# AIIN 12 MINUTES FOR EDUCATION





#### 1/24 MOTIVATION - WHY AI

Personalized learning
Efficiency in administration
Enhanced student engagement
Data-driven insights
Automated grading and feedback



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#### 2/24 INDUSTRY



Schools and Universities
E-learning platforms
Educational content providers
Assessment and testing
Education technology







#### 3/24 STRATEGIC TRENDS

Online learning platforms **Gamification of education** Al tutors and assistants Big data analytics Adaptive learning technologies Virtual and augmented reality **Blockchain for certification** Collaborative learning tech Mobile-first education platforms Cloud-based educational resources



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#### 4/24 WHY CHANGE?

Global educational accessibility
Evolving job market needs
Technological integration demand
Personalized learning importance
Efficiency in administration





#### 5/24 LEADING THE CHANGE

Coursera, EdX, Khan Academy (E-learning)

Duolingo (Language learning)

**Quizlet (Study tools)** 

Blackboard (Education management)

Canvas (Learning management systems)

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#### 6/24 DIGITAL TRANSFORMATION

Al-powered educational assistants Virtual Reality (VR) classrooms Augmented Reality (AR) learning Adaptive learning algorithms Blockchain for secure certifications Cloud computing for accessibility Big data for personalized insights Gamified learning experiences Mobile learning applications **E-learning platforms** 

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#### 7/24 AI DISRUPTION

Personalized learning paths

Predictive analytics for student success

**Al-driven content curation** 

**Automated grading systems** 

**Chatbots for student support** 

AI in educational gaming

Natural Language Processing (NLP) for

language learning

Facial recognition for attendance

Al in special education

Data-driven curriculum development

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#### 8/24 GREAT EXAMPLES OF AI

Al tutors like Carnegie Learning Chatbots like SnatchBot for student querie Al-driven personalized learning from Knewton **Automated essay scoring by Turnitin** Al in Duolingo for language learning IBM Watson for education analytics Content recommendations by Quizlet Facial recognition in Smart Classrooms Al for special needs education in CogniToys Predictive analytics in higher education

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#### 9/24 ECOSYSTEM REQUIREMENTS

**High-speed internet access** 

Technologically equipped classrooms

Continuous professional development for

educators

Collaboration between tech providers and

educators

Supportive policy and funding

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#### 10/24 AI >>> SUSTAINABILITY

Reduces paper usage with digital resources
Enables remote learning, reducing travel
Energy-efficient smart campus technologies
Al for efficient resource allocation
Enhanced global educational accessibility

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11/24
NEW RISKS - ETHICAL
LEGAL, SOCIAL

Data privacy and security concerns
Bias in Al algorithms

Over-reliance on technology

Digital divide among students

Ethical use of surveillance tech

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#### 12/24 AI MISUSE EXAMPLES

Biased AI in admissions (Example: algorithm favoring certain demographics)
Invasive surveillance in classrooms
Plagiarism using AI writing tools
Manipulated educational content
Hacking of educational databases



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### 13/24 THREE AI DILEMMAS

Should AI grade subjective answers?

Is constant AI surveillance in education ethical?

How to ensure equitable Al access?



## 14/24 OPERATIONAL REQUIREMENTS

Strong leadership and vision for AI integration
Skilled team for AI development and
maintenance
Collaborative culture embracing technology
Effective data governance and management
Continuous investment in technology and

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training





#### 15/24 STEP BY STEP APPLICATION

Assess educational needs
Choose suitable AI tools
Train educators and staff
Implement in phases
Monitor and adapt







#### 16/24 BEST PRACTICES

Start small with pilot programs

Focus on student privacy and data security
Encourage educator and student feedback
Continuously update AI systems

Blend traditional and AI methods





### 17/24 AI MODELS

Predictive analytics models
Natural Language Processing (NLP)
Machine learning for personalized learning
Decision tree algorithms
Neural networks for pattern recognition



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#### 18/24 GOOD DIGITAL TWINS

Virtual campus models

Digital twins for laboratory experiments

Virtual reality classroom simulations

Online learning environment replicas

Al-driven school operation models





#### 19/24 COOL NORWEGIAN CASES

Kahoot! (Game-based learning platform

Ludenso (AR for education)

Differ (Social learning platform)

Eduplaytion (Educational gaming)

Skillify (Competence development tools)

Boost AI (Virtual assistants for education)



#### 20/24 GLOBAL LEADERS

United States (Silicon Valley's edtech)
China (Massive online platforms)
India (Rapid edtech growth)
Norway (Innovative learning solutions)

United Kingdom (Diverse educational tech)







### 21/24 FUTURE JOBS

Al curriculum developers

Educational data analysts

VR/AR educational content creators

Al ethics officers in education

Edtech support specialists







#### 22/24 THE FUTURE OF AI

Al for individual learning paths
Immersive VR and AR learning
Al in global education outreach
Ethical Al development in education
Integration of Al in curriculum design











## 23/24 RECOMMENDED READING

"Artificial Intelligence in Education" by Wayne Holmes, Alyssa Friend Wise
"Teaching Machines" by Audrey Watters
"Al in Learning and Education" by Neil Selwyn
"Machine Learning Yearning" by Andrew Ng
"The Hundred-Page Machine Learning Book" by





**Andriy Burkov** 

#### 24/24 GOOD TED TALKS

"The future of learning" by Sugata Mitra
"What AI is — and isn't" by Sebastian Thrun
"Can we build AI without losing control over
it?" by Sam Harris

"Let's teach for mastery — not test scores" by Sal Khan

"The surprising thing I learned sailing solo around the world" by Dame Ellen MacArthur (focuses on adaptive learning and resilience)

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## WHAT WOULD YOU ADD? LET ME KNOW!

