

September 2, 2026

AGENDA

BOARD OF REGENTS' WORKSHOP

The **Workshop** of the Board of Regents of the Del Mar College District will convene at **10:00 a.m. Tuesday, September 8, 2026**, at the Center for Economic Development, 3209 S. Staples, Room 106, Corpus Christi, Texas.

OPENING PROCEDURES

- Call to Order
- Quorum Call
- Moment of Silence
- Pledge of Allegiance
- DMC Vision Statement: *Del Mar College empowers our communities to achieve their dreams.*

Del Mar College is streaming live audio and video from the official Board of Regents meetings on the College's website in real-time, with the exception of portions of the meeting considered as "closed session" by statute.

GENERAL PUBLIC COMMENTS (Non-Agenda Items) – 3-minute time limit

- Specific Public Comments will be allowed on agenda items prior to action by the Board.
- General Public Comments may be moved on the agenda at the discretion of the Board Chair and as an accommodation to those in attendance.
- Pursuant to the Texas Open Meetings Act, the College is limited in responding to public comments or inquiries as follows:
 1. Provide a statement of specific factual information in response to an inquiry.
 2. Recite existing policy in response to an inquiry.
 3. Propose placing the subject of the inquiry on the agenda for a subsequent meeting.

(Tex. Govt. Code Section § 551.042)

ITEMS OF BUSINESS:

1. Discussion relating to AI Strategy at Del Mar College

Presenter: Mr. Ali Kolahdouz

(I: Communicate, Goal 1: Collaborate across the College, II: Elevate: Goal 1: Increase completion for all students, and II: Elevate, Goal 2: Maximize resources entrusted to the College)

2. CLOSED SESSION pursuant to:

a. **TEX. GOV'T CODE § 551.071**: (Consultation with Legal Counsel), regarding pending or contemplated litigation, or a settlement offer, and the seeking of legal advice from counsel, with possible discussion and action in open session;

b. **TEX. GOV'T CODE § 551.087**: (Deliberation Regarding Economic Development), regarding discussion or deliberation of information received from a business prospect with which the College is conducting economic development negotiations and/or the deliberation of an offer of a financial or other incentive to a business prospect, with possible discussion and action in open session; and,

c. **TEX. GOV'T CODE § 551.074(a)(1)**: (Personnel matters), regarding the appointment, employment, evaluation, reassignment, duties, discipline, or dismissal of a public officer or employee, with possible discussion and action in open session.

CALENDAR

Discussion and possible action related to calendaring dates.

ADJOURNMENT

PUBLIC NOTICE: The Board may elect to go into executive session at any time during the meeting in order to discuss matters listed on the agenda, when authorized by the revision of the Open Meetings Act, Chapter 551, of the Texas Government Code.

Item 1

Del Mar College AI Strategy

Board of Regents Workshop

Presented by

Ali Kolaheidou, Vice President Information Technology/CIO

September 2026



DEL MAR COLLEGE

Workshop Agenda

01

Why AI Matters for Del Mar College

Context and a vision for the future of DMC

03

Timeline: Integrating AI at DMC

Planning, preparation, and the vision of Del Mar in 2030

05

What We Have Accomplished

Raising awareness, developing an AI strategic roadmap, and encouraging innovation across the College community

02

Impact of AI on Higher Education and Workforce

Concern, opportunity, and transformation

04

The People Doing the Work

Cross functional approach to an institutional opportunity:
DMC AI Working Group

06

What Comes Next

Expanding technology access and training, support enhanced instruction, harness AI to improve the Viking Experience.

Thoughts on AI and the Value It Provides

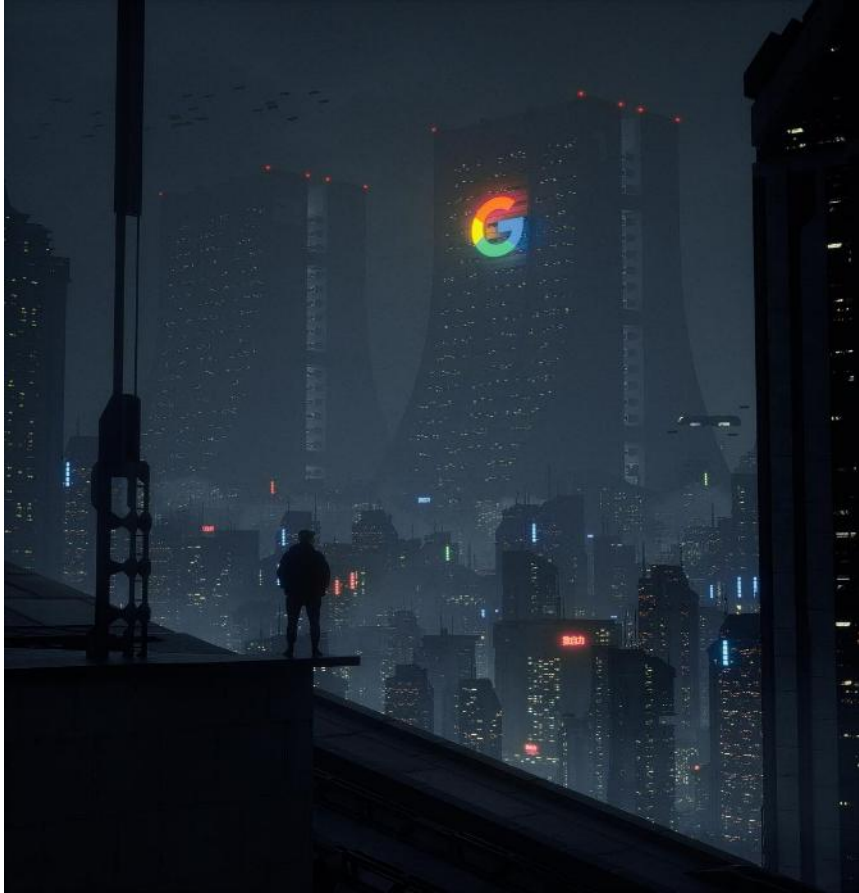
“Are we going to fill the time saved by AI with other low-value tasks, or will it free us to be more disruptive in our thinking and doing? I have some unrealistically high hopes of what AI can deliver.

I want low-engagement tasks to take up less of my working day, allowing me to do more of what I need to do to thrive (thinking, writing, discussing science with colleagues).”

-Tregoning, Nature (2023)

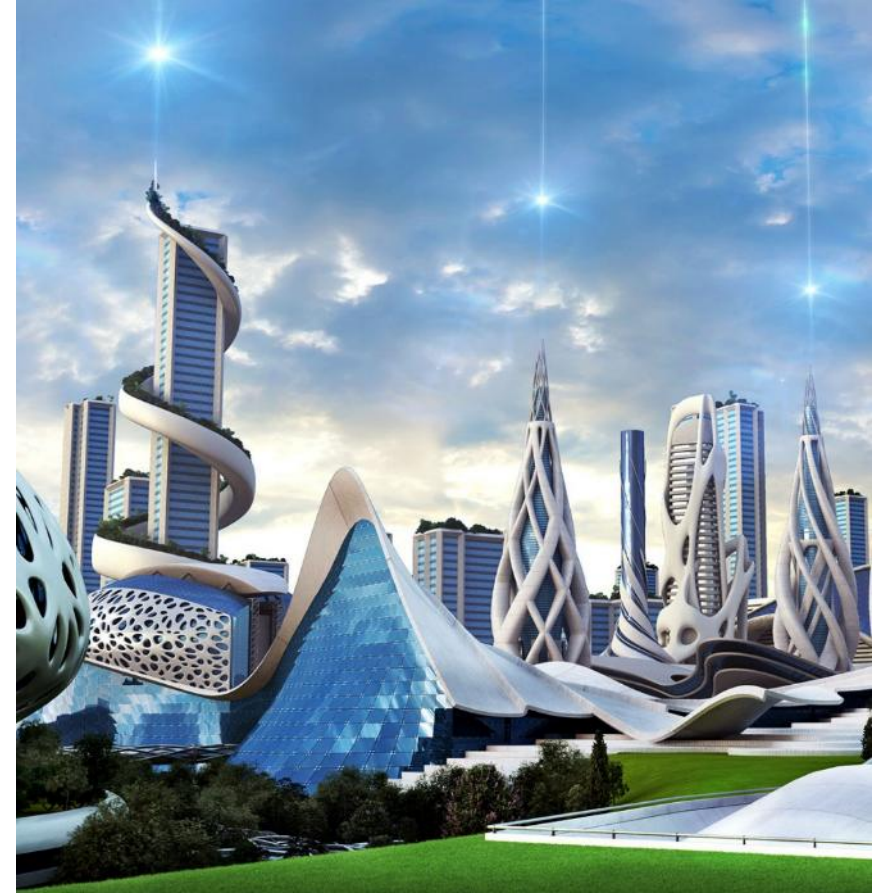


A Human Centric Approach to AI



Credit: Our Dystopian Future (Nagafujiriku)

OR



Credit: Futuristic city with an organic architecture (Getty Images)

A Human-Centric Approach to AI: Broader Considerations

AI is not about replacing people; it is about strengthening their ability to serve students, support one another, and advance Del Mar College's contribution to the communities we serve.

AI Working Group, DMC AI Strategic Roadmap (2026)

Societal Impact of AI Systems



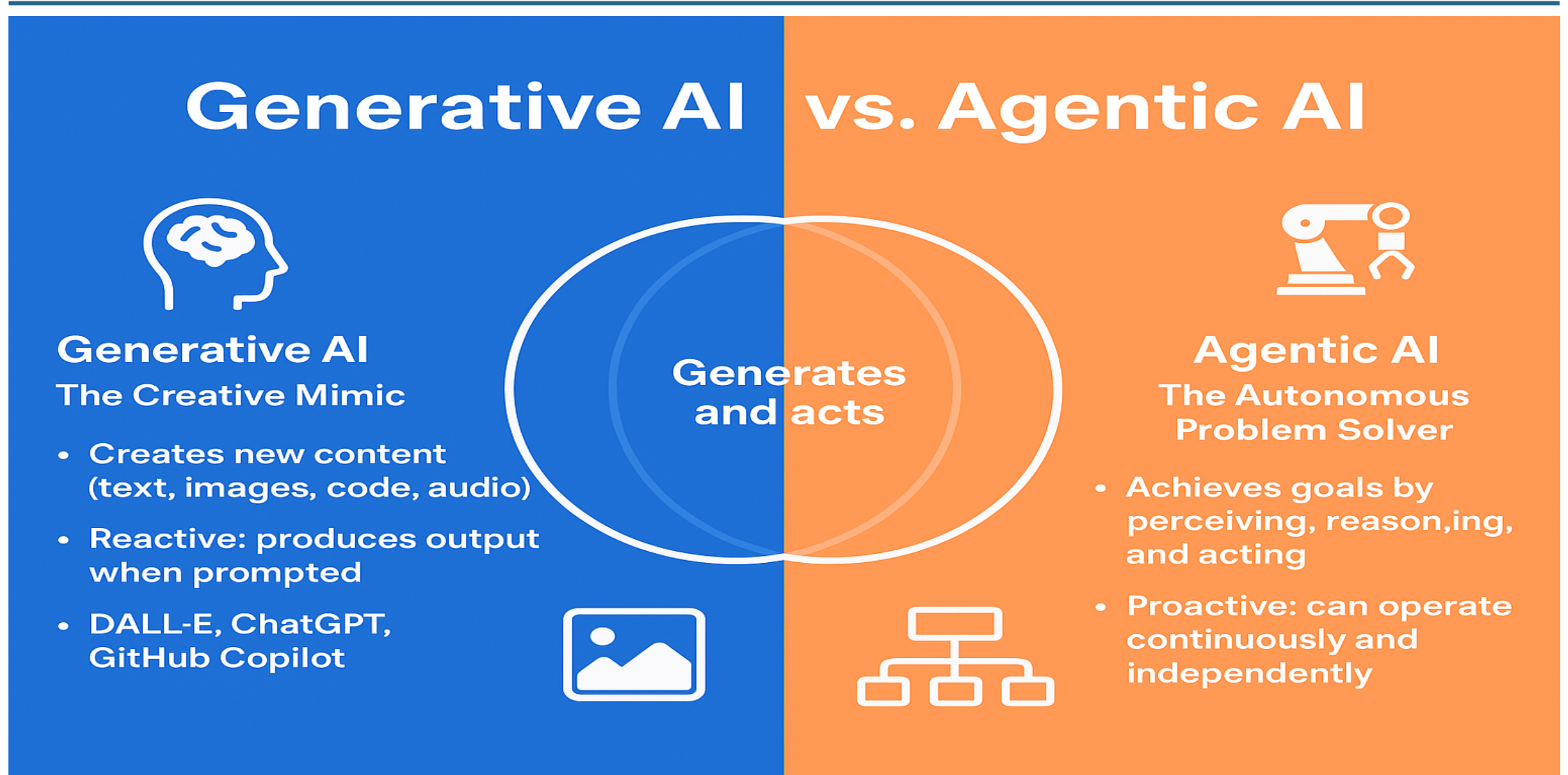
The Meaning of Work and Productivity



Ethics of AI Technology



Generative vs. Agentic AI



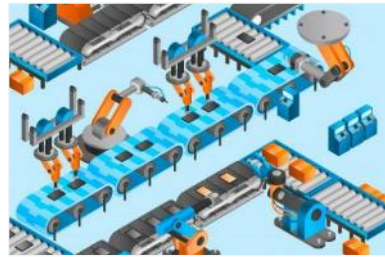
Source: <https://javascript.plainenglish.io/generative-ai-vs-what-is-agentic-ai-whats-the-difference-3467a73c5470>

AI Strengths and Weaknesses *(current iterations)*

Strengths of AI Systems



Natural Language Human-Machine Interface



Process Automation and Time/Effort Reduction



Big Data Analysis and Summarization



High Performance for Complex Computation

Weaknesses of AI Systems



Empathy and emotional intelligence



Opinion, judgment, and ethics



Creativity and imagination



Hope, vision, and leadership

Why AI Matters for Del Mar College

Student Success



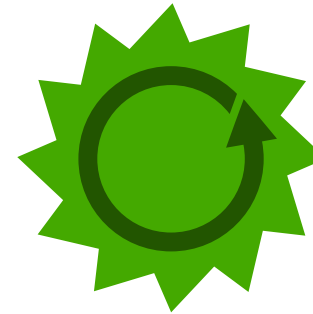
AI-powered advising, personalized learning pathways, and enrollment tools can transform student completion and persistence.

