreement with the following statements: (Strongly Disagree, Partially Disagree, Neutral, Partially Agree, Fully Agree)

1. AI encourages dehumanization
2. Robots will replace people at work
3. AI helps to solve many problems in society (education, agriculture, medicine), managing time and dangerous situations more efficiently
4. AI will rule society

**Question 4**: Express your agreement or disagreement with the following statements: (Strongly Disagree, Partially Disagree, Neutral, Partially Agree, Fully Agree)

1. Machinery using AI is very expensive and resource intensive to build and maintain
2. AI will lead to a global economic crisis
3. AI will help global economic growth
4. AI leads to job losses

**Question 5**: When you think about AI do you feel:  
o Curiosity  
o Fear  
o Indifference  
o Trust

**Question 6**: In which areas do you think AI would have a big impact?  
-Education  
-Medicine  
-Agriculture  
-Constructions  
-Marketing  
-Public administration  
-Art

**Question 7**: On a scale of 1 to 10, how useful do you think AI would be in the educational process? (1- not useful at all, 10-extremely useful)

**Question 8**: What do you think is the main advantage that AI would have in the teaching process?  
o Teachers can be assisted by a virtual assistant for teaching lessons and answering students' questions immediately  
o More efficient management of teachers' time  
o More interactive and engaging lessons for students  
o Other

**Question 9**: What do you think is the main advantage that AI would have in the learning process?  
o Personalized lessons according to students' needs  
o Universal access for all students eager to learn, including those with special needs  
o More interactive and engaging lessons for students  
o Other

**Question 10**: What do you think is the main advantage that AI would have in the evaluation process?  
o Automation of exam grading  
o Fewer errors in grading system  
o Constant feedback from virtual assistants for each student  
o Other

**Question 11**: What do you think is the main disadvantage that AI would have in the educational process?  
o Lack of a relationship between students and teacher  
o Internet addiction  
o Rarer interactions between students and teachers  
o Loss of information caused by possible system failure

**Question 12**: What is your gender?  
o Female  
o Male

**Question 13**: What is your year of study?  
o Year 2  
o Year 3

**Question 14**: What is your major?  
o Economic Cybernetics  
o Statistics and Economic Forecasting  
o Economic Informatics

**Question 15**: Did you pass all your exams?  
o Yes  
o No

**Question 16**: What is your GPA for your last year of study? (Note that grades are from 1 to 10 in Romania)  
o 5.0-5.4  
o 5.5.-5.9  
o 6.0-6.4  
o 6.5-6.9  
o 7.0-7.4  
o 7.5-7.9  
o 8.0-8.4  
o 8.5-8.9  
o 9.0-9.4  
o 9.5-10

**ANALYSIS IN EXCEL**

I have done some analysis in Excel, let me provide the analysis

**Analysis**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Question 1** |  |  | **Row Labels** | **AI knowledge** |
| **Row Labels** | **Count of AI knowledge** |  | 1 | 3% |
| 1 | 3 |  | 2 | 2% |
| 2 | 2 |  | 3 | 4% |
| 3 | 4 |  | 4 | 12% |
| 4 | 11 |  | 5 | 19% |
| 5 | 17 |  | 6 | 19% |
| 6 | 17 |  | 7 | 19% |
| 7 | 17 |  | 8 | 14% |
| 8 | 13 |  | 9 | 5% |
| 9 | 5 |  | 10 | 2% |
| 10 | 2 |  |  |  |
| **Grand Total** | **91** |  |  |  |
|  |  |  |  |  |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Row Labels** | **Count of Utility grade** |  | **Row Labels** | **Count of Utility grade** |
| 2 | 2 |  | 2 | 2% |
| 3 | 4 |  | 3 | 4% |
| 4 | 5 |  | 4 | 5% |
| 5 | 4 |  | 5 | 4% |
| 6 | 13 |  | 6 | 14% |
| 7 | 14 |  | 7 | 15% |
| 8 | 17 |  | 8 | 19% |
| 9 | 11 |  | 9 | 12% |
| 10 | 21 |  | 10 | 23% |
| **Grand Total** | **91** |  |  |  |
|  |  |  |  |  |

