Using Curriculum to Shape AI's Place in Industry

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Learning Outcomes

At the completion of this educational activity, the learner will be able to:

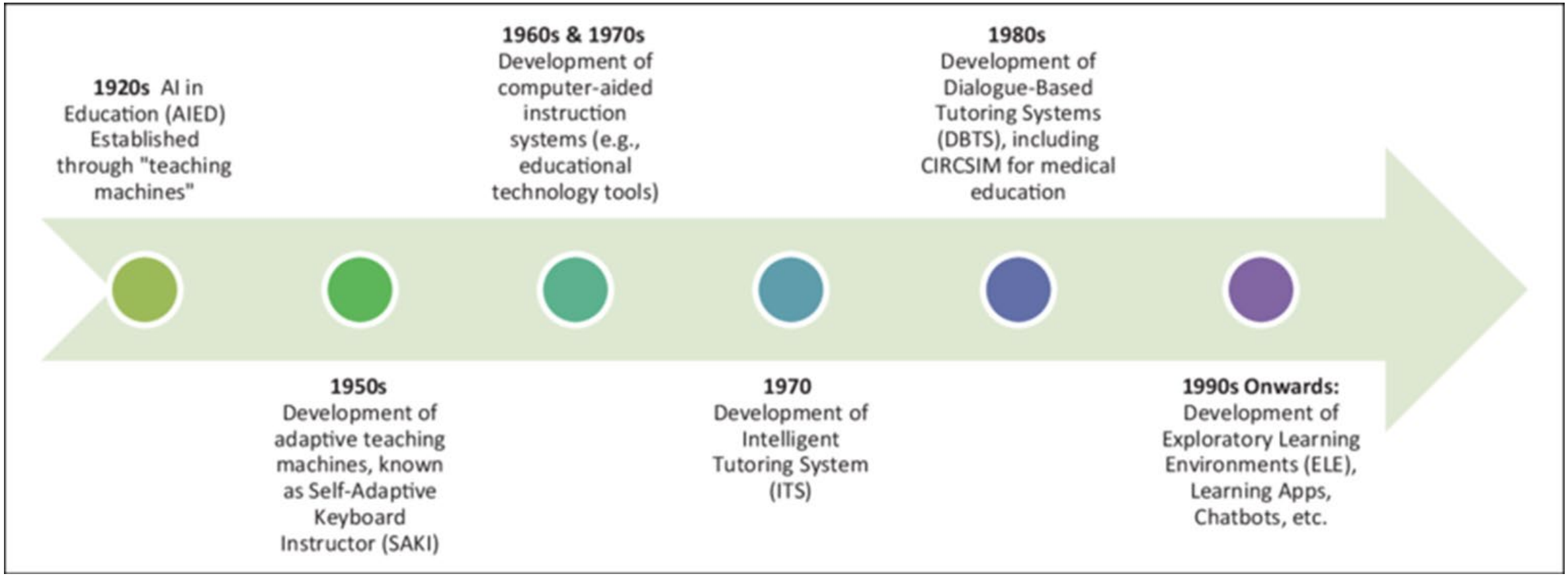
- Gain knowledge on the evolution and significance of AI in higher education
- Uncover how AI in education can create equity for vulnerable populations
- Learn how AI can be used as a retention tool for student
- Experience a pathway of classroom AI to its integration into AI and the workforce

This presentation is for educational purposes only and is not intended for marketing the speaker's employer and/or product.

Agenda

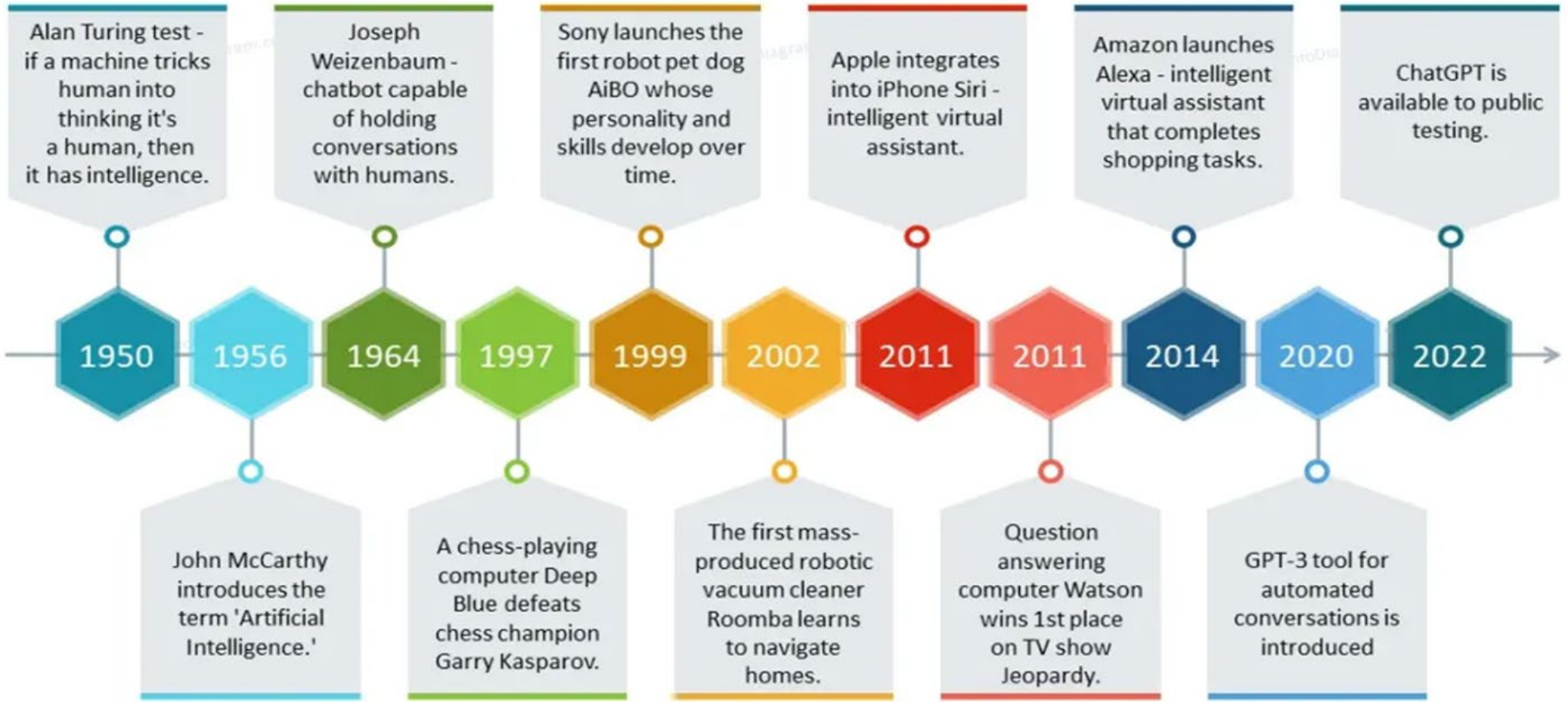
- AI in Higher Education
- Tools of the Trade
- Organizational Considerations
- Faculty and Staff
- Student Perspectives
- Connecting To the Workforce