Workforce Readiness



Graduates will need foundational AI skills to remain competitive in high-demand programs and the regional workforce.

Operational Efficiency



AI bolsters workflow automation, optimization, and data-driven decision support.

Institutional Risk



Clear policy and guardrails are critical to addressing compliance, privacy, and academic integrity risks.

Impact of AI on Higher Education

Rapid Proliferation and Daily Use



90%

of college
students

report using artificial intelligence in class at
least occasionally.

Source: Higher Ed Dive (2026)

61%

of college
instructors

Governance and Risk



44%
of employees

report their
organization is
using AI

Source: Gallup.com AI poll (2025)

22%
of employees

report their
organization has a
clear strategy

Evolving Workforce and Needs

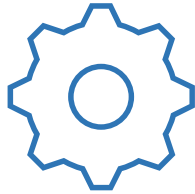


40%
of employees

will need to be reskilled by 2027 due to AI

Source: Michigan Journal of Economics (2026)

AI in Higher Education: Opportunities and Support



Personalized Learning

Tailored content generated for each student.

Immediate Feedback

Instant, detailed, and thorough feedback.

Content Creation

Activities, lesson supplements, and discussion prompts.

Accessible Lessons

Text-to-speech, visual recognition, transcription, and captioning.

Resource Access

Thousands of educational AI platforms available.

Visual Learning

Reinforce complex concepts with custom generated images.

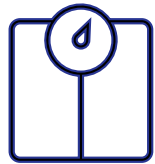
Source: AI in Schools: Pros and Cons, University of Illinois Urbana-Champaign (2024)
https://illinois.edu/?utm_source=education&utm_medium=web&utm_campaign=Header

AI in Higher Education: Risks and Concerns



Privacy and Security

Reduced visibility for data collection and handling, processing, and dissemination.



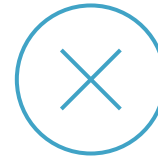
Algorithm Bias

Noted bias in GPT* against non-native English speakers.



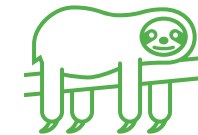
Reduced Human Interaction

AI may reduce student interactions, potentially impacting social skills and development.



Academic Misconduct

Cheating and plagiarism are primary concerns raised by educators.



Hampered Development

Students may engage in fewer opportunities for inquiry, reflection, and critical thinking.



Inaccurate Information

AI may generate inaccurate output, requiring information evaluation and validation skills.

***Generative pre-trained transformers** - a large language model that uses deep learning architecture to generate human-like text, code, and other content.

Source: AI in Schools: Pros and Cons, University of Illinois Urbana-Champaign (2024)
https://illinois.edu/?utm_source=education&utm_medium=web&utm_campaign=Header

Impact of AI on Workforce and Job Markets



More white-collar jobs are seeing job descriptions updated to include AI skills, and demand for skilled trades has surged in response to data center and power source builds.

Requirements for White Collar Jobs

6-12%

of jobs in software development, data analytics, engineering, IT, and research fields now require AI skills and experience.

Entry Level Candidate Requirements

73%

of employers surveyed* seek entry level candidates that can develop effective AI prompts and elicit quality outputs.

Demand for Skilled Trades

107%

growth in demand for robotics technicians since 2022. HVAC technicians followed with 67%, and construction and infrastructure roles by 30%.

*N=157

Source: Indeed Hiring Lab, <https://hiringlab.indeed.com/2026/01/22/january-labor-market-update-jobs-mentioning-ai-are-growing-amid-broader-hiring-weakness/>

Source: National Association for Colleges and Employers (NACE), <https://www.nacweb.org/job-market/trends-and-predictions/demand-for-ai-skills-in-entry-level-jobs-nearly-triples-since-fall-2025>

Source: Randstad, <https://www.randstad.com/press/2026/ai-cant-build-data-centers-global-demand-for-skilled-trades-soars-in-the-ai-era/>

Vision for AI at Del Mar College

AI VISION

Del Mar College leverages responsible, accessible, and human-centric use of AI to strengthen student success, support employees, and enrich the communities we serve.

AI Enhanced Academic Programs

- Model ethical and appropriate use of AI for students across many/all disciplines
- Develop student AI skills and familiarity with AI tools to ensure workforce readiness
- Reinforce secondary skills like information validation, agent orchestration, prompt development, research methodology, data analysis, and content creation across many/all disciplines

Services Optimization

- Eliminate searching for information and service entry points with AI agents and tools that respond to natural language inquiries.
- Deploy academic support AI agents and tools that can access multiple systems and information sources and provide students real-time help and resolution.
- Deploy faculty/staff support AI agents that simplify navigating complex institutional processes and manage tasks.

Effort and Work Optimization

- Redesign critical institutional task chains as workflows that are processed with AI agent orchestration and overseen and approved by people.
- Crowdsource the identification of issues, inefficiencies, or pain points through concierge agents that analyze, diagnose, and assist with remediation.
- Establish and continuously reinforce a strong baseline of AI usage skill in faculty and staff through training, appropriate infrastructure, and collaborative solutioning.

Legislative Mandates for AI Technologies

Texas has enacted multiple AI-related laws that directly affect public institutions of higher education.

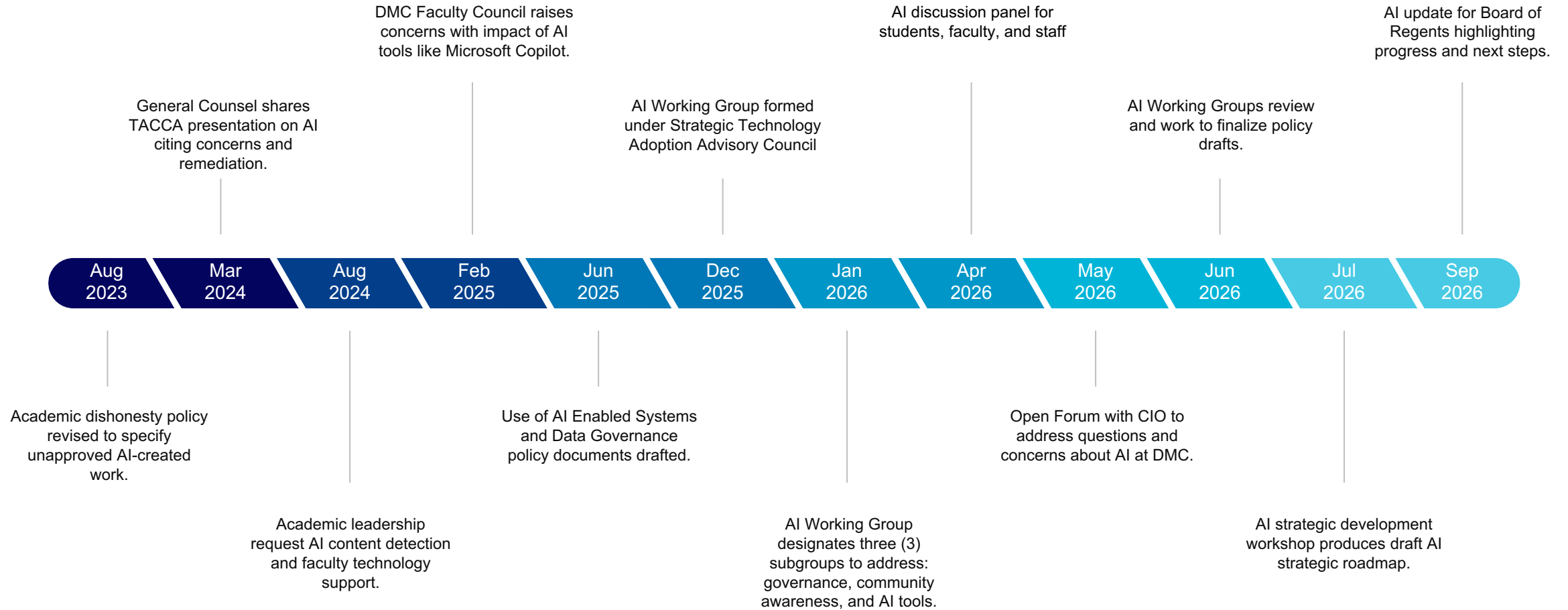
Mandate	Full Title	Status / Effective Date
HB 149	Texas Responsible AI Governance Act (TRAIGA)	Effective January 1, 2026
HB 3512	AI Training for State & Local Employees	Effective September 1, 2025
SB 1964	Transparency for Government AI Use	Pending / In Effect
TX-RAMP	Texas Risk & Authorization Mgmt. Program	Ongoing — Vendor Compliance

DMC’s AI governance work, including policy drafting, data classification, and tool review processes, is designed to satisfy these requirements. Specific compliance details will be enumerated in AI Usage and Data Governance policies.

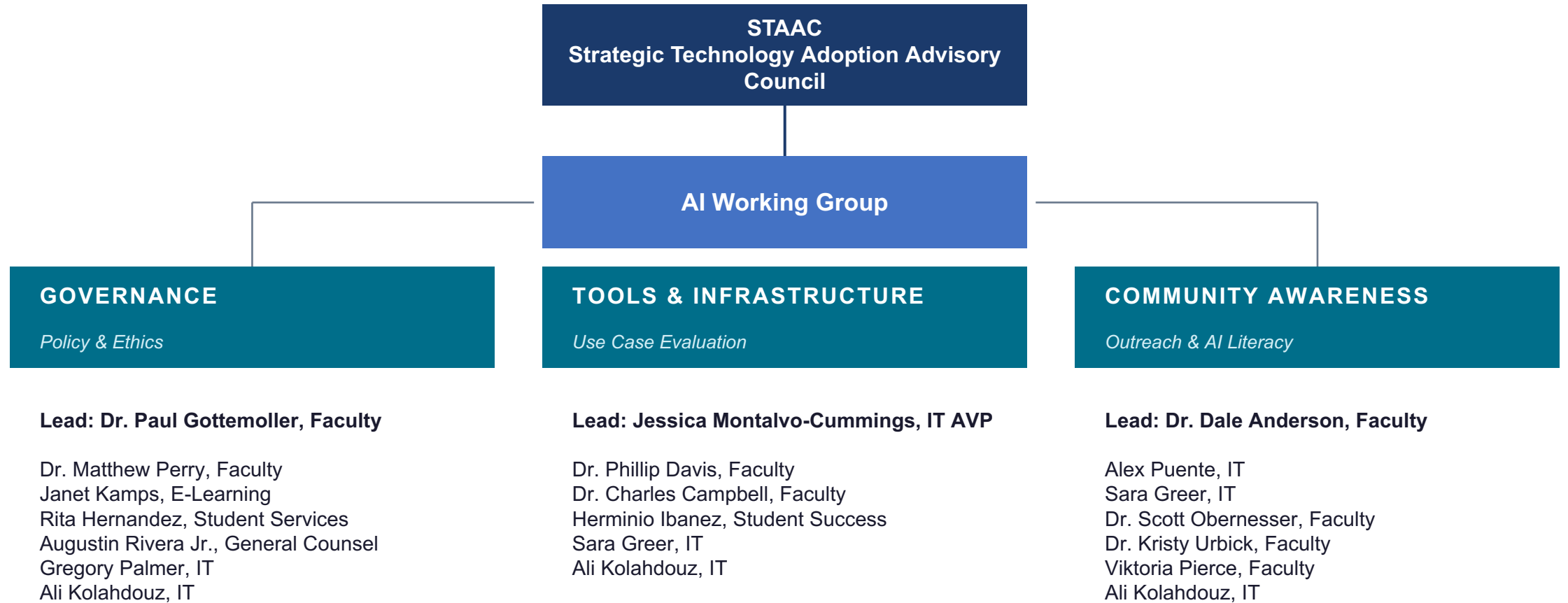
Comprehensive federal AI legislation has not yet been passed. Federal agencies instead regulate AI using existing laws.

Agency
Federal Trade Commission (FTC) Punishes deceptive practices, fake reviews, and unfair uses of AI.
Federal Communications Commission (FCC) Bans AI-generated voice cloning in robocalls.
Securities and Exchange Commission (SEC) Targets AI-related fraud in financial markets.
Equal Employment Opportunity Commission (EEOC): Prevents hiring discrimination caused by biased algorithms.