**2. What are the most common sources students use to learn about AI?**

|  |  |  |
| --- | --- | --- |
| **AI Sources** | **No** | **Yes** |
| Internet | 17 | 74 |
| Books/Papers | 59 | 32 |
| Social media | 51 | 40 |
| Discussions | 73 | 18 |
| Not-Informed | 85 | 6 |
|  |  |  |
| **Total** | **285** | **170** |
|  |  |  |
| **AI Sources** | **No** | **Yes** |
| Internet | 6% | 44% |
| Books/Papers | 21% | 19% |
| Social media | 18% | 24% |
| Discussions | 26% | 11% |
| Not-Informed | 30% | 4% |

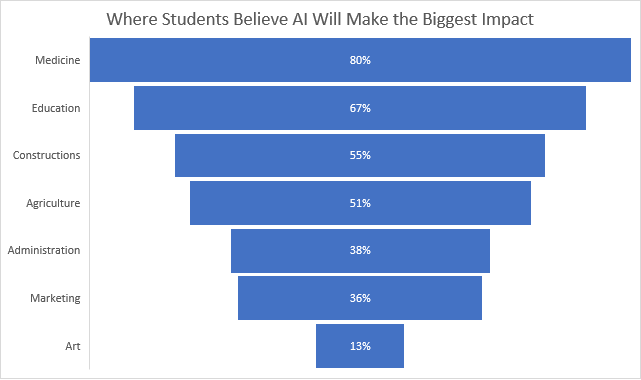
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| --- | --- | --- | --- | --- | --- |
| **Societal Effects** | **Fully Agree** | **Neutral** | **Partially Agree** | **Partially Disagree** | **Strongly Disagree** |
| **AI dehumanization** | 5 | 22 | 15 | 29 | 20 |
| **Job replacement** | 12 | 15 | 33 | 23 | 8 |
| **Problem solving** | 43 | 3 | 35 | 8 | 2 |
| **AI rulling society** | 5 | 30 | 11 | 17 | 28 |
| **Total** | 65 | 70 | 94 | 77 | 58 |
|  |  |  |  |  |  |
| **Societal Effects** | **Fully Agree** | **Neutral** | **Partially Agree** | **Partially Disagree** | **Strongly Disagree** |
| **AI dehumanization** | 8% | 31% | 16% | 38% | 34% |
| **Job replacement** | 18% | 21% | 35% | 30% | 14% |
| **Problem solving** | 66% | 4% | 37% | 10% | 3% |
| **AI rulling society** | 8% | 43% | 12% | 22% | 48% |

**5. Do students believe AI leads to job loss or global economic growth?**

|  |  |  |  |
| --- | --- | --- | --- |
| **Job loss** |  |  |  |
| **Row Labels** | **Economic Cybernetics** | **Economic Informatics** | **Statistics & Forecasting** |
| Fully Agree | 13% | 9% | 13% |
| Partially Agree | 40% | 35% | 53% |
| Neutral | 13% | 30% | 18% |
| Partially Disagree | 33% | 13% | 13% |
| Strongly Disagree | 0% | 13% | 3% |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Economic Impacts** | **Fully Agree** | **Neutral** | **Partially Agree** | **Partially Disagree** | **Strongly Disagree** |
| **AI costly** | 13 | 27 | 39 | 11 | 1 |
| **Economic crisis** | 4 | 30 | 12 | 30 | 15 |
| **Economic growth** | 16 | 31 | 36 | 8 | 0 |
| **Job loss** | 11 | 18 | 40 | 18 | 4 |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| **Economic Impacts** | **Fully Agree** | **Neutral** | **Partially Agree** | **Partially Disagree** | **Strongly Disagree** |
| **AI costly** | 30% | 25% | 31% | 16% | 5% |
| **Economic crisis** | 9% | 28% | 9% | 45% | 75% |
| **Economic growth** | 36% | 29% | 28% | 12% | 0% |
| **Job loss** | 25% | 17% | 31% | 27% | 20% |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Areas** | **Yes** | **No** |  | **Areas** | **Yes** | **No** |
| **Medicine** | 80% | 20% |  | **Medicine** | 73 | 18 |
| **Education** | 67% | 33% |  | **Education** | 61 | 30 |
| **Constructions** | 55% | 45% |  | **Constructions** | 50 | 41 |
| **Agriculture** | 51% | 49% |  | **Agriculture** | 46 | 45 |
| **Administration** | 38% | 62% |  | **Administration** | 35 | 56 |
| **Marketing** | 36% | 64% |  | **Marketing** | 33 | 58 |
| **Art** | 13% | 87% |  | **Art** | 12 | 79 |