Historical Perspectives of AI in Learning



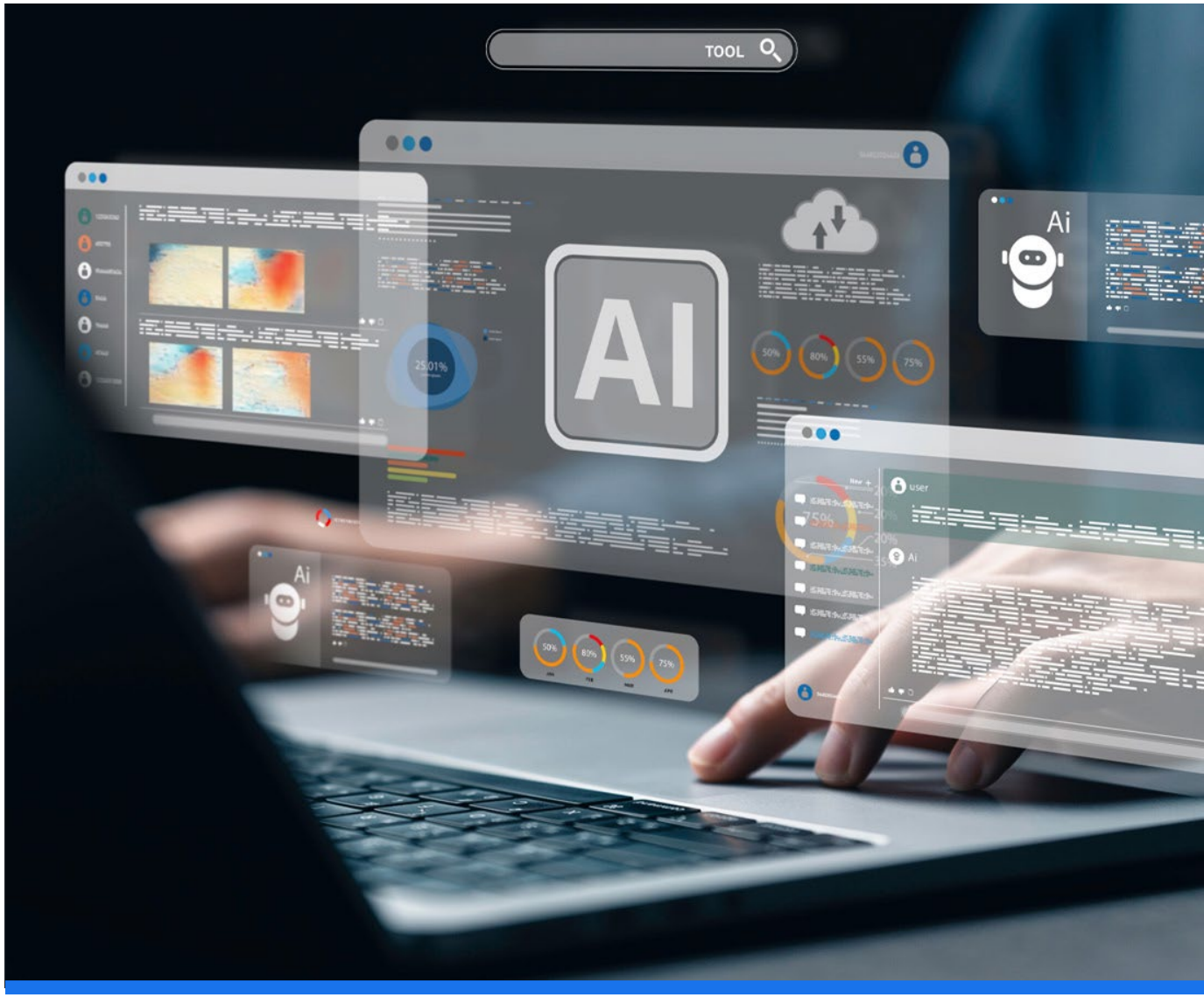
AI From a Student's Perspective

Artificial Intelligence Development History Timeline



Where Are We Now?

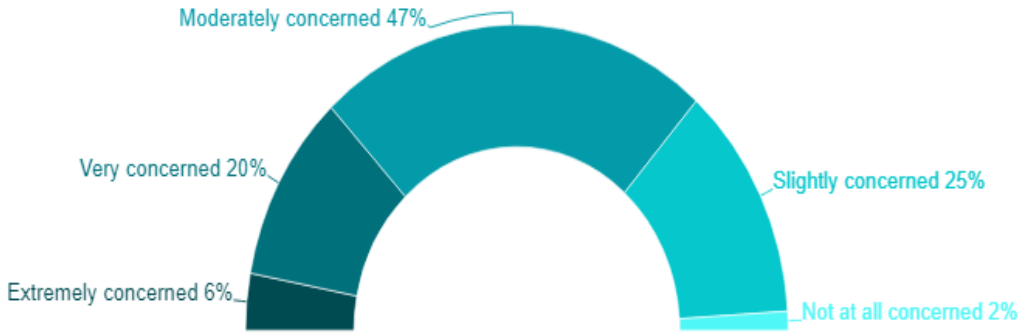
- *Inside Higher Ed*'s annual provost survey in spring 2024 show only 1 in 5 (20%) of their participating universities have developed a policy related to the use of AI, and only 1 in 7 (14%) had reviewed curriculum to ensure for correlation with workforce needs for AI.



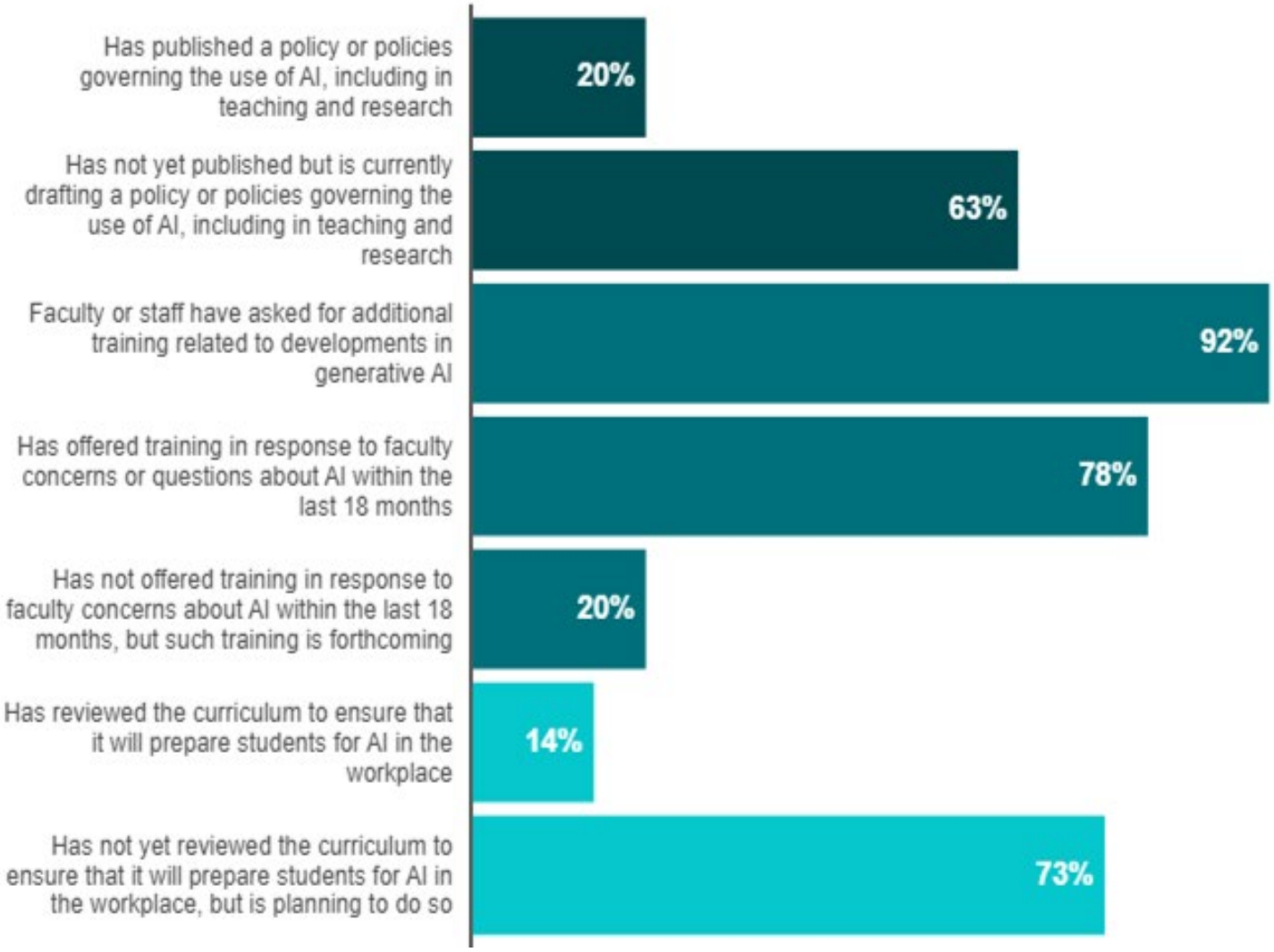
Credit: Deemerwha studio / Shutterstock.com © 2023