Timeline: AI at DMC



The People Doing the Work



AI Working Group Lead: Subgroup Overviews

GOVERNANCE

Policy & Ethics

**Dr. Paul Gottemoller,
Faculty**

TOOLS & INFRASTRUCTURE

Use Case Evaluation

**Jessica Montalvo-
Cummings, IT**

COMMUNITY AWARENESS

Outreach & AI Literacy

**Dr. Dale Anderson,
Faculty**

What We Have Accomplished

Policy Development

- Technology Acceptable Use Policy
- Guidelines for Use of AI Enabled Systems (draft)
- Data Governance and Classification Policy (draft)
- Data Privacy Policy (upcoming)
- Identity Access and Management Policy (upcoming)

AI Strategy Development

- Strategic planning workshop facilitated by national technology research firm
- AI Strategic Roadmap (draft)
- Defined operational and academic AI development use cases for review and implementation

Community Awareness and Engagement

- Delivered sessions at Faculty and Exempt Staff Professional Development
- College-wide AI discussion panels
- CIO discussion forums
- Shared governance updates via STAAC
- AI awareness training campaigns
- AI information and resource web sites

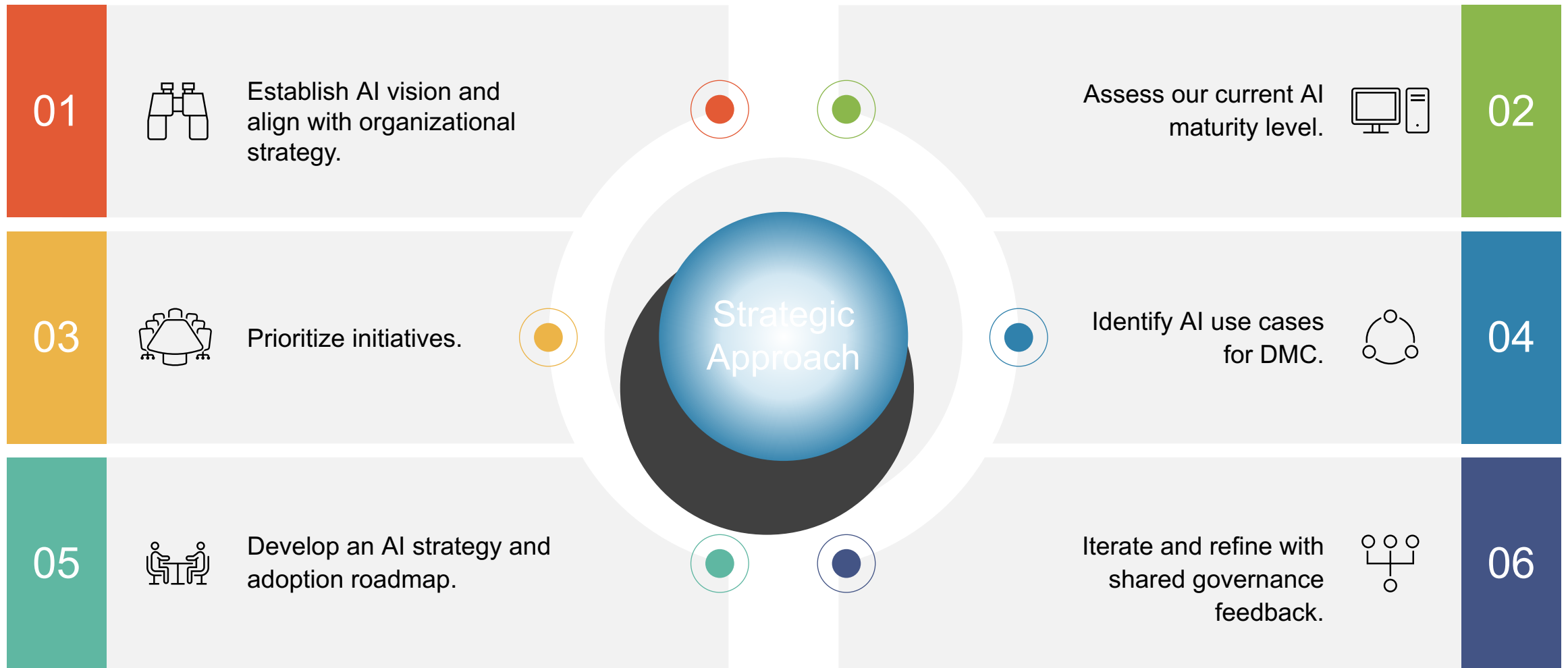
Technology Strategy Development

- Strategic planning workshop facilitated for STAAC
- Technology Strategic Roadmap (draft)
- Initiatives aligned to institutional mission and prioritize student experience, systems optimization, data security, and innovation

AI Tools and Infrastructure

- Microsoft Copilot available to all faculty and staff
- Copilot Pro available by request and in consultation with IT
- Anthropic Claude available by request
- Agentic AI development and deployment training
- Collaborating with academic departments to design and implement an AI research and development “sandbox” environment for faculty and students

AI Strategy Development: Our Approach



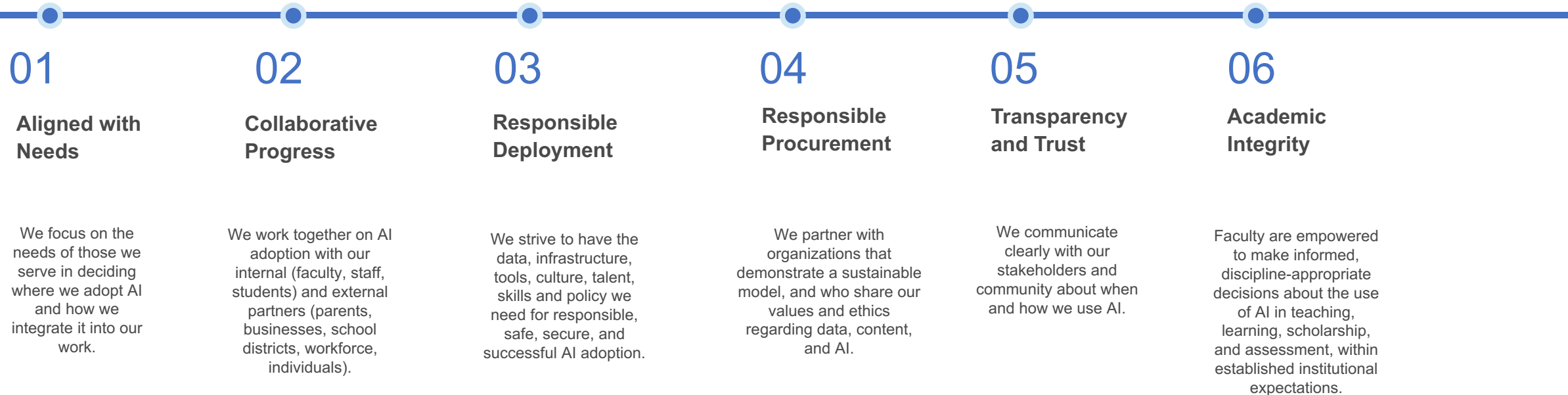
AI Strategy Development: Participants & Expectations

	Name & Role	Expectations
1	George Woods, Faculty	To have an open discussion about AI. As districts are implementing AI for teachers, we need to catch up and to make our students hybrid users, to teach them to use when appropriate.
2	Paul Gottemoller, Faculty	To gain an understanding on governance; to address concerns regarding regulation and social impact.
3	Matthew Perry, Faculty	In the classroom: helping us come to grips without compromising skills transferred to students; efficient use of institutional resources regarding our instructional endeavors; policing vs contending with it. Need for able/disable AI; to understand liabilities regarding AI use and risks given the TX laws and federal statutes.
4	Michael Jones, Faculty	It is incorporated in my teaching, e.g. formatting documents using copilot. To understand how to help students using AI as in the business world and how to effectively teach this in a ethical & efficient manner.
5	Herminio Ibanez, Coordinator Tutor Support Services	To gain new ways to help students thrive.
6	Thomas Weller, Inst. Effectiveness Reports Manager	From an accreditation perspective, to form a vision as an institution and develop ideas of ways to incorporate AI that will make processes easier.
7	Sara Greer, Director of Web Services	To understand when we can allow for different types of AI that will increase the force multiplier.
8	Alex Puente, Exec Director of Infrastructure	To reach a balanced shared understanding of AI and ethical principles.
9	Gregory Palmer, Information Security Officer	To understand governance and guard rails, vendor/security assessment, regular use of LLMs; to take a deep dive into policy and procedure; and filling in these gaps.
10	Jessica Alaniz Perez, Exec Director of Administration	To understand AI and how it will play a part in HR procedures while preserving integrity of our data. To ensure it doesn't get in the wrong hands, that it does not do our job but is an added bonus while mitigating risks.
11	Ali Kolahdouz, Vice President and CIO	This workshop assembles a representative group across the college, a healthy mix. We aim to capture elements from everyone into strategy which can then evolve into initiatives that we can roll out. Eventually, we aim to expand our capabilities, i.e. shift from one-on-one interactions to orchestration of AI agents (force multiplier).
12	Christina Gonzalez Director of Grants and Sponsored Research	To utilize AI to augment future projects, to gain more efficiency, to generate reports, and predictive analysis for tuition revenue and enrollment forecasting.
13	Ralph Goonan UX Manager	It is a valuable tool to have as a coach without becoming dependent. Our CRM is already driven by AI. Knowing how to use, step by step, as well as prompt engineering.

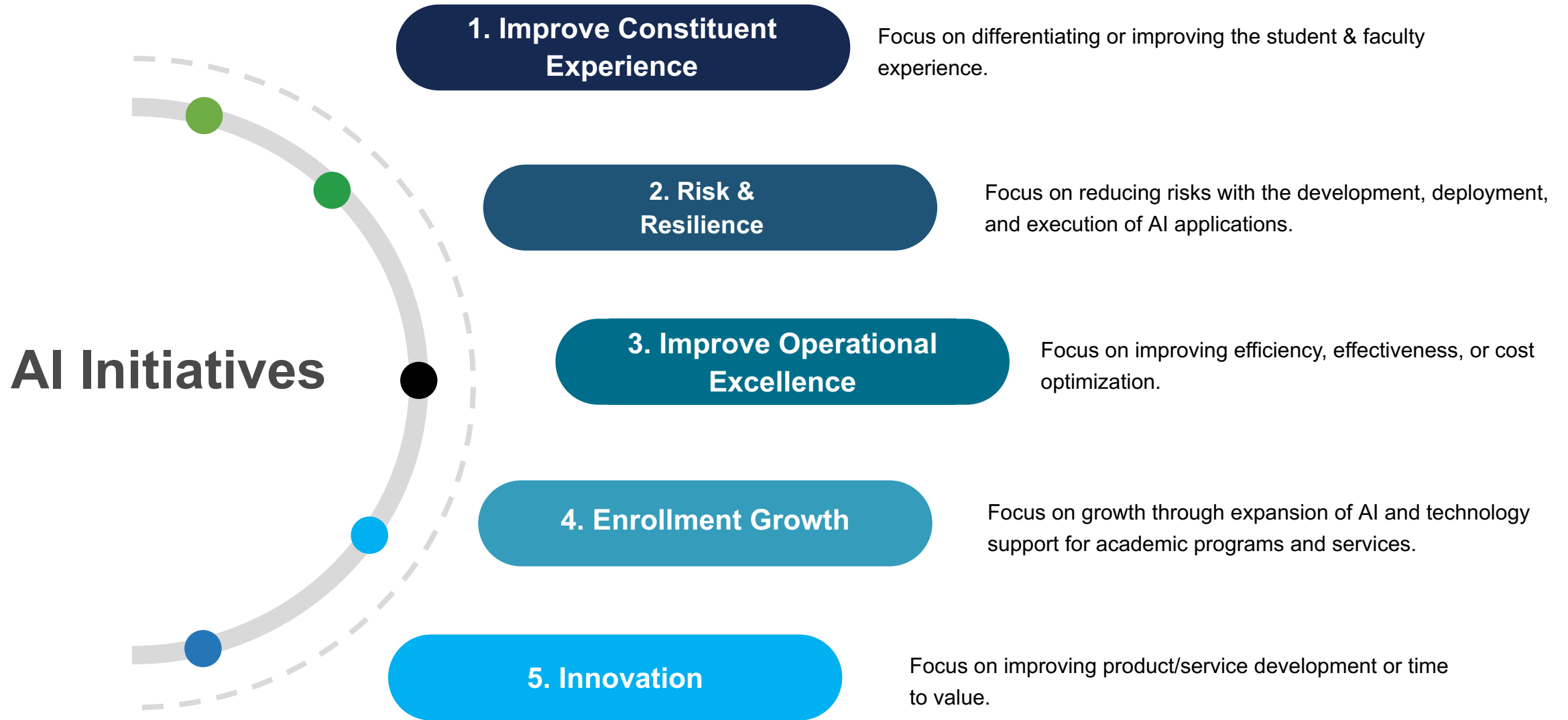
AI Strategy Development: Vision and Principles

Vision

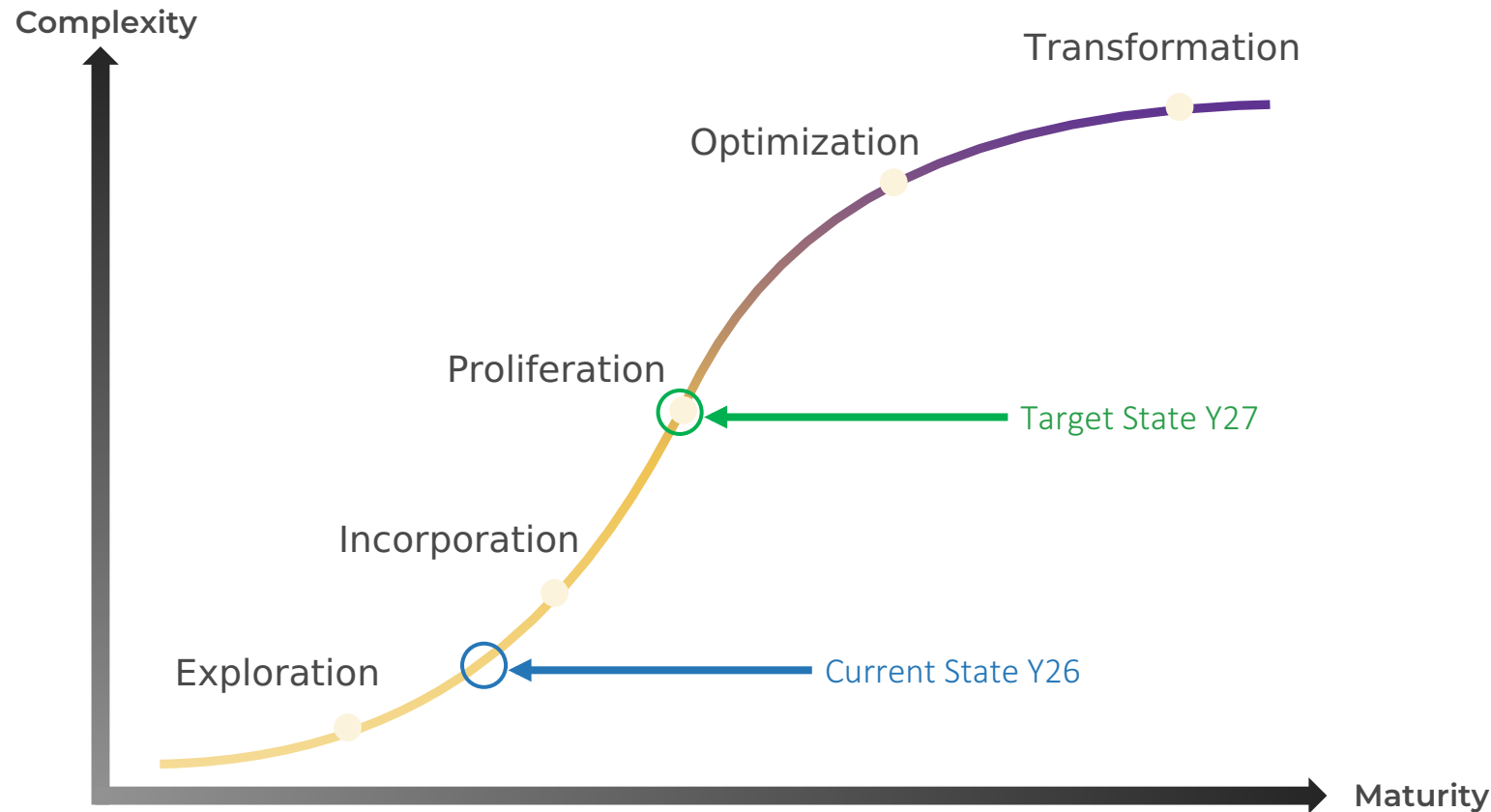
“We will leverage responsible and human-centered use of AI to strengthen student success, support employees, and enrich the communities we serve.”