|  |  |
| --- | --- |
| **Question 8** |  |
| **Row Labels** | **Count of Advantage teaching** |
| AI Assistant | 39 |
| Engaging Lessons | 32 |
| Time Management | 20 |
| **Grand Total** | **91** |
|  |  |
| **Row Labels** | **Advantage teaching** |
| AI Assistant | 43% |
| Engaging Lessons | 35% |
| Time Management | 22% |

|  |  |
| --- | --- |
| **Question 9** |  |
| **Row Labels** | **Count of Advantage learning** |
| Engaging Lessons | 16 |
| Personalized Lessons | 27 |
| Universal Access | 48 |
| **Grand Total** | **91** |
|  |  |
| **Row Labels** | **Advantage learning** |
| Engaging Lessons | 18% |
| Personalized Lessons | 30% |
| Universal Access | 53% |

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| **Question 10** |  |
| **Row Labels** | **Count of Advantage evaluation** |
| Auto Grading | 22 |
| Constant Feedback | 45 |
| Fewer Errors | 24 |
| **Grand Total** | **91** |
|  |  |
|  |  |
| **Row Labels** | **Advantage evaluation** |
| Auto Grading | 24% |
| Constant Feedback | 49% |
| Fewer Errors | 26% |

|  |  |
| --- | --- |
| **Question 11** |  |
| **Row Labels** | **Count of Disadvantage educational process** |
| Data Loss | 10 |
| Fewer Interactions | 23 |
| Internet Addiction | 24 |
| No Student-Teacher Bond | 34 |
| **Grand Total** | **91** |
|  |  |
|  |  |
| **Row Labels** | **Count of Disadvantage educational process** |
| Data Loss | 11% |
| Fewer Interactions | 25% |
| Internet Addiction | 26% |
| No Student-Teacher Bond | 37% |

A Scatter Plot of AI Knowledge Rating Against Utility Grade

**DEMOGRAPHICS**

|  |  |
| --- | --- |
| **Question 12** |  |
| **Row Labels** | **Count of Gender** |
| Female | 59 |
| Male | 32 |
| **Grand Total** | **91** |
|  |  |
|  |  |
| **Question 13** |  |
| **Row Labels** | **Count of Year of study** |
| Year 2 | 34 |
| Year 3 | 57 |
| **Grand Total** | **91** |
|  |  |
|  |  |
| **Question 14** |  |
| **Row Labels** | **Count of Major** |
| Economic Cybernetics | 30 |
| Economic Informatics | 23 |
| Statistics & Forecasting | 38 |
| **Grand Total** | **91** |
|  |  |
|  |  |
| **Question 15** |  |
| **Row Labels** | **Count of Passed exams** |
| No | 23 |
| Yes | 68 |
| **Grand Total** | **91** |

|  |  |
| --- | --- |
| **Row Labels** | **Gender** |
| Female | 65% |
| Male | 35% |
|  |  |
|  |  |
|  |  |
| **Row Labels** | **Year of study** |
| Year 2 | 37% |
| Year 3 | 63% |
| Total | 100% |
|  |  |
|  |  |
|  |  |
| **Row Labels** | **Major** |
| Economic Cybernetics | 33% |
| Economic Informatics | 25% |
| Statistics & Forecasting | 42% |
| Total | 100% |
|  |  |
|  |  |
|  |  |
| **Row Labels** | **Passed exams** |
| No | 25% |
| Yes | 75% |
| Total | 100% |
|  |  |