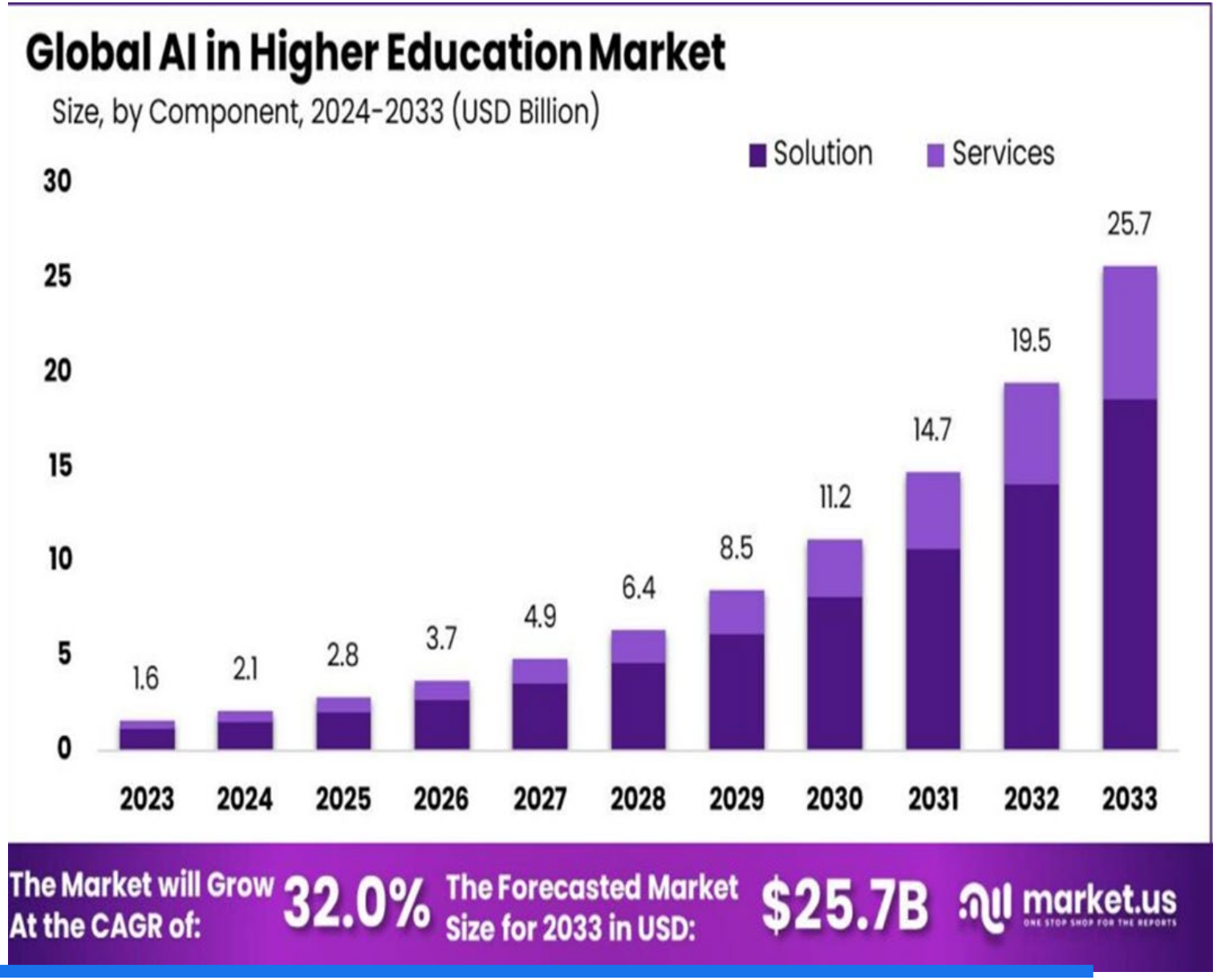
Inside Higher Ed/ Hanover Research Annual Provost Survey: 2024

Provosts express their level of concern about the risk generative AI poses to academic integrity (n=331)



Provosts who indicate the following regarding their institution and AI (n=331):



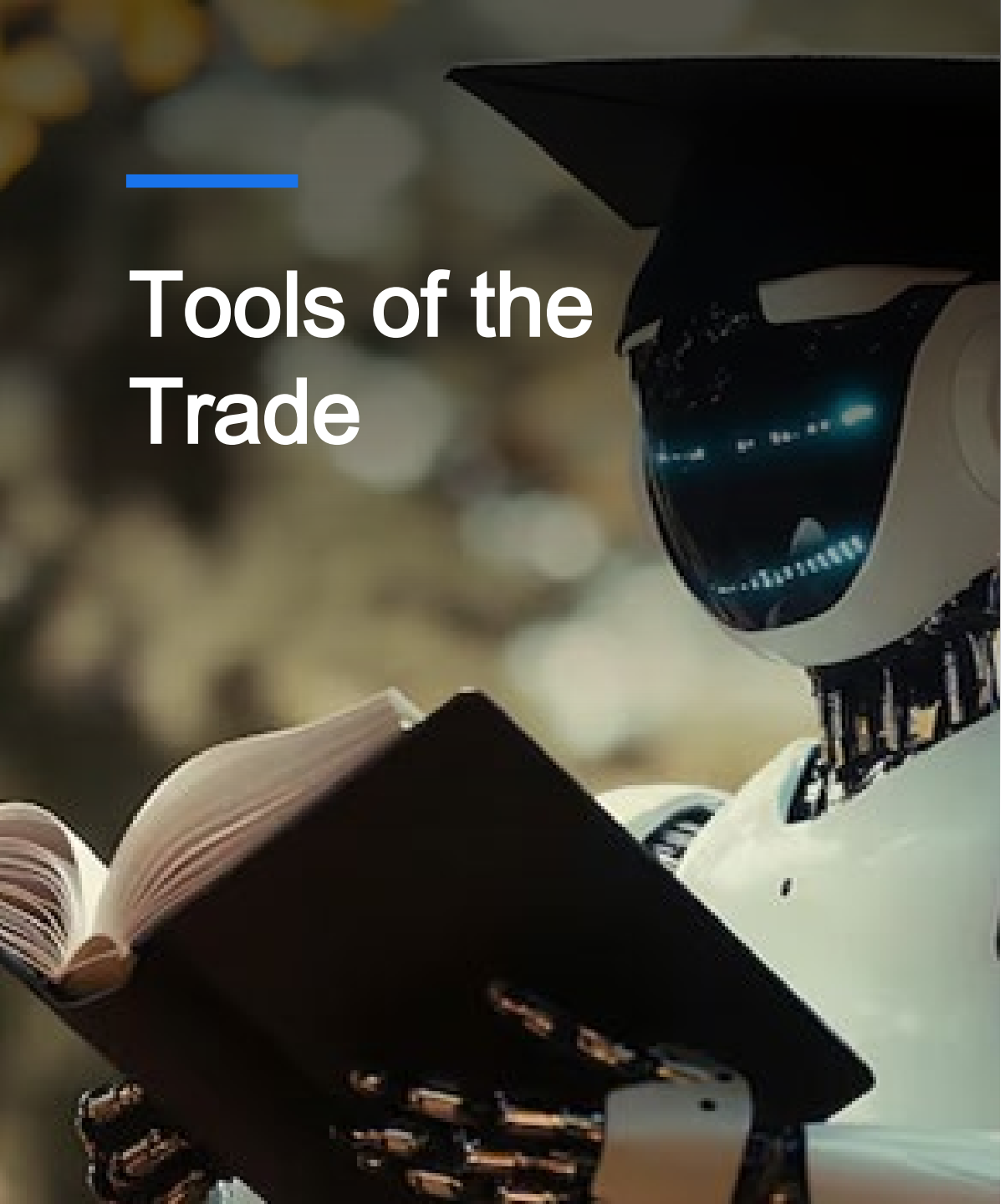


Understanding the Global AI Market

Key Insights

Top Reasons for Growth:

- Covid drives high demand for AI capable Education models
- Technology collaborations with training universities
- Workforce demands for skilled workers, knowledgeable in the use of AI



Tools of the Trade

AI polling and quizzing

- *Example*: Vevox

Intelligent Tutoring Systems (ITS)

- *Example*: TutorAI

Automated Grading and Feedback

- *Example*: Graide

Virtual Reality (VR) and Augmented Reality (AR)

- *Example*: ClassVR

Automated Language Translation

- *Example*: Smartcat

Content Creation

- *Example*: SendstepsAI

Research

- *Example*: ChatPDF

The Future By Design

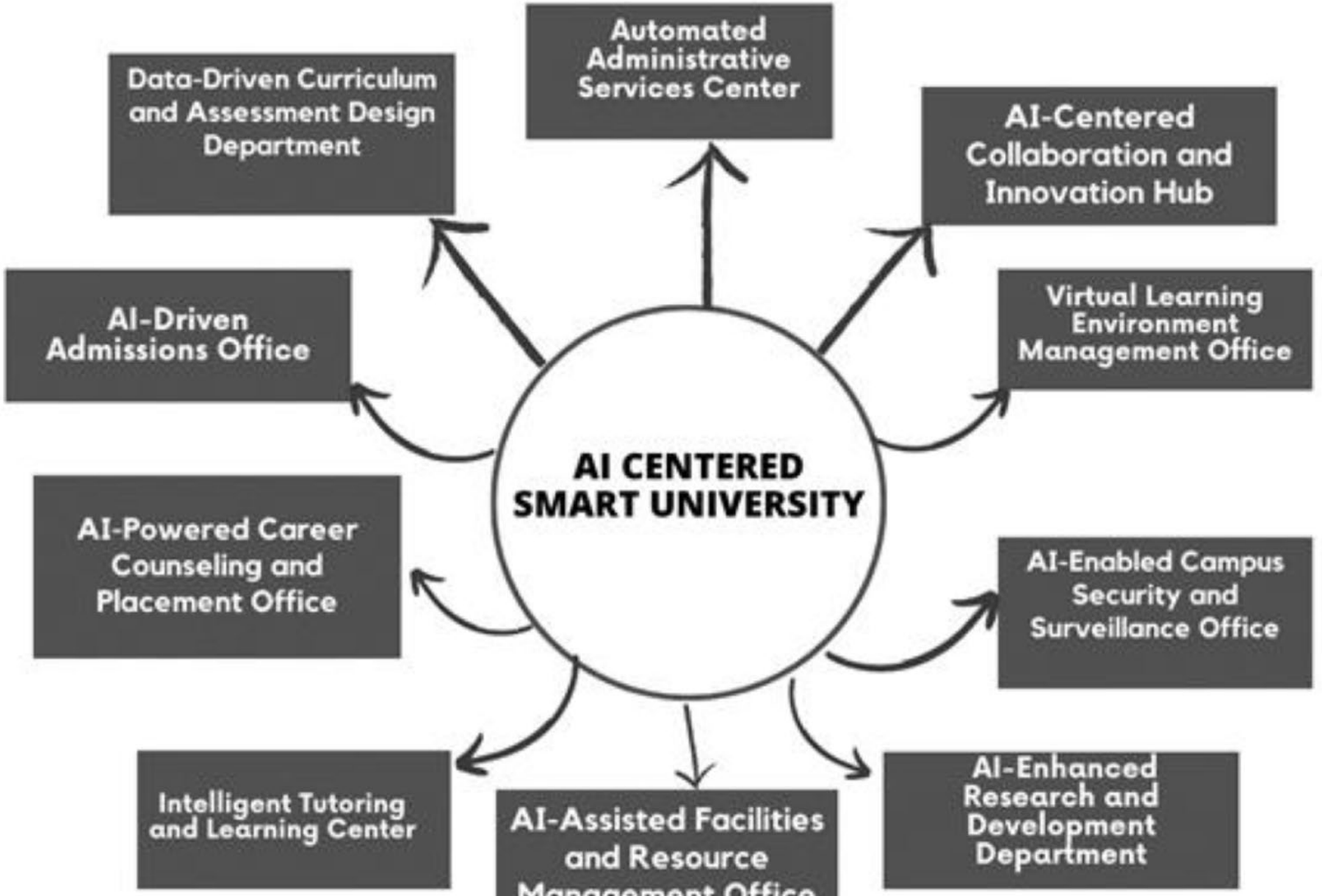


Figure 1. The administrative system conceptual blueprint of an AI-centered smart university.

George, B., Babu, S., & Wooden, O. (2023). Managing the strategic transformation of higher education through artificial intelligence. Administrative Sciences, 13(9), 196. https://doi.org/10.3390/admsci13090196

Potential Benefits

- Improved Retention
- Accessibility and Inclusivity
- Data-Driven Insights
- Experiential Learning
- Increased Student Engagement
- Adaptive Technology

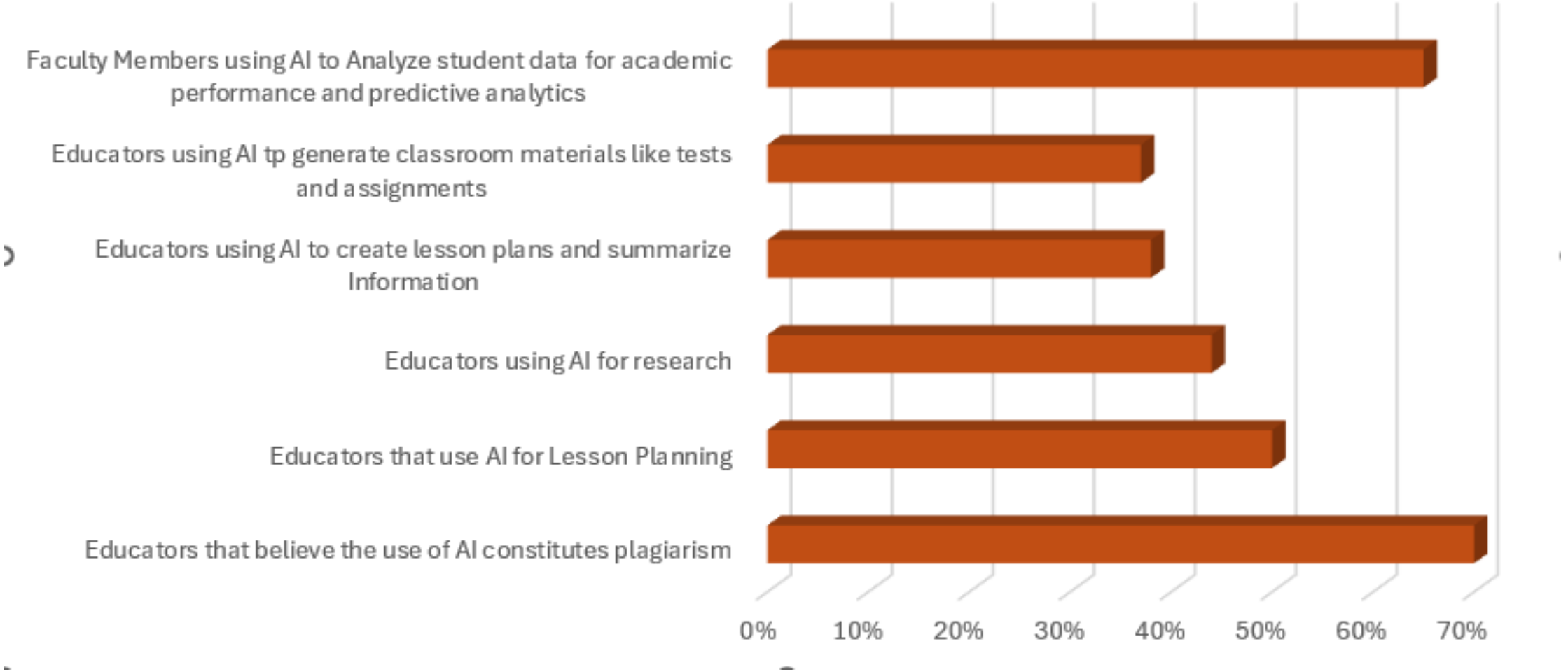
Academic, Administrative, and Managerial Challenges