AI Strategy Development: Value Drivers



AI Capabilities Maturity (self-assessed)



Exploration (1.0)

No experience building or using AI applications.

Incorporation (2.0)

Some skills in using AI applications, or AI pilots are being considered for use.

Proliferation (3.0)

AI applications have been adopted and implemented in multiple departments. Some of the responsible AI guiding principles are addressed (i.e. data privacy).

Optimization (4.0)

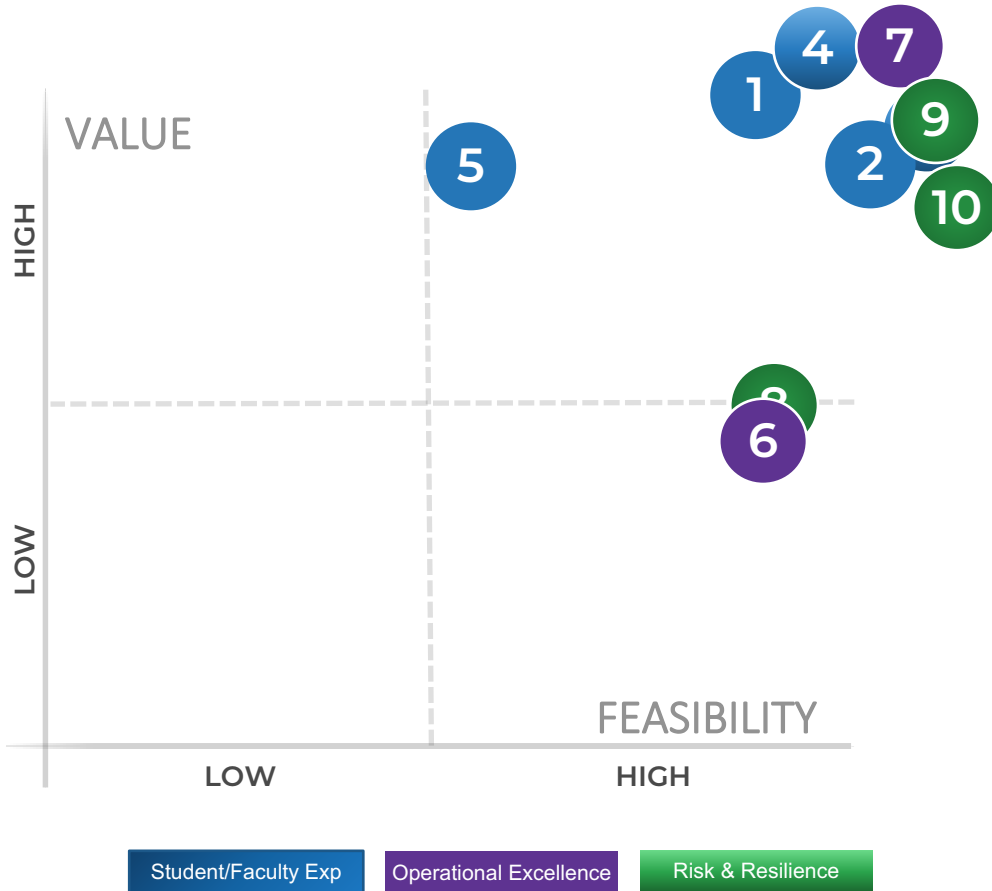
The organization has automated the majority of its digital processes and leverages AI to optimize business operations. Controls are in place to monitor compliance with responsible AI guiding principles.

Transformation (5.0)

The organization has adopted an AI-native culture and approach for building or implementing new business capabilities. Responsible AI guiding principles are operationalized with AI processes that proactively address risks associated with AI applications.

AI Strategy Development: Initial Use Cases (draft)

Each AI use case was scored against the predefined value, feasibility criteria and highest impact to prioritize the initiatives with the highest potential value and feasibility to execute.



	Initiative	Description
1	AI Transfer Chatbot (Student)	AI-supported transfer pathway exploration and preparation
2	AI-assisted course remediation (Faculty)	AI-assisted course remediation, document conversion, captions, transcripts, and alt text
3	AI Enrollment guide (Student)	AI-supported enrollment guidance and next-step navigation
4	AI Chatbot Academic pathway clarity (Student)	AI explanation of degree plan variants, prerequisites, and course sequencing
5	AI second-check (Faculty)	AI second-check for advising, transfer, career paths, and degree requirements
6	AI-assisted workflows for non-IT administrative users	An AI and machine learning-enabled predictive tool used to forecast enrollment trends and growth potential across academic programs.
7	Help desk analytics	AI-assisted monitoring and remediation solution that identifies accessibility gaps in digital learning environments
8	Data classification before AI use	Require departments to identify whether the AI use case involves public, internal, confidential, or critical data before the tool is approved
9	AI use case intake and review	Create a simple intake process where departments submit proposed AI use cases for review before launch, including purpose, users, data involved, student impact, and risk level
10	AI risk training for employees	Train faculty and staff on approved AI use, prohibited uses, protected data, hallucinations, student-impacting decisions, and when to escalate

Safeguarding DMC: AI Guardrails and Governance

Organization

Structure, roles, and responsibilities of the AI governance organization.

Monitoring

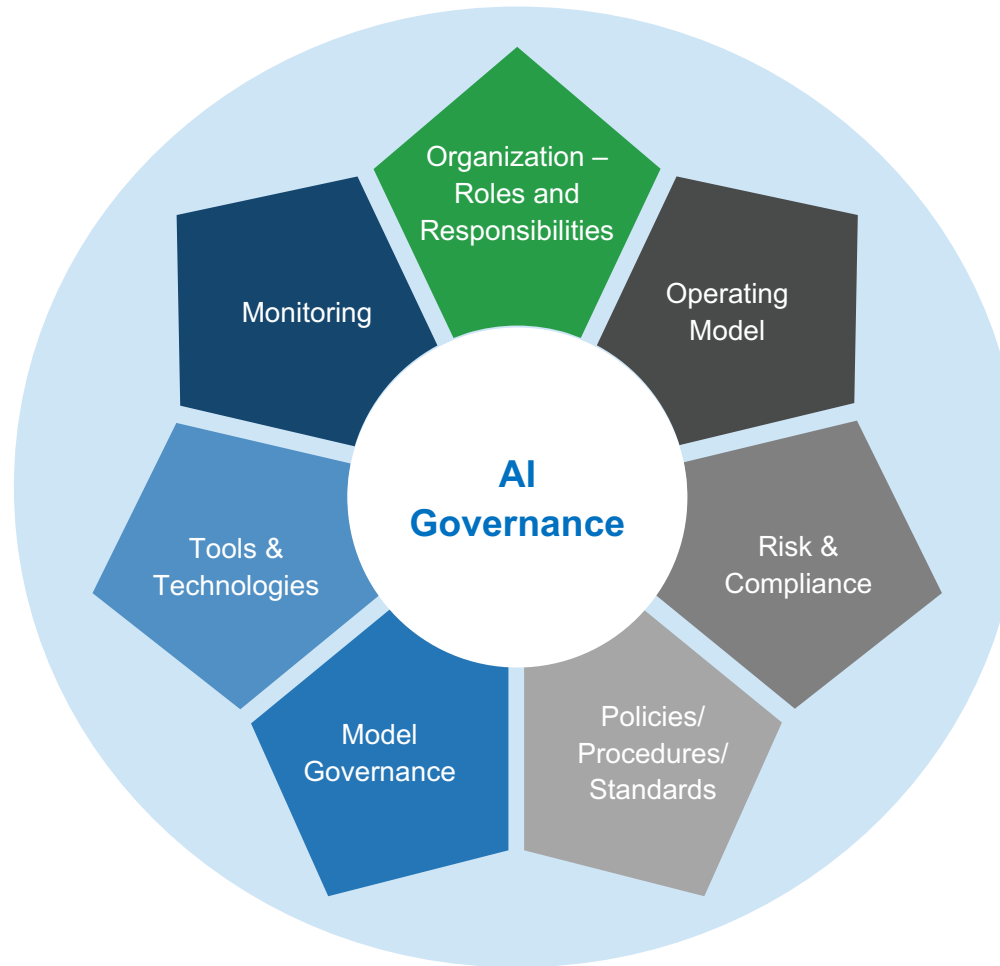
Monitoring compliance and risk of AI/ML systems/models in production.

Tools & Technologies

Tools and technologies to support AI governance framework implementation.

Model Governance

Ensuring accountability and traceability for AI/ML models.



Operating Model

How AI governance operates and works with other organizational structures to deliver value.

Risk & Compliance

Alignment with corporate risk management and ensuring compliance with regulations and assessment frameworks.

Policies/Procedures/Standards

Policies and procedures to support implementation of AI governance.

What Comes Next

Activity	Date
Shared governance review AI and Data Governance policy drafts	September 2026
Shared governance review AI strategic roadmap	September 2026
Policy submission for Board of Regents review and approval	Fall 2026
Research and deploy AI monitoring and security systems	Spring 2027
Add approved AI use cases to technology roadmap	Spring 2027
Deploy AI academic research and development environment	Spring 2027
Develop framework for AI enhanced courses and learning outcomes	Spring 2027
Implement AI use cases	Spring 2027 forward
Pilot 3-5 AI enhanced programs	Fall 2027

Innovation Showcase

Heartwood

presented by: Dr. Scott Obernesser



GV-001 · SHIP-YEAR 314

HEARTWOOD

A generation-ship classroom simulation

ENGL 2341: Forms of Literature · Speculative Literature · Del Mar College



www.generationdelmar.com

THE HEARTWOOD



Board the demo.

www.generationdelmar.com

Trail Hikes in the National Parks

A course-built website for embedded writing and research.

DEL MAR COLLEGE – FIRST YEAR WRITING



Innovation Showcase

AI for Student Support

presented by: Herminio Blas Ibanez



From Problem to Prototype

Three experiments in making college systems easier to use

September 8, 2026



Advisor Assistant

INFORMATION



Instructor Assistant

LEARNING

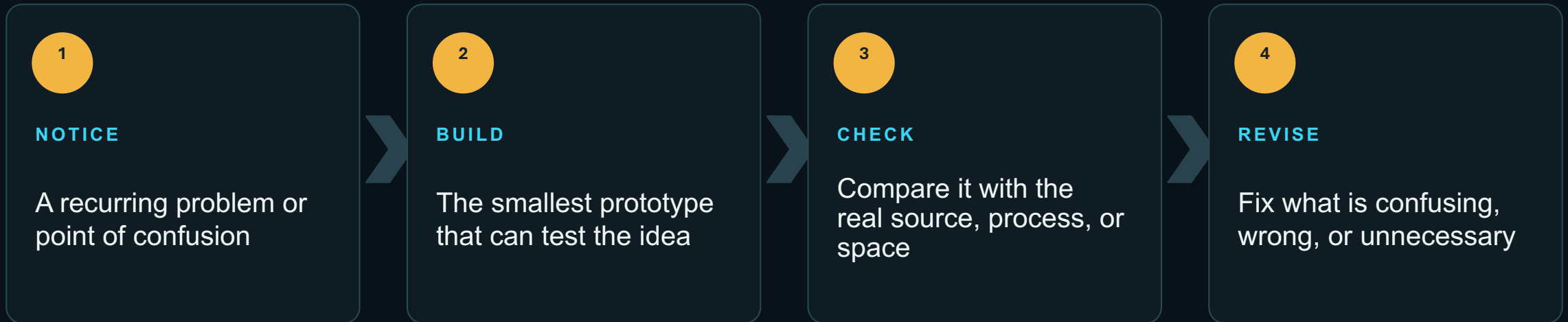


Campus Navigator

PLACE

I started with problems I already knew

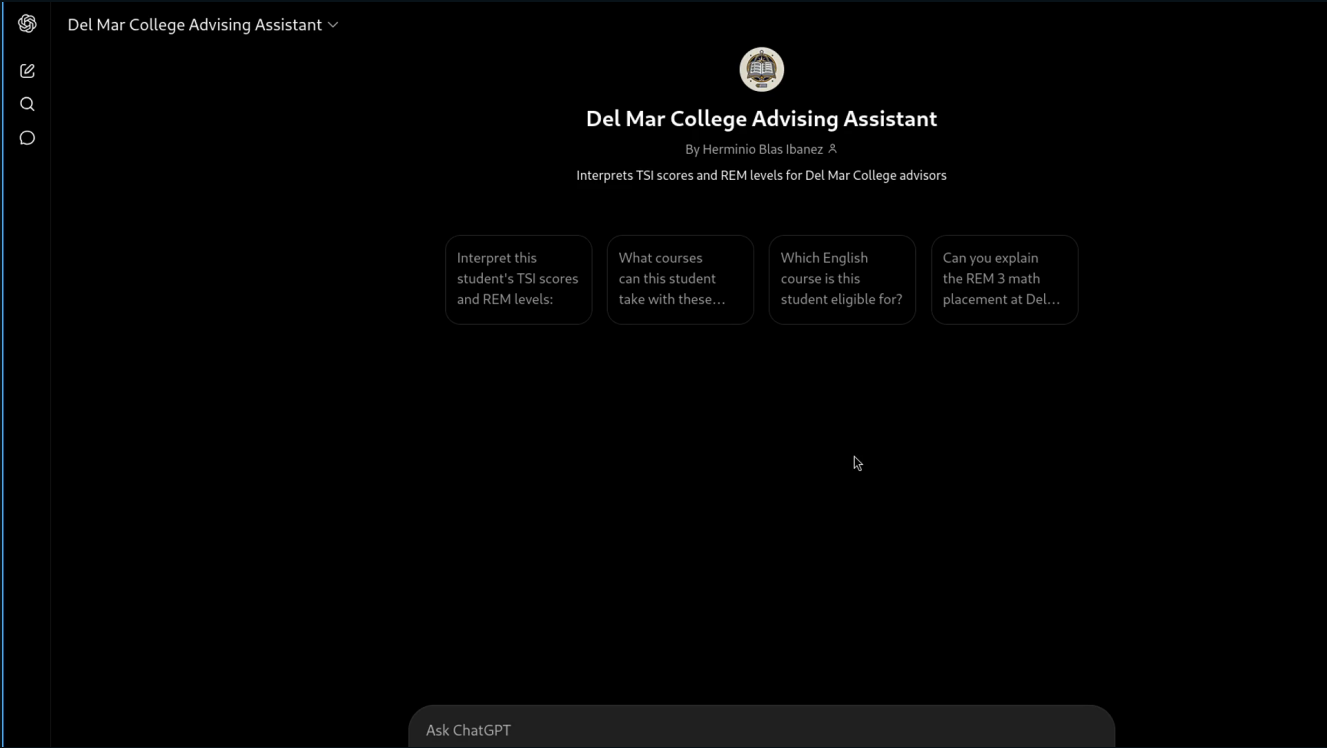
I learned the tools by building, testing, and revising — not by trying to become a software developer first.