- Data protection
- Potential algorithmic bias
- Issues demanding human discernment ：
  - Ethical dilemmas
  - Multifaceted research
  - Critical thought
  - Communication, interpersonal, and social skills
- Erosion of educational value association for students
- Job displacement for administrative and academic staff

Institutional Needs

- Legal and Regulatory
- Implementation
- Resources
- Culture

Faculty Perspectives on AI



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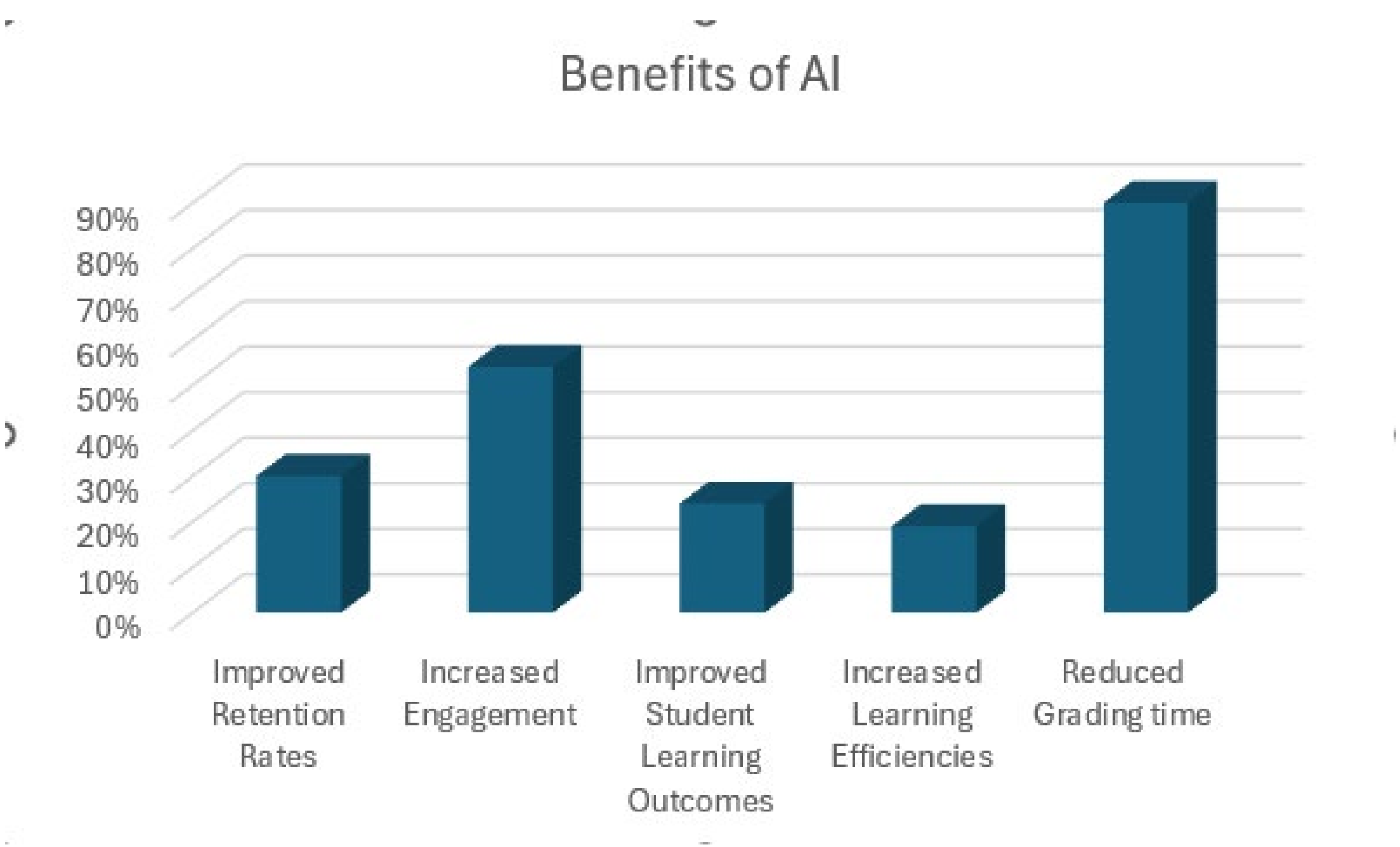
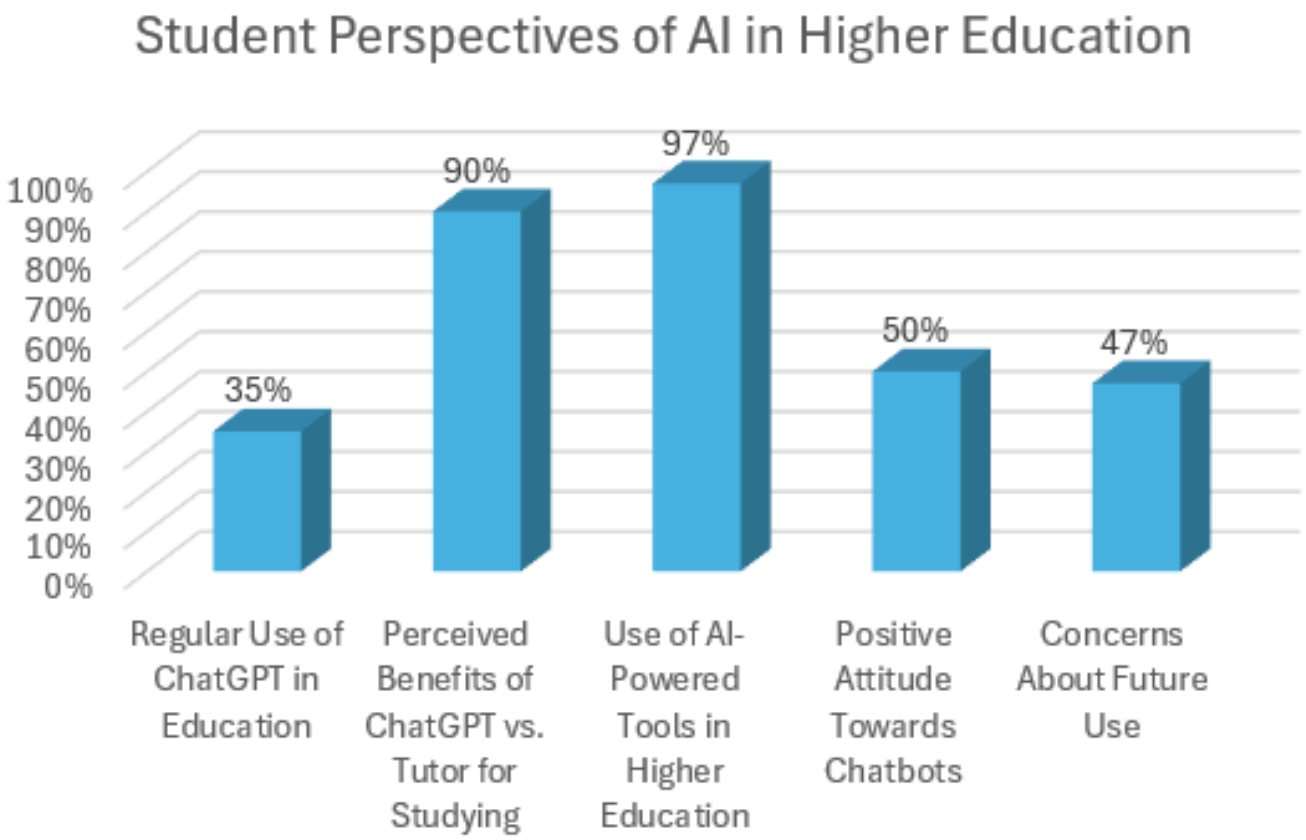


Yan, M., & Ghollam Pourdavood, R. (2024). Faculty and student perspectives on online learning in higher education. Education Sciences, 14(8), 801. https://doi.org/10.3390/educsci14080801

Student Perspectives



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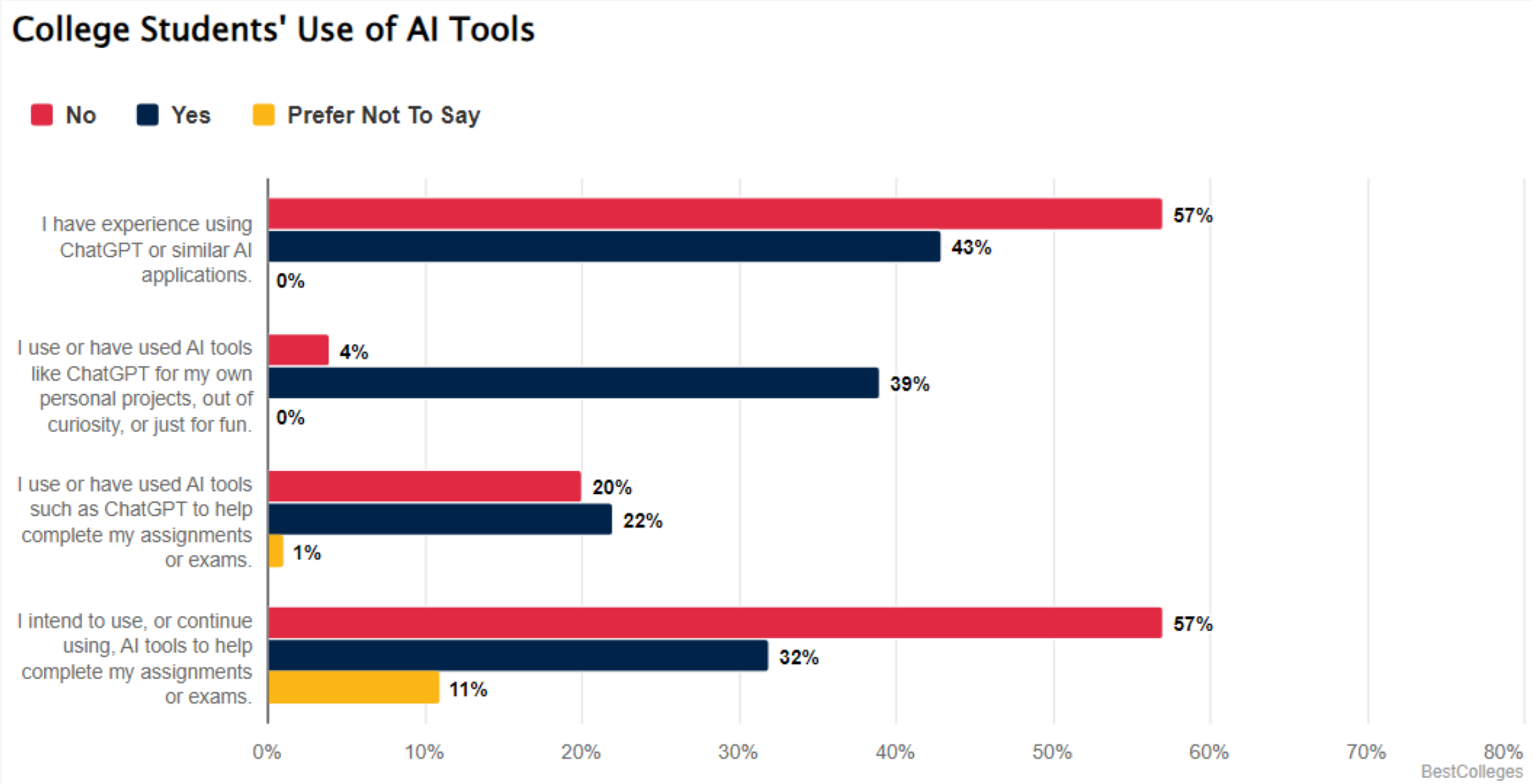
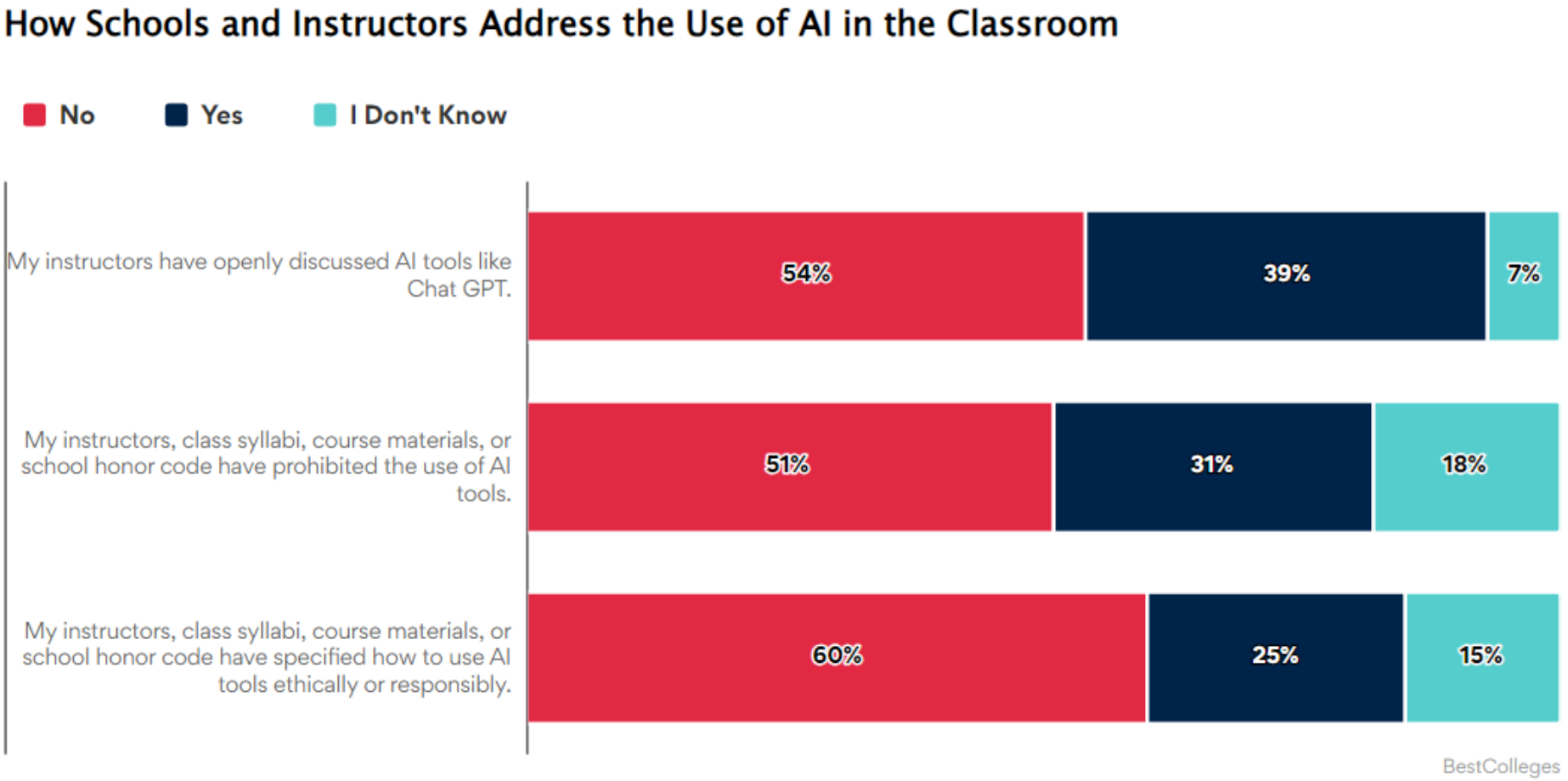
The Struggle is Real:

- Isolation
- Difficulties in maintaining focus
- Difficulties in Communication
- Blurred Boundaries



Welding, L. (2023, March 17). Half of college students say using AI on schoolwork is cheating or plagiarism. Best Colleges. https://www.bestcolleges.com/research/college-students-ai-tools-survey/

What Is the Lesson?