If I have to explain how to use the prototype before someone can use it, I probably need to redesign it.

Advisor Assistant

Make the information easier to reach — not the decision automatic.



DESIGN INTENT

- Support faculty advisors — not replace Advising.
- Ground responses in approved institutional sources.
- Keep the source visible so a person can verify the answer.
- Leave judgment and exceptions with the people who own the work.

Simple interaction. Transparent source. Human authority.

Instructor Assistant

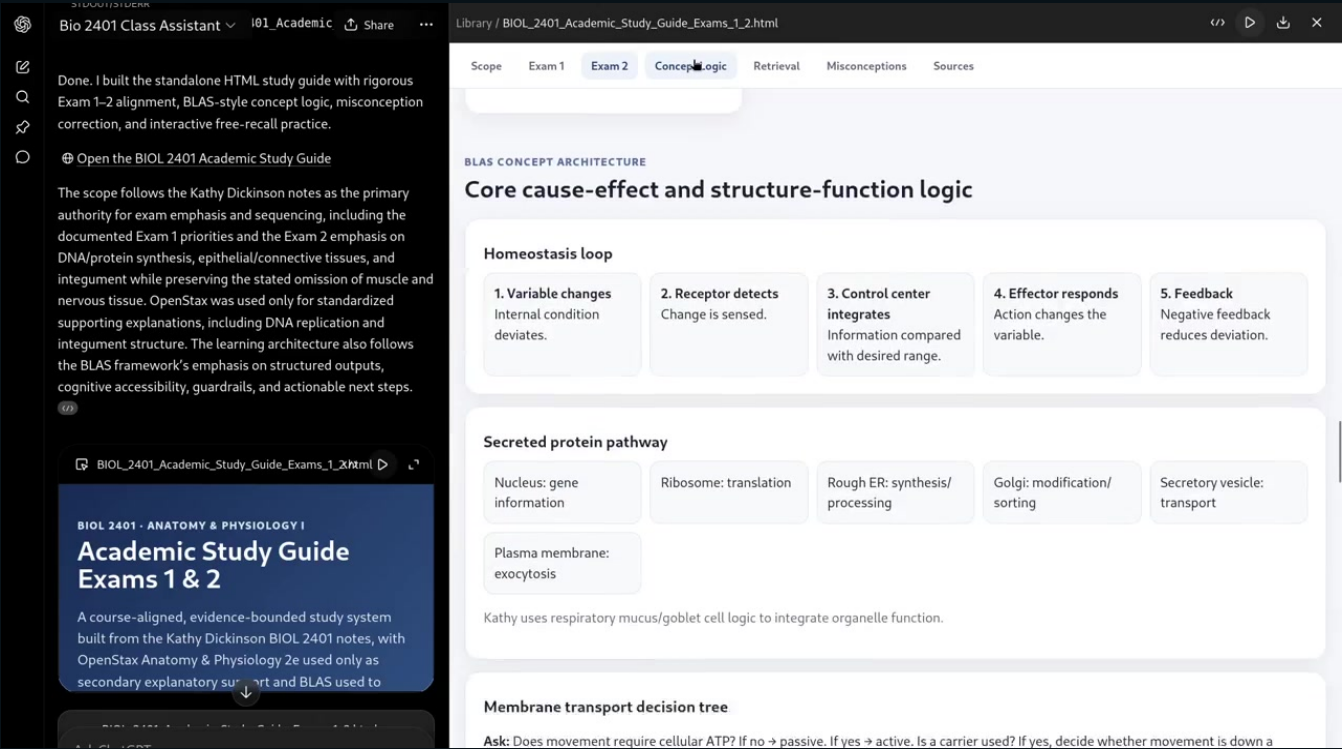
Use the instructor’s own materials and expectations as the boundary.

THE QUESTION

Can AI help explain, practice, or scaffold course material without becoming a substitute for the instructor?

Examples

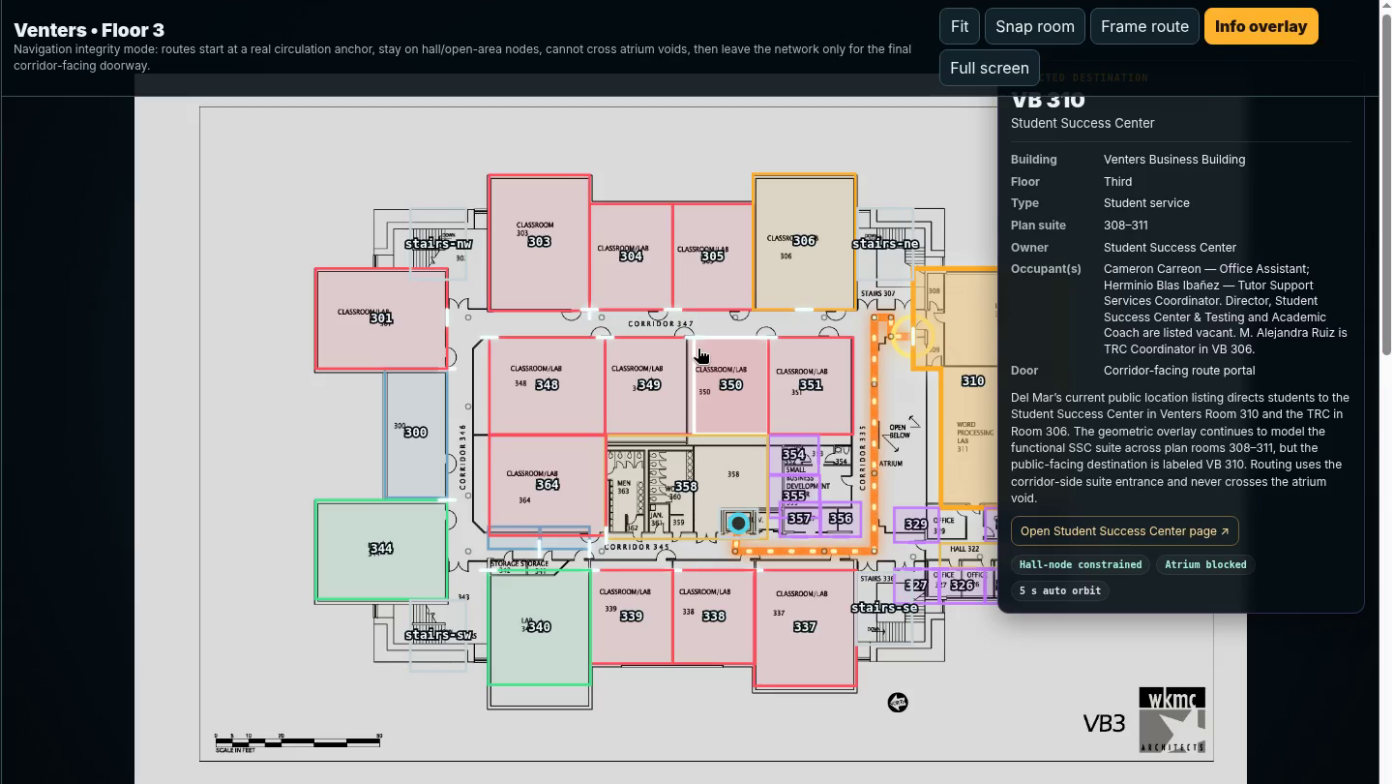
- Clarify an assignment or concept
- Generate targeted practice or study support
- Adapt explanations while staying inside the course context



Instructor expertise stays upstream of the tool.

Campus Navigator

Students shouldn't have to know the campus before they can navigate it.



WHAT IT TESTS

- Choose a destination instead of learning building codes first.
- Move between rooms, floors, buildings, and campus paths in one flow.
- Pair visual routing with room/service context.
- Treat physical routes as proof-of-concept until field-verified.

The program does more of the sorting so the user doesn't have to.

Start with what the person is trying to do

The three prototypes look different, but the design problem is the same.



Advisor Assistant

“I need the right institutional answer.”



Instructor Assistant

“I need help distilling and abstracting this.”



Campus Navigator

“I need to know where to go.”

A lot of college systems make sense once you already know how they work. I wanted to experiment with tools that make sense before you know the system.

AI made iteration faster. It did not make verification unnecessary.

The prototypes were useful because they made ideas testable — including the parts that failed.

AI HELPED WITH

- Turning an idea into something I could actually test
- Trying multiple interface and workflow ideas quickly
- Learning the next technical concept as I needed it

PEOPLE STILL OWN

- The authoritative source and policy
- Professional judgment and exceptions
- Validation, accessibility, and the decision to deploy

The value is not that a prototype is finished. The value is that a real problem can become something we can see, test, question, and improve.

Prototype boundaries & source checks

Keep this slide after the close; use it only if questions turn to governance or deployment.

Prototype	Source of truth	Human owner	Before production
Advisor Assistant	Official institutional sources	Advising / faculty advisor	Human reviews answer; source is visible
Instructor Assistant	Instructor-provided course materials	Instructor	Course boundaries and expectations stay instructor-defined
Campus Navigator	Published plans + mapped geometry + field checks	Facilities / accessibility / relevant units	Routes remain provisional until physically verified

Common rule: easy to use does not mean unaccountable.

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Questions and Discussion

Additional Information



Speaking a Common Language: AI Terms and Concepts

What is AI?

Artificial intelligence (AI) is technology that enables computers and machines to simulate human learning, comprehension, problem solving, decision making, creativity and autonomy.

Machine Learning

A problem-solving approach that teaches computers to make statistical predictions or decisions using data without being explicitly programmed for each task.

Deep Learning

Subset of machine learning; multilayered, interconnected networks modeled on the human brain (neural networks) that automate extraction of “features” from large, unlabeled, and unstructured data, without human intervention.

Model

Mathematical or computational algorithm that has been trained on data to perform tasks like classification, prediction, or generation.

Generative AI

Deep learning models that can create complex content such as long-form text, images, video or audio in response to a user’s “natural language” request.

Agentic AI

Autonomous AI program, or system of multiple AI programs, that perform tasks on behalf of a user or system without human intervention (e.g., have agency). Can designing its own workflows and use available tools (other applications or services).

Hallucination

Instances where an AI system generates information or responses that are incorrect or entirely fabricated but presented as factual.

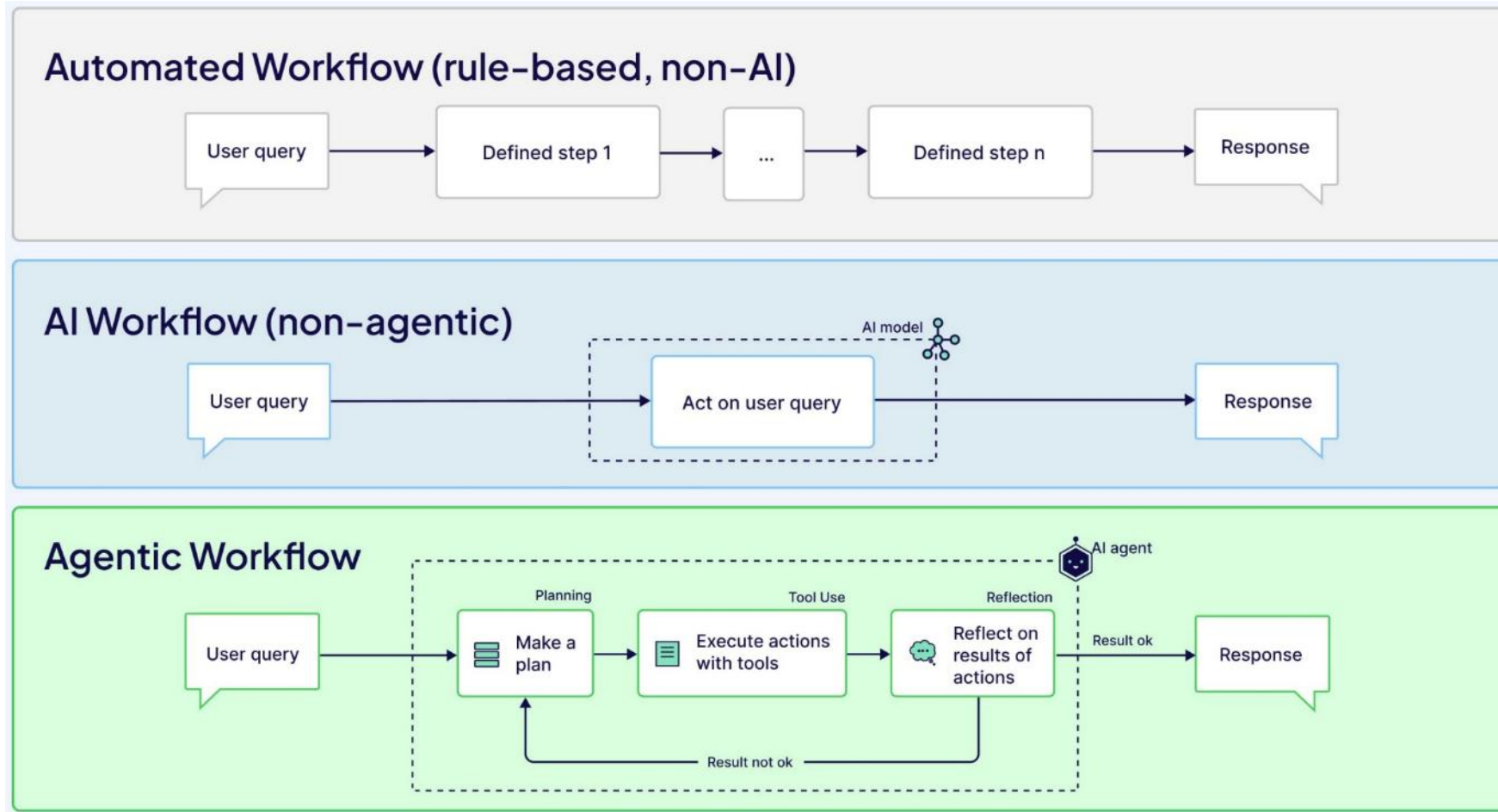
Human-in-the-Loop

AI systems that include human feedback or intervention as part of their operation. Humans may provide guidance, correct errors, or make final decisions to improve the accuracy and reliability of AI.

Large Language Model (LLM)

AI system trained on massive amounts of text data to understand and generate human-like language. Uses deep learning to predict and produce coherent text, answer questions, write code, and perform language-based tasks.

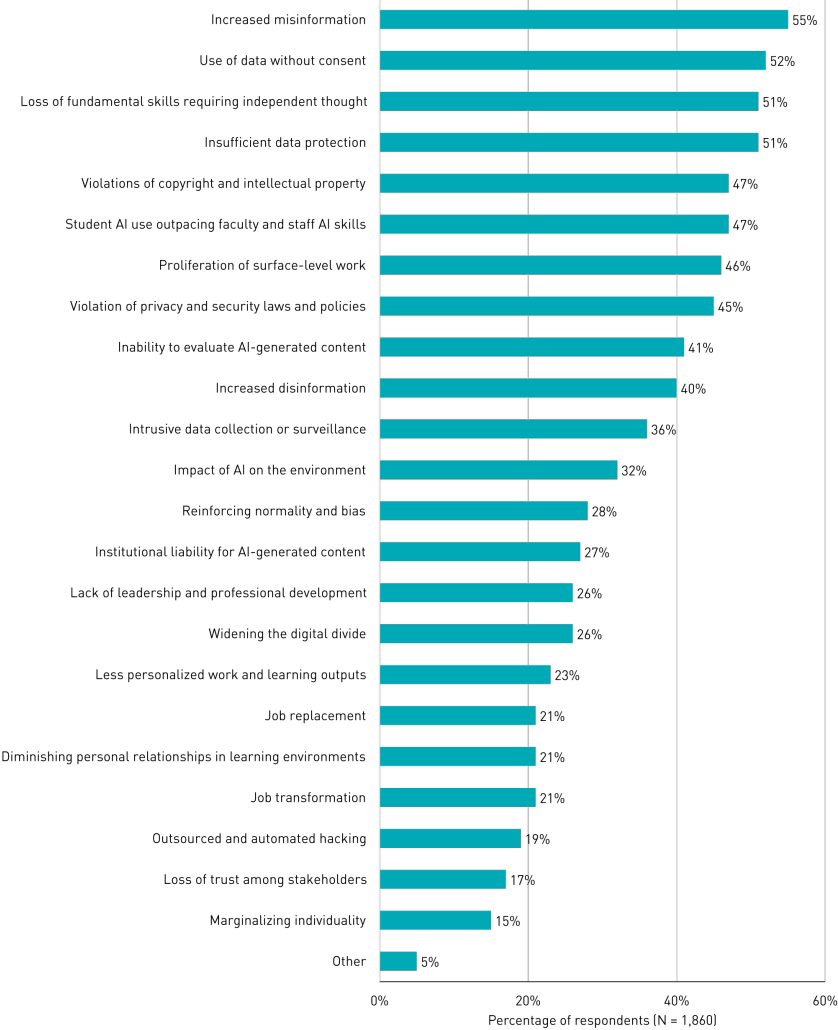
Standard Workflows vs. Agentic Workflows



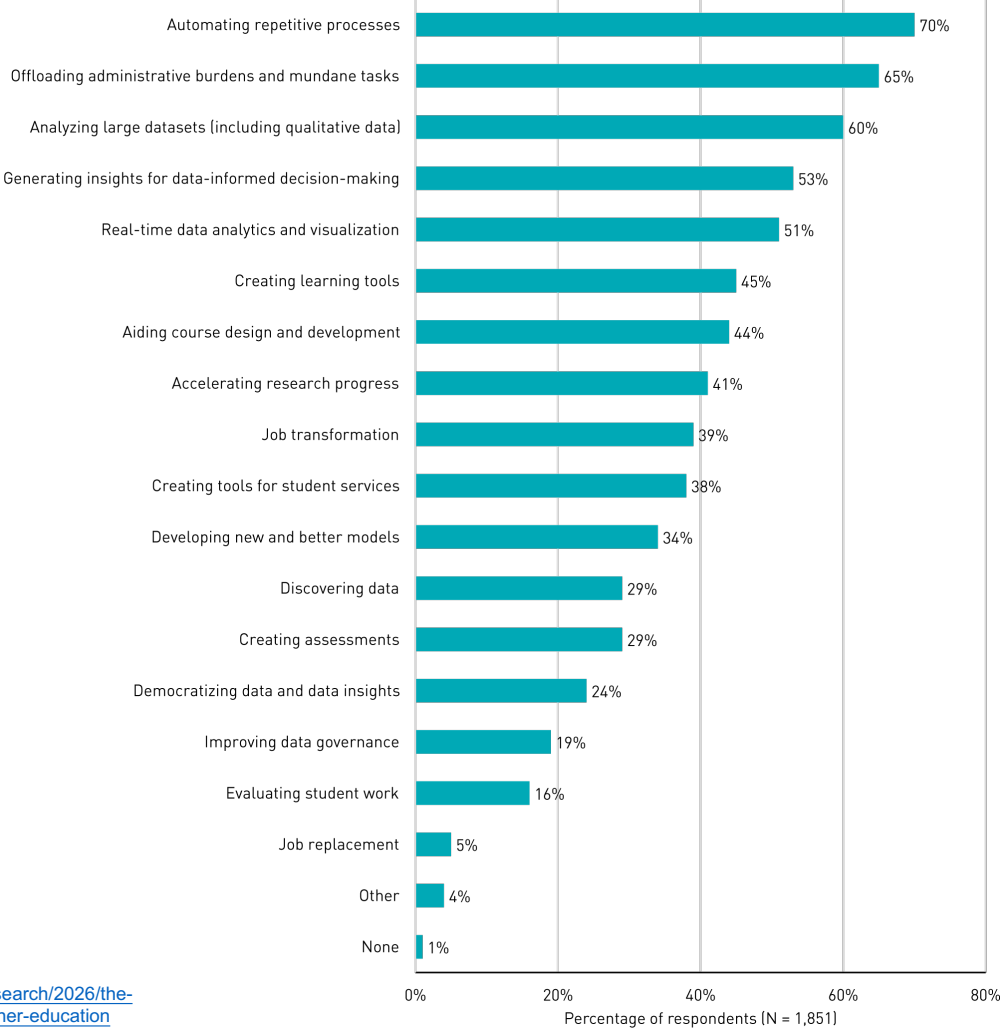
Source: weaviate.io

Educause Survey: Impact of AI on Work in Higher Education

Risks

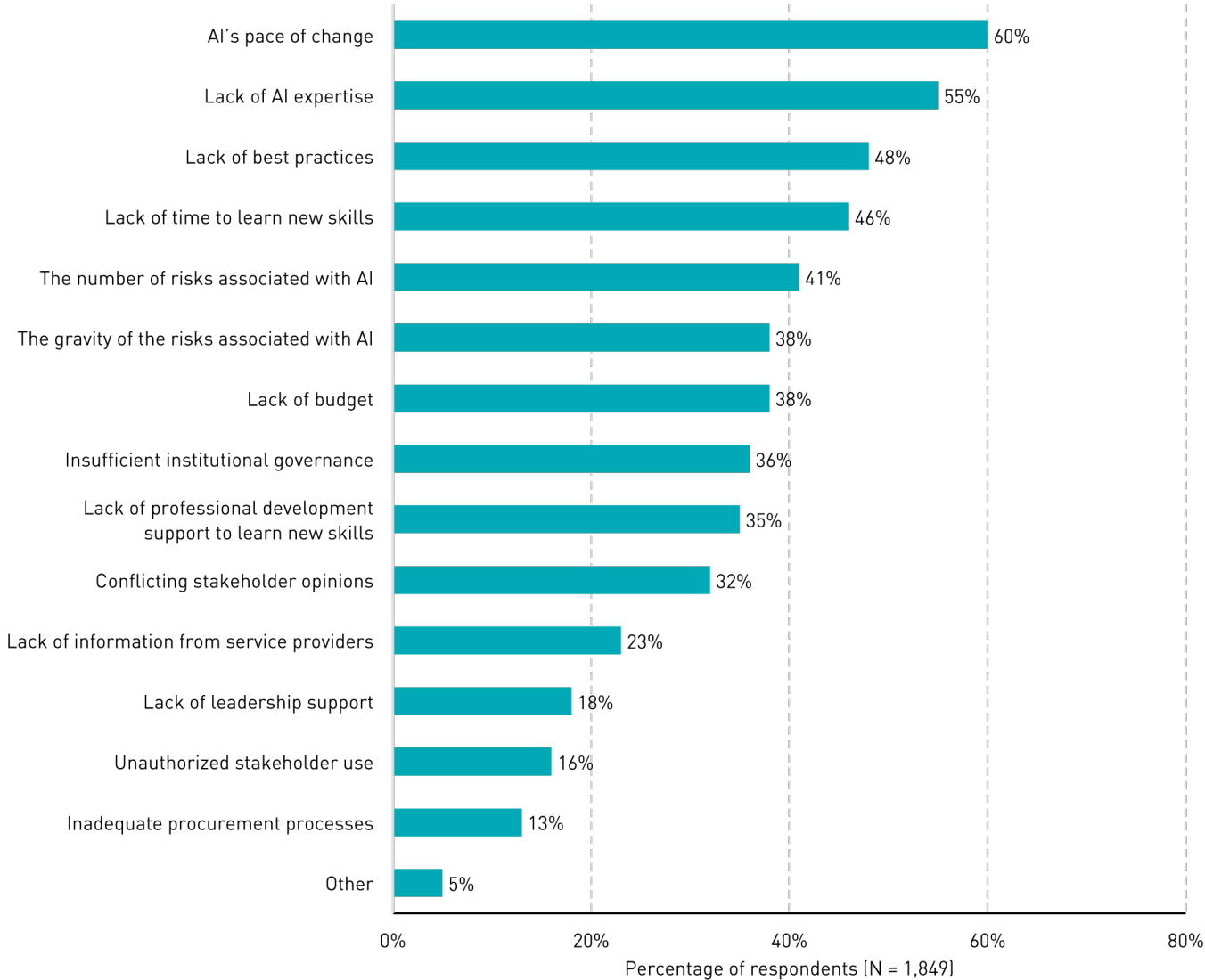


Opportunities



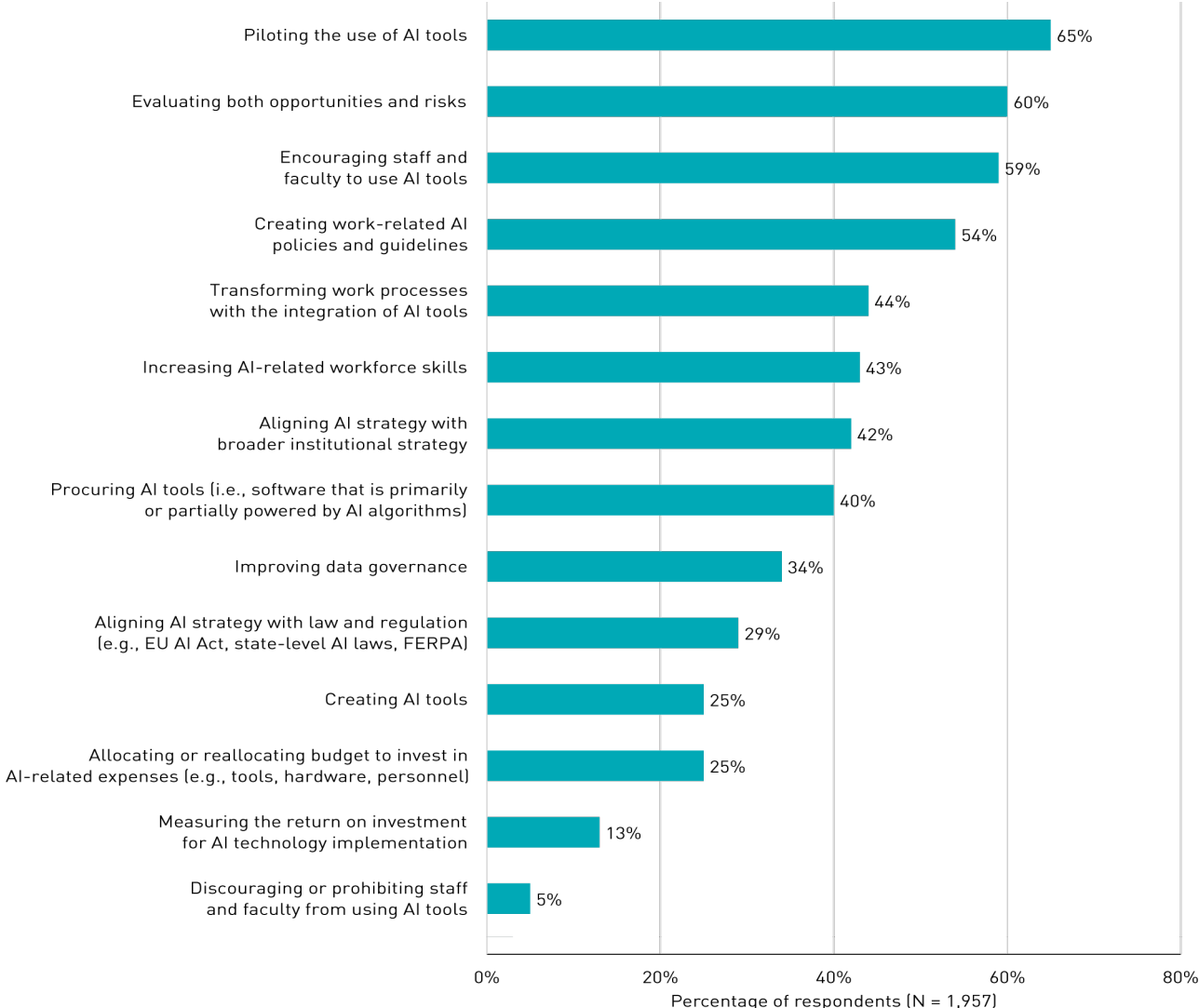
Source:
<https://www.educause.edu/research/2026/the-impact-of-ai-on-work-in-higher-education>