Best Colleges 2023 survey suggests "schools are more likely to have banned AI tools than to have explained how to use them appropriately".

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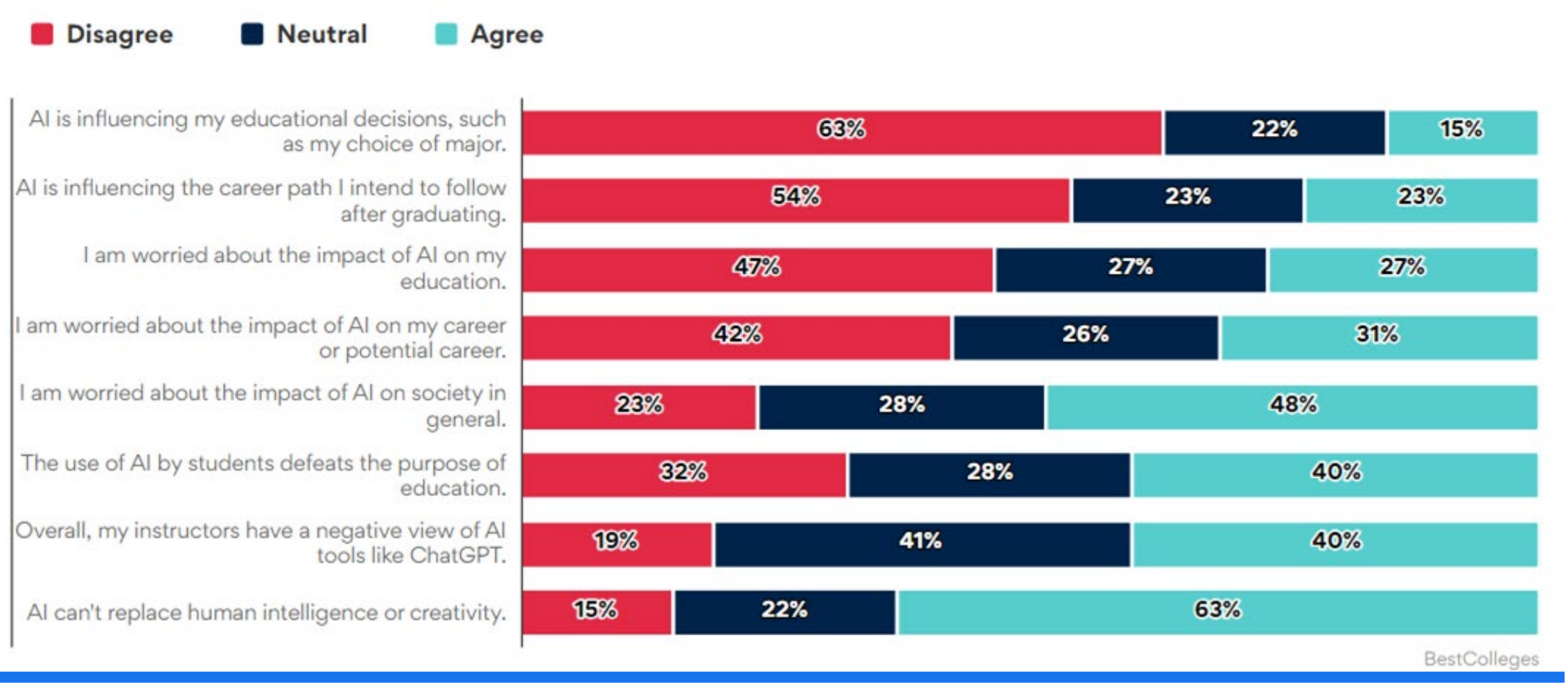

4 in 10 Students Say Using AI Defeats the Purpose of Education

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AI in the Workforce

Automation of lower -skilled work
Realignment of Skills
Policy Changes
Remote Work Infrastructure
Higher Cognitive Requirements
Sector-Specific Strategies

How Do We Get There?

- Enhanced Training and Reskilling Programs
- Adaptive Employment Policies
- Strengthening the Remote Work Infrastructure
- Sector-Specific Strategies
- Foster Public-Private Partnerships

Gaps of Graduates :

- Digital Literacy
- Soft Skills
- Communication
- Complex thought processes

Olaniyi, O. O., Ezeugwa, F., Okatta, C., Arigbabu, A., & Joeaneke, P. (2024, April 24). Dynamics of the digital workforce: Assessing the interplay and impact of AI, automation, and employment policies. SSRN. https://doi.org/10.2139/ssrn.4806307

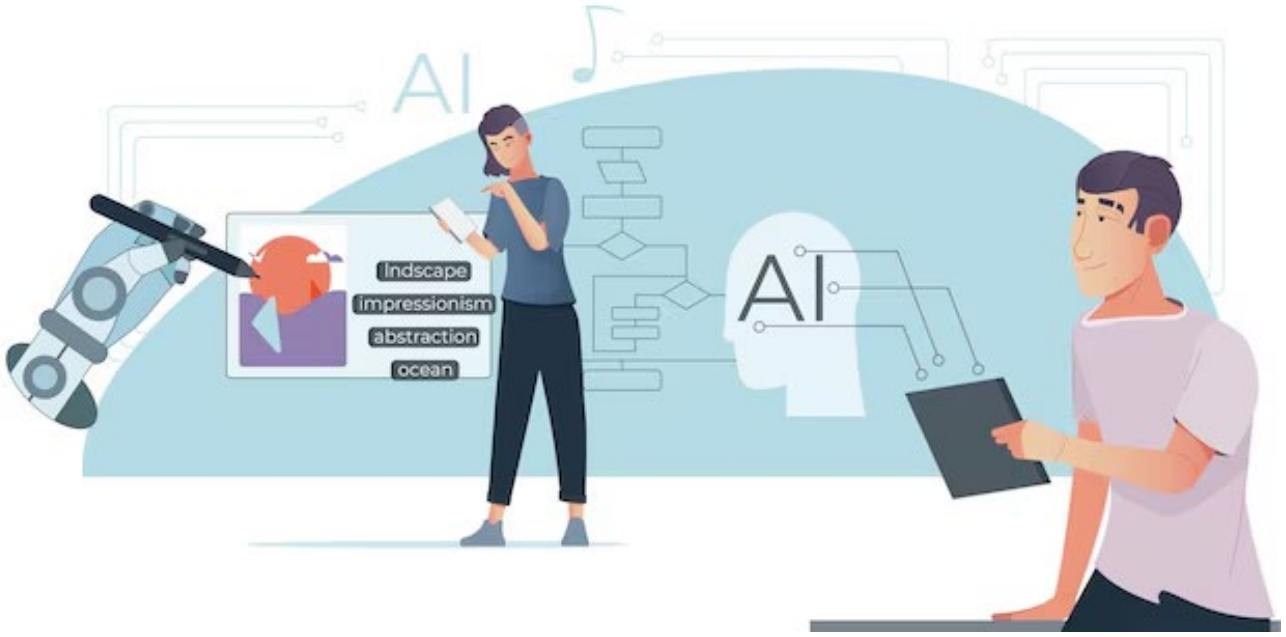
Using AI-Driven Dashboards to Understand Data

Economic Indicators of Hospital Performance	Potential Areas of AI Impact
Revenue and Expenses: Total operating revenue, Total operating expenses, Operating margin	Revenue optimization Improved coding and billing accuracy Cost reduction in procurement
Efficiencies and Resource Utilization: Average length of stay (ALOS), Case mix index (CMI), Labor cost as a percentage of total cost	Predictive analytics for resource allocation AI-powered scheduling and bed management Reduced readmission rates
Financial health and Solvency: Current ratio, Debt-to-equity ratio	Early fraud detection Real-time financial insights Predictive modelling for financial forecasting

https://www.medicaladvantage.com/blog/4 -healthcare-dashboards-examples/

Teaching Students to Read, Understand, and Share the Story of Data

- Understanding Data
- Turning Data into Usable Information
- Using Data to Make Smarter Real-time Decisions
- Communicating the Data Effectively to Impact Change