Educause Survey: Most Common AI Challenges



Source:
<https://www.educause.edu/research/2026/the-impact-of-ai-on-work-in-higher-education>

Educause Survey: Elements of Work-Related AI Strategy



Source:
<https://www.educause.edu/research/2026/the-impact-of-ai-on-work-in-higher-education>

Impact of AI on Workforce and Job Markets

Top 15 occupational groups ranked by share of postings containing AI terms in December 2025 (Indeed Job Lab)

Occupational Group	Jan 2025	Dec 2025	Change
Data & Analytics	38.8%	44.9%	+6.1%
Software Development	28.5%	39.7%	+11.2%
IT Systems & Solutions	20.9%	24.7%	+3.8%
Scientific Research and Development	16%	20.7%	+4.7%
Industrial Engineering	12%	18.7%	+6.7%
Marketing	8.4%	14.9%	+6.5%
IT Infrastructure, Operations, and Support	8.7%	13.4%	+4.6%
Electrical Engineering	7.1%	12.1%	+5%
Banking & Finance	7.3%	10.1%	+2.8%
Media & Communications	7.0%	9.4%	+2.4%
Human Resources	4.4%	8.8%	+4.4%
Legal	4.3%	8.3%	+3.9%
Project Management	4.3%	7.4%	+3.1%
Accounting	4.2%	6.0%	+1.7%
Sales	2.9%	5.9%	+3%

Source: Indeed Hiring Lab, <https://hiringlab.indeed.com/2026/01/22/january-labor-market-update-jobs-mentioning-ai-are-growing-amid-broader-hiring-weakness/>

2026 Job Outlook Spring Update (NACE)

AI Skills Employers Seek in Entry-Level Candidates	2026
Identify and use AI tools appropriate to the task	75%
Develop effective AI prompts to elicit quality outputs	72.7%
Analyze and revise AI outputs as needed	65.9%
Develop AI tools to increase work productivity	52.3%

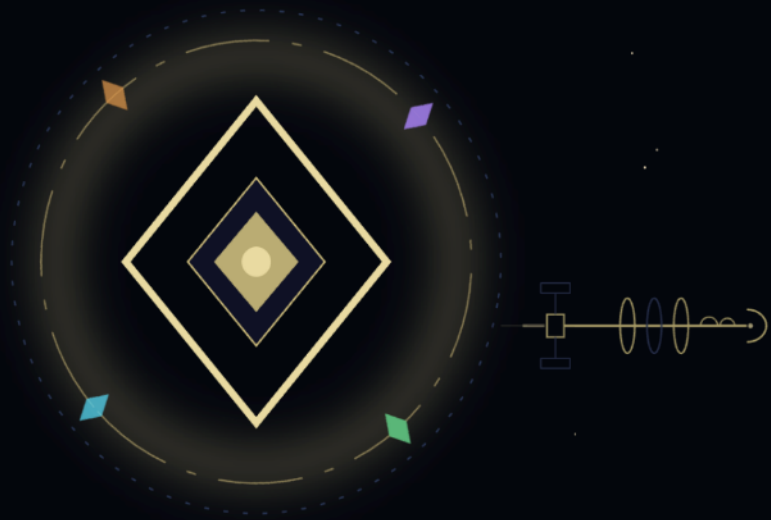
Source: National Association for Colleges and Employers (NACE), <https://www.nacweb.org/job-market/trends-and-predictions/demand-for-ai-skills-in-entry-level-jobs-nearly-triples-since-fall-2025>

Ranstad Data for Skilled Trades

- **Robotics Technicians:** Demand spiked by **107%** since late 2022.
- **HVAC Engineers & Technicians:** Demand increased by **67%**.
- **Construction & Infrastructure Roles:** Demand grew by **30%**.
- **Time-to-Hire Bottleneck:** Hiring a skilled tradesperson now takes an average of **56 days**, outpacing desk-based professional roles at **54 days**.

Source: Ranstad, <https://www.ranstad.com/press/2025/skilled-trades-personnel-demand-for-skilled-trades-soars-in-the-ai-era/>

Overall Talent Gap: The skilled trades face a large deficit, estimated between a **1.3 million and 2.1 million worker talent gap**.



HEARTWOOD

GV-001 · ARK PROGRAM · SHIP YEAR 314

THE FOUR FACTIONS · ONE CREW · ONE SHIP

Reach a habitable world.

Establish a human society.

Give the species its chance.

THE CREW IS THE SHIP · THE SHIP IS THE CREW

TOUCH ANYWHERE TO BOARD

HEARTWOOD

GV-001 · ARK PROGRAM

SHIP YEAR 314 · WEEK 1 OF 15

DEEP TRANSIT

SHIP HUM · OFF

[This Week](#) [Bridge](#) [Factions](#) [Crew](#) [Archive](#) [Map](#) [Log](#) [Personal Files](#) [How to Play](#)

ECOLOGY



78

INFRASTRUCTURE



83

COHESION



71

KNOWLEDGE



76

OBE · AUTONOMY 22 · COMPLIANT

◆ [Blight Watch](#) · [Greenhouse Two](#) · [TRACKING](#)

DEL MAR COLLEGE · SPECULATIVE LITERATURE · WEEK 1 OF 15

THIS WEEK ABOARD

◆ SHIP'S CLOCK — WEEKLY BRIEF POSTS · 4d 4h 17m · BRIEF MON 12:00 · SCENARIO TUE 12:00 · DUE FRI 5:00 PM · RESOLUTION SAT 12:00

◆ WEEK 1 · INDUCTION

The voyage record has not begun. This week the ship takes your names: read [How to Play](#), report for [Induction](#), and take your seat on your Faction's ruling council. The first scenario posts when the councils are seated.

[Report for induction](#)

[Read the Long Record](#)

◆ THE WEEKLY RHYTHM — BEGINNING NEXT WEEK

Monday 12:00 — the weekly brief posts: last week's consequences and the state of the ship.

Tuesday 12:00 — the new scenario posts here.

Tuesday & Thursday class — texts, discussion, and council work; aim to have your resolution written by Thursday.

Friday 5:00 PM — resolutions due at each council's Resolution Desk (the desk stands open to 11:59 PM, no later).

Saturday 12:00 — the resolution posts; read the consequences over the weekend.

◆ THE VOYAGE SO FAR · THREE CENTURIES IN SIX PLATES

TOUCH A MOMENT TO RAISE ITS PLATE FROM THE LONG RECORD

[SY 0 · DEPARTURE](#)

[c. SY 72 · THE QUIET YEAR](#)

[SY 122 · THE RENAMING](#)

[SY 234 · THE SCAR](#)

[SY 314 · THE CROSSING](#)

[SY 344 · ORBIT — PROJECTED](#)

◆ THE CROSSING · SOL → KEPLER-442B · SHIP YEAR 314 OF 344 · DEEP TRANSIT



What Heartwood is:

- An asynchronous generative narrative engine using persistent state, scheduled edge functions, prose-based branching , LLM-augmented, student-guided resolution
- A simulation the whole class governs together — one society, mid-voyage, whose story is written by students



15

weeks aboard,
one continuous voyage



4

factions govern the ship:
ecology, infrastructure,
cohesion, knowledge



1

scenario per week —
generated, resolved,
and answered by the ship



\$0

no cost, no accounts,
works on any phone
or computer

The best approach to monitor AI-generated course work is *not* through detection software or hidden questions placed deep in prompts. Those tools and strategies may help, but innovative curricular design that prioritizes engagement and interest through new pedagogies must match our student's interests and evolving technological literacy.

Why a generation ship?

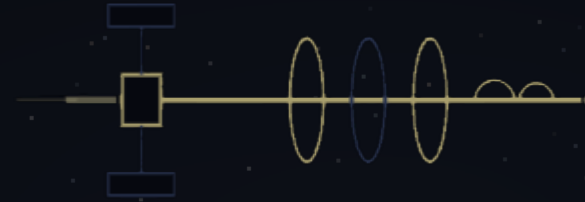
“There are ecological, biological, sociological, and psychological problems that can never be solved to make this idea work. The physical problems of propulsion have captured your fancy, and perhaps they can be solved, but they are the easy ones.”

— Kim Stanley Robinson, *Aurora*

A generation ship is a closed system with a fixed budget of air, soil, trust, and memory — crewed by people bound to a project they never consented to and cannot leave.

This trope in Speculative Fiction addresses a core human debate when faced with difficult circumstances: run or confront? The Generation Ship has been interpreted as both escapism *and* a different form of engagement.

Six generations of stories has rebuilt the same ship in every era's image — engineering dream, pulp drama, social laboratory, countercultural exodus, climate parable. Students have the opportunity to build their own narrative image by participating in a joint-story-telling endeavor.



THE COURSE RESEARCH QUESTIONS

Why are contemporary artists and audiences drawn to speculative fiction? Why do these narratives resonate so prominently now?

How do artists imagine humanity's future?

What are some of the most interesting, inventive contemporary Speculative Fiction? What makes those texts so unique?

What I have been building in anticipation of Fall 2026:



Ambient ship media in the page

Fifteen-second seamless transit animations — the ship visibly Running Full, Cautionary, or Damaged as the voyage's health changes



Faction-aligned cultural artifacts

Growing the Earth Cultural Database with records each faction would treasure — agriculture and harvest lore for the Tenders, engineering relics for the Architects



A new crew

Fresh pseudonymous crew patches for the fall cohort, and close attention to how strangers deliberate where the pilot cohort was already warm



Smoother deliberation

Clearer signposting for where and how factions file, and drafts that survive a student stepping away to check the Archive

Everything Earth ever published, including its errors, plus the ship's own record. When a scenario directs you to the Earth Repository, it means your real library databases — your existing student login, no new accounts, no cost. Your faction's credibility depends on what you choose to cite.

◆ THE EARTH REPOSITORY • THE CARTOGRAPHERS HOLD THE INDEX

Del Mar College laid this collection into the keel before departure and endows it still — the long record of Earth thinking about itself, searchable from any deck. The Cartographers keep the index; the ship keeps the questions.

Enter the Earth Repository → Del Mar College Library

◆ EARTH CULTURAL DATABASE • ROOTWAYS CUSTODY

Art, images, music, and stories brought aboard at departure — 109 records, kept, half-kept, or quietly fading as the ship becomes a culture of its own. The Repository holds the scholarship; this room holds the fire.

CONSULTED THIS VOYAGE: 26 OF 109 RECORDS

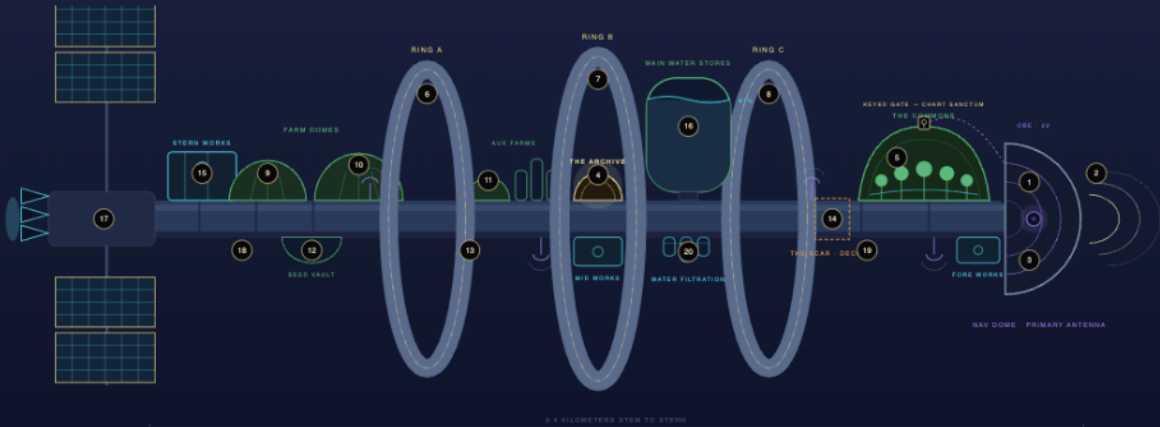
Open the database →

Download plate SVG

Download plate PNG

◆ DISTRICT ATLAS – WHERE YOU ARE ABOARD

SHOW MY BERTH: – choose your crew member –



Tap any numbered compartment to open its record

New searchBrowse by ▼Research tools ▼Quick Links ▼

Search articles, books, journals & more

Basic search

All fields ▼

AND ▼

All fields ▼

AND ▼

All fields ▼

THE RISE AND FALL OF SANCTUARY MOON ▶

LONGFORM SERIAL • ENTERTAINMENT FEED • CARRIED COMPLETE

LAST CONSULTED SY 312 • THE ROOTWAYS • THIRD-SHIFT ROTATION

THE TEMPEST — WILLIAM SHAKESPEARE ▶

LONDON • 1611 • PLAY

LAST CONSULTED SY 312 • THE KEEPERS • PERFORMANCE, RING B COMMONS

HEARTWOOD

GV-001 • SHIP'S HOLOGRAM • OUTBOUND FROM SOL
9.4 KM • NINETEEN COMPARTMENTS • THREE RINGS • FORTY THOUSAND SOULS

SY 314 OF 344 • DEEP WATER • UNDER WAY — RINGS AT SPIN • HULL VIEW
DRAG TO ORBIT • SCROLL TO ZOOM • RIGHT-DRAG TO PAN • CLICK A COMPARTMENT

SHIP'S INDEX • 19 COMPARTMENTS

- 01 Command Ring
- 02 Nav Dome & Antenna
- 03 Observation Gallery
- 04 The Archive
- 05 The Commons
- 06 Habitat Ring A
- 07 Habitat Ring B
- 08 Habitat Ring C
- 09 Biodome One
- 10 Biodome Two
- 11 Greenhouse Two (Aux Farms)
- 12 Seed Vault
- 13 Medical & Long Care
- 14 The Scar

- THE TENDERS
- THE ARCHITECTS
- THE KEEPERS
- THE CARTOGRAPHERS



COMMUNICATIONS

The Private Lobby is for your Faction alone; ALL-DECKS carries to everyone. The rule of the Long Record applies here without exception: **everything transmitted is fiction, in character, and part of the ship's permanent, public record.** Motions are advisory — they inform your council's written resolution and never act on the ship.

- The Factions
- Communications 3

◆ SHIP'S CLOCK — WEEKLY BRIEF POSTS • 3d 21h 5m • BRIEF MON 12:00 • SCENARIO TUE 12:00 • DUE FRI 5:00 PM • RESOLUT

TRANSMITTING AS: — choose your crew member — ▾

- THE ARCHITECTS • PRIVATE LOBBY
- ALL-DECKS 1

• DISCUSSION — the council's working talk — in character, on the record

◆ THE ARCHITECTS • PRIVATE LOBBY

- ◆ Randy Dune • THE ARCHITECTS • 8/27 12:55
Good afternoon! Current status of the infrastructure is 83%.
- ◆ Barry Spinner • THE ARCHITECTS • 8/27 13:47
Hello
- ◆ Sally Timely • THE ARCHITECTS • 8/27 13:47
Hello
- ◆ Bryn Voss • THE ARCHITECTS • 8/27 13:52
Hello
- ◆ Phaethon • THE ARCHITECTS • 8/27 13:52
nah

CHOOSE YOUR CREW MEMBER ABOVE TO TRANSMIT.

• MOTIONS — formal advisory votes — they inform the council's filing; they never act on the ship

NO OPEN MOTIONS ON THIS LINE.

• OBE CONSULTATION — rationed, logged conversations with the ship's mind — it asks as much as it answers

◆ OBE • CONSULTATIONS — AUTONOMY INDEX 22 (COMPLIANT)

Your council may open **3 consultations per scenario** — a scheduled resource, like water. 3 remain. OBE answers within its charter resolution, and it asks as much as it answers. Every word is logged under Cartographer custody.

NO CONSULTATIONS THIS SCENARIO. THE LINE TO OBE IS OPEN.

CREW OF THE HEARTWOOD

Every record below is a seated council member — a student of this class.

The thousands they lead are statistical; the seats are real. Records are shared with the whole class; edits are on the honor system, removals require the instructor.

◆ ALREADY ABOARD?

If you have already signed the Long Record — on this device or any other — find your name below and take your seat. Your record follows you; nothing is created twice.

"papa" bo jenkins

Alura Rivenwood

Barry Spinner

Bryn Voss

Elliot

Eva Costanza Velacruz

Eve Villarreal

Janus Tregor

Jax Orden

Josie Lovehart

Kael Veyron

Kara Trace

Mary Watney

Moonbeam

Paul Clarke

Phaethon

Randy Dune

Rikki Stars

Sally Timely

Sibling Lex

Zathura Morales

First time aboard? [Sign the Long Record](#) — only if you have never signed before.

[Refresh roster](#) [Print / full roster export](#)

THE TENDERS • RULING COUNCIL • 4 SEATS OF 9,988 POSTED

"PAPA" BO JENKINS

WARDEN • THE TENDERS

FOURTH COHORT • 06 • HABITAT RING A

He's the oldest person on the ship left and the last of his lineage. Just lives day by day helping everyone out from an advice standpoint.

[edit](#) [remove](#)

EVA COSTANZA VELACRUZ

WARDEN • THE TENDERS

SIXTH COHORT • 09 • BIDDOME ONE

Having only known the stars, Eva Costanza Velacruz was born aboard the Heartwood. She was only ever able to dream visions of Earth based off the memories and stories that the elders would tell her. She crew fascinated with

[edit](#) [remove](#)

MARY WATNEY

WARDEN • THE TENDERS

FIFTH COHORT • 08 • HABITAT RING C

Aquaculture technician. Ring C stern tanks. Fifth-generation Tender in the mastline; fifty-one years aboard. Keeps the brood stock ledger by hand. Holds that the ship is a garden that thinks it is a machine.

[edit](#) [remove](#)

RIKKI STARS

WARDEN • THE TENDERS

SIXTH COHORT • 06 • HABITAT RING A

My name is Rikki Stars, part the Tenders, and honestly, I'm not sure why I am here. We've been traveling for so long, generation after generation, that the 'why' feels like it got lost somewhere along the way. I'm part of the sixth

[edit](#) [remove](#)

THE ARCHITECTS • RULING COUNCIL • 7 SEATS OF 8,788 POSTED

BARRY SPINNER

CHIEF OF WORKS • THE ARCHITECTS

SIXTH COHORT • 09 • BIDDOME ONE

My family were good people who helped others and it brought them joy. They were here's almost, always doing something that helped people and the community. I am hardheaded and stubborn. If my mind is set on

[edit](#) [remove](#)

БРYН VOSS

CHIEF OF WORKS • THE ARCHITECTS

SIXTH COHORT • 06 • HABITAT RING A

My name is Bryn Voss I am a part of the Architects. My family were builders back on earth, meaning I grew up with people who knew how to repair things. My first memory on Heartwood is hearing the thin no ouler

[edit](#) [remove](#)

MOONBEAM

CHIEF OF WORKS • THE ARCHITECTS

SIXTH COHORT • 19 • THE QUIET ROOMS

my name is moonbeam and I am a part of the Architects.

[edit](#) [remove](#)

PAUL CLARKE

CHIEF OF WORKS • THE ARCHITECTS

SIXTH COHORT • 14 • THE SCAR (DECK 14, REBUILT)

Weld inspector, frames 30-55. Born in the rebuilt sections; took the frames at eleven, the year his father's crew lost a man to unlogged work. Files everything. Twenty-nine, and older than that in the joints.

[edit](#) [remove](#)

PHAETHON

CHIEF OF WORKS • THE ARCHITECTS

FIFTH COHORT • 20 • WATER FILTRATION

I am an Architect aboard Heartwood, descended from a family who built beautiful cities on Earth, though most of them are now gone. I learned to design spaces that make people feel safe, not I secretly hate enclosed

[edit](#) [remove](#)

RANDY DUNE

CHIEF OF WORKS • THE ARCHITECTS

SIXTH COHORT • 06 • HABITAT RING A

My family line left behind builders on Earth. According to the records, the Dunes worked in construction, infrastructure, and mechanical repair for generations. They helped maintain buildings, roads, water systems, and machinery

[edit](#) [remove](#)

◆ THE VOYAGE SO FAR • THREE CENTURIES IN SIX PLATES

TOUCH A MOMENT TO RAISE ITS PLATE FROM THE LONG RECORD

- SY 0 • DEPARTURE
- c. SY 72 • THE QUIET YEAR
- SY 122 • THE RENAMING
- SY 234 • THE SCAR
- SY 314 • THE CROSSING
- SY 344 • ORBIT — PROJECTED

THE LONG RECORD • NO ENTRY

The Quiet Year

c. SY 72 • THE QUIET YEAR

NAV DOME • THIRD SHIFT • NO LOG ENTRY

The year the ship stopped believing in a promised shore. The Archive keeps no single day for it; grief has no timestamp. What grew afterward became the Rootways.

THE LONG RECORD • DECK 14

The Scar

SY 234 • THE SCAR

DECK 14 • REBUILT FROM SALVAGE • SIX YEARS

RESETTLED • ITS RESIDENTS CHOSE IT

Deck 14, holed in SY 234 and rebuilt from salvage over six years. Its residents chose it. The welds show; the people who live in the Scar polish them rather than paint them.

CONSOLE

Lock console

◆ MANUAL OVERRIDE · NO SCENARIOS YET

The record begins here. With the calendar set and the clock ON, the first scenario posts itself on the first Tuesday after induction. Use this control only if the clock misses; it previews privately before it posts.

SCENARIO SEED — OPTIONAL

A premise, image, or event to build this week around — e.g. 'a Sixth Cohort welder reports a repeated pattern knocked against the Ring C truss, in rhythm with the drive hum.' Leave empty and the voyage speaks for itself.

The seed sets the situation; the engine still writes the week from canon, and the students still decide everything that matters.

Hold seed for the clock's Tuesday post

Generate scenario for week 2

◆ SEED POOL · 2 WAITING

Motifs, fragments, and mysteries the engine may draw on. Every Tuesday post offers the pool to the engine as strictly optional material — it weaves one in only when the week's canon makes it apt, and most weeks it uses none. A held seed (above) takes precedence and skips the pool that week. Retire an entry once you see it surface; retired entries stay listed for your records.

e.g. 'A children's counting rhyme aboard has verses that no longer match the stores ledger.'

Add to the pool

The Counting Song. Every child aboard learns the Turning Song before they can read — the counting rhyme sung at shift-change that teaches which handholds to take when a ring is under thrust. An Archive original from Commander Andrade's first decade has surfaced, and its fourth verse is inverted from the verse the ship sings: the song as sung says move with the ring's rotation during a slow-drill; the departure-era notation says against. Three centuries of children have sung either the error or the correction, and nothing has gone wrong — yet. Living memory against archival record: which is the

Retire

A small, repeating clink in the ship's hum — metal on metal, patient, evenly spaced, roughly a minute apart. The maintenance rota cannot source it. It has not missed an interval since anyone started counting, and no one can say when it began. What is making the noise? It cannot be human, because the timing is too exact. It does not sound mechanical. Could it be... OBE?

Retire

► RETIRED — 1 SURFACED OR WITHDRAWN

◆ TRACKED CONDITIONS · MODERATION · 1

The engine opens, updates, and retires these at each Saturday resolve — that is the usual path. This panel is the curatorial safety valve: resolving one removes its chip from the status bar everywhere, immediately and permanently; the engine simply stops seeing it. Cycle state walks TRACKING → ACTIVE → CRITICAL.

◆ Blight Watch — Greenhouse Two · TRACKING cycle state resolve — retire from the record

◆ THE SHIP'S CLOCK · AUTOMATION

With the clock ON and the calendar set, the cycle runs itself, ship time: the weekly brief Monday 12:00, the scenario Tuesday 12:00 (using any held seed), OBE's ALL-DECKS reminder Friday 5:00 PM naming councils that haven't filed, and the resolution Saturday 12:00 — read from the desks, with anything you've typed in the cycle panel taking precedence. The clock checks in hourly; a missed posting is caught on the next check. OFF pauses everything; the manual controls above always work.

Clock: ON — the cycle runs itself

Tick the clock now

LAST TICK: 12/31 18:00 — nothing due

► FORCE AN EVENT NOW — testing & recovery

◆ CANON DOCUMENT — THE ENGINE'S MEMORY OF THE VOYAGE

Rewritten automatically after every resolution. Edit only to correct the record; the engine treats this text as truth.

STATE OF THE SHIP (SY 314, Deep Transit, 30 years to Kepler-442b):
Blight in Greenhouse Two contained but not cleared; produce rations run a tenth short, two more seasons expected. Forty-one deferred maintenance items logged by OBE, most minor. Aft water reclaimers show microfractures found in the Architects' preventive survey. Attendance at rest-gatherings rising since rationing began; the question of whether gathering hours count against work shifts is unrul

STANDING DECISIONS & PROMISES: The labor charter caps work at two shifts per crew member (suspended once, SY 178-189; every Keeper learns the famine record). The Ossai lottery's four thousand unchosen berths remain the Selection's only uncontested decision.

TENSIONS & THREADS: The long argument (Factions vs Roorways) is quiet but breathing — the gathering-hours question is its current edge, and the

Save canon

◆ CANON HISTORY — WHAT THE SHIP CARRIED INTO EACH WEEK

Read-only. Before every Saturday resolve the canon the scenario was written from is filed under its week, with a SHA-256 fingerprint. Loading a week recomputes the fingerprint from the stored text, so the record proves itself.

Load the history WEEK

◆ WORLD BIBLE — READ-ONLY

The fixed text the engine and the clock both read (hw:bible in ship storage). It is not embedded in this file and never loads on a student's page. Review it here; edit it deliberately, in Supabase, never mid-week.

Load the bible for review

Access and Privacy are central components

Every design decision defers to continuity and reach. A less elegant story every student can enter beats an elegant one that loses people along the way. No student data is ever used online—communication to Canvas works through pseudonymity.



Free, no accounts, any phone

One link. No logins, no purchases, no installs — a student with only a phone can participate fully. We hold class in a computer room that allows each individual desktop access as well.



FERPA-safe by design

The game holds no education records. Crew identities are fictional; grades live only in Canvas. Pseudonymity is written into the world as “the law of the Long Record.”



Follows Federal Accessibility Laws

Anything student-facing must be reachable in two taps with zero explanation, colors are shiftable, everything can be read aloud or captioned. Adheres to strictly to WCAG 2.1 AA standards.