AI powered student learning dashboard in education sector

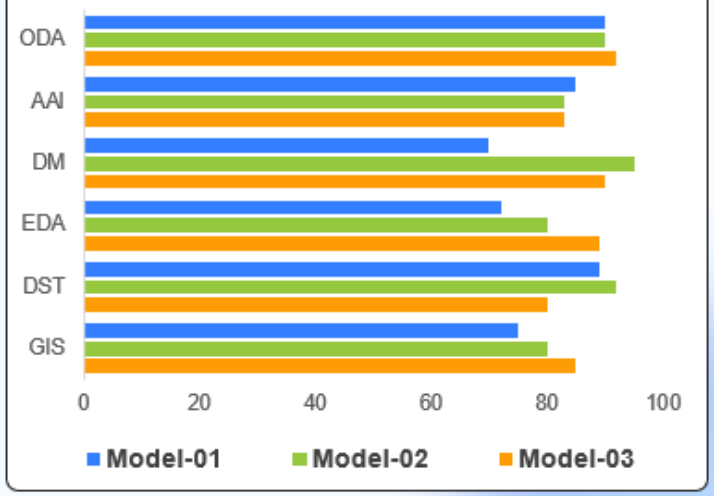
This slide shows the KPI dashboard of an AI learning organization. The KPIs are total student enrolment details, average CGPA, attendance rate of student, academic performance, student engagement percentage, etc.

Student Performance Data

Student Name - George

Subject Name	Assignments	Quiz/ Exam	Discussion Posts
Intro to HIM	90	90	95
ICD Coding	78	80	82
Rev Cycle Management	75	98	94
Health Law	82	79	91

Performance Analysis



Student Profile Picture

Current Term GPA

2.5% ▲ vs prev 2.1% (+.4)

Overall GPA

1.9% ▲ vs prev 1.5% (+.4%)

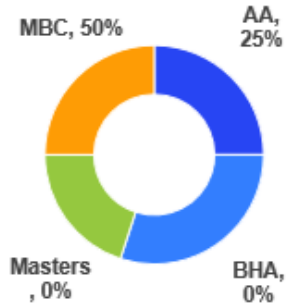
Course CGPA

Term	CGPA
7/	9.11
02	9.16
03	9.18
04	9.13

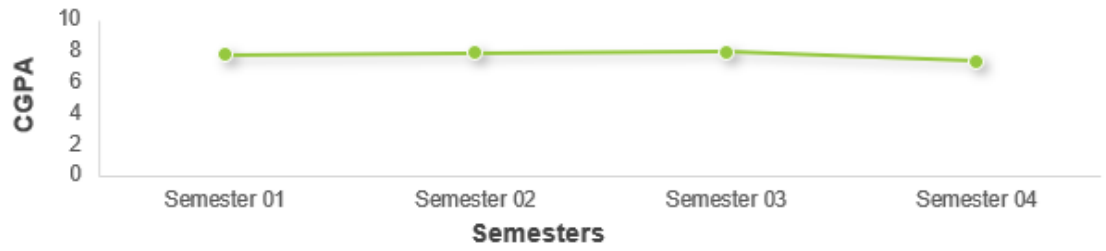
Live Session Attendance Data

Week	Class 1	Class 2
1	25	25
3	0	25
5	25	-
7	-	-

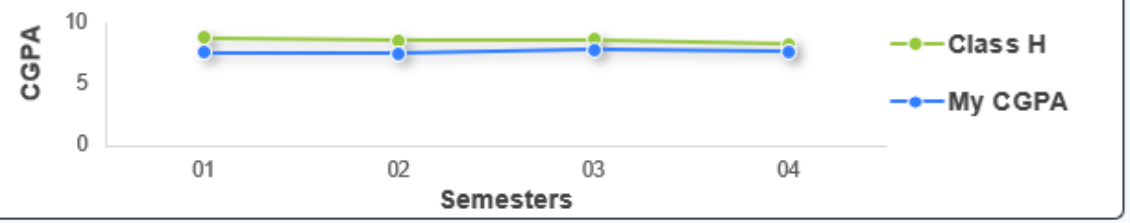
Program Progress Analysis



Semester wise growth

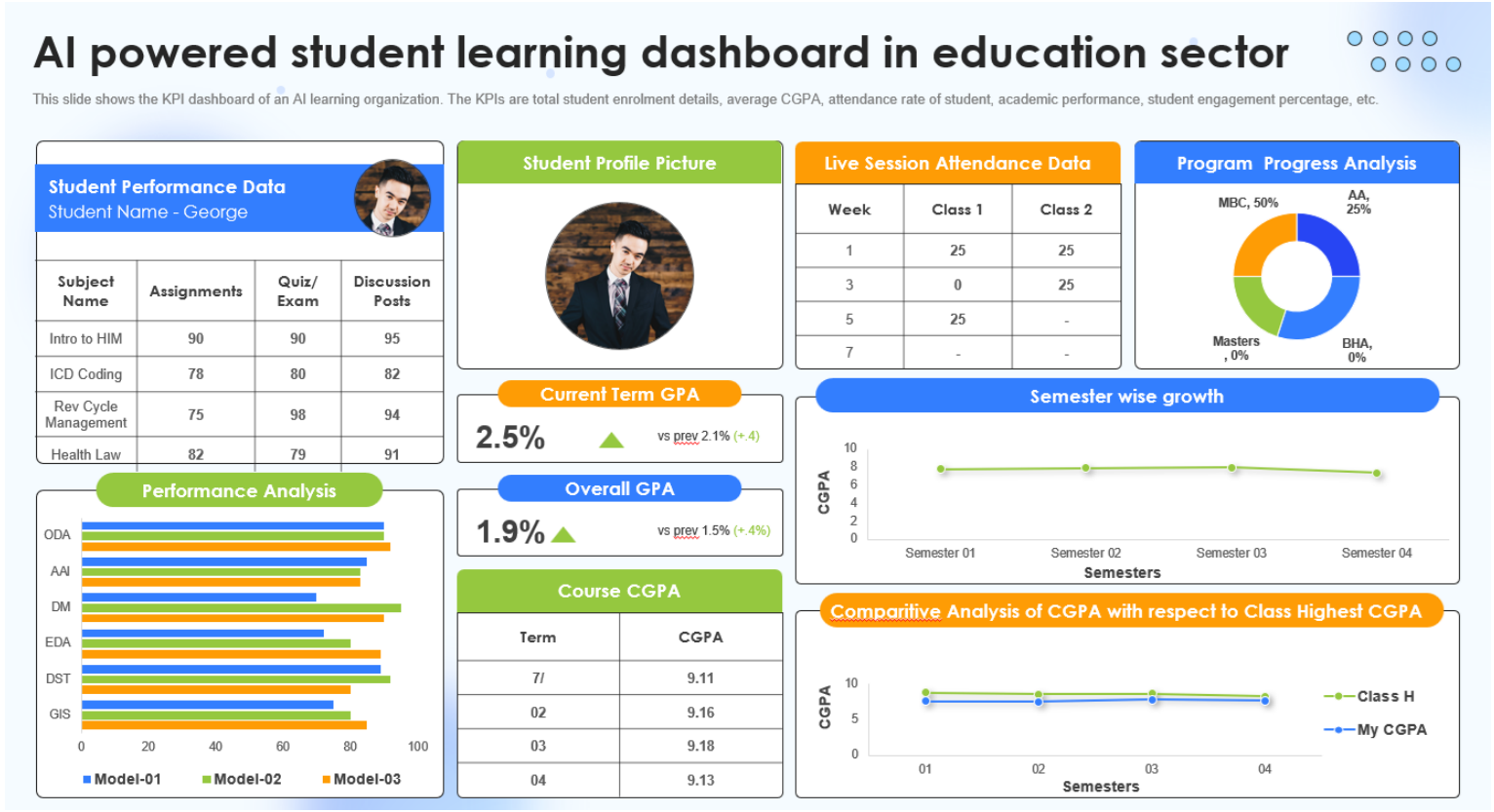


Comparitive Analysis of CGPA with respect to Class Highest CGPA



Ready for Some Hands -On Fun?

Building Dashboards Activity



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Questions?

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