LEHIGH CARBON COMMUNITY COLLEGE
Minutes of the Meeting of the Board of Trustees
November 7, 2024
Volume 60

The scheduled regular meeting of the Board of Trustees of Lehigh Carbon Community College was held in a conventional manner with virtual access via a telecommunications device on Thursday, November 7, 2024. Public in-person access was available in the Nevin Earl Remaley Technology Center, Room TC203, on the Schnecksville Campus, PA. Ms. Audrey L. Larvey, Vice Chair, convened the meeting at 5:30 p.m.

Members Present:

Ms. Sharon L. Albert	Mr. David L. Krause
Mr. Daniel Bosket	Ms. Audrey L. Larvey
Mr. John W. Corby	Ms. Michelle Mazzola
Mr. David J. Hein	Mr. Paul R. McArdle
Dr. Barbara C. Kistler	Mr. Kenneth H. Mohr, Jr.
Mr. Matthew T. Korp	Mrs. Ann L. Thompson

Staff Present
Ms. Tracy Bean, Executive Assistant to the President and Board of Trustees
Dr. Ann D. Bieber, President
Mr. Joshua Mitchell, CIO
Ms. Stefanie Nester, Vice President for Finance and Administrative Services
Dr. Melanie Turrano, Professor of English
Ms. Larissa Verta, Vice President for Academic Services and Student Support

Counsel Present:
Attorney Jerome B. Frank

Press Present:
None.

Others Present:
None

Members of Public Present:
None.

Public Comment –
Agenda Items

None.

Minutes of Previous
Meeting
October 10, 2024

On a motion by Trustee Thompson, seconded by Trustee Hein, the minutes for the October 10, 2024, LCCC Board of Trustees meeting were approved.

Treasurer's Report

David Hein, Treasurer, provided the Treasurer's Report as listed below:

Cash Balance 9/1/2024	$44,342,669.00
Receipts	+2,251,659.00
Total	46,594,328.00
Disbursed	-4,346,506.00
Cash Balance 9/30/2024	$42,247,822.00

Total revenues are $16.1 million or 34% of the budget compared to 27% last year; Total expenditures are $11.3 million, or 24% of the budget compared to 25% last year.

There are no CD's up for renewal at this time.

President's Report

Dr. Bieber reported it's been a very busy time on campus; college and career days at the Morgan Center, transfer events at Morgan and Donley, job fair last week at main with 85 employers on campus, Run Club planning Turkey Trot, student clubs are planning events (food drives, Friendsgiving and others). Dr. Bieber tries to meet with each club every semester. The notes from the second SBHE meeting are attached in the Legislative update. To note, Dr. Kate Shaw was hired as the Executive Director effective immediately. Dr. Bieber met with Dr. Shapira and Dr. Shaw to discuss the Transfer of Authority committee, which Dr. Bieber is chair. Next steps include a review of the legislation by the attorneys to understand the effect on higher education and then discussion on how to roll out the changes.

Dr. Haney is traveling on college business; Dr. Bieber provided the enrollment report. There are no dashboards available at this time, however, the first winter dashboard will be available on November 18. Fall ended down 2.5% in headcount and down 6.5% in credit hours. The spring dashboard will be available on November 25 and Spring applications are trending positive.

Personnel,
Curriculum and
Government
Relations
Committee
Presentation:
Artificial
Intelligence (AI)

Dr. Kistler welcomed Josh Mitchell, CIO/CISO to give his presentation, Artificial Intelligence (AI).

Mr. Mitchell began by defining what AI is and how it relates to the college. There are currently five college policies regarding AI; two are academic and three are more business and data oriented. A new AI policy for guidelines is being developed and will be presented at some point in the future.

The Gartner Hype Cycle for AI 2024 was reviewed depicting the expectations and realities of AI. We are mostly in a peak period of expectation with a decline of about 90% of AI companies will be gone or absorbed into larger companies.

There are three levels of AI; (1) Reactive Machine AI-the use of algorithms to "learn" by extracting patterns (i.e. Netflix recommendation program), (2) Narrow AI-performs specific tasks that normally require human intelligence (i.e. Siri, Alexa, self-driving cars), (3) Artificial General Intelligence-general ability to learn, reason and think without human intelligence (currently theoretical). A full list of AI definitions was reviewed.

Important to Note: Large Language Model (LLM) used primarily to collect massive amounts of parameters and training data to understand and predict content. Hallucinations are nonsensical or inaccurate outputs, that is why AI must be checked a verified by a human to be certain data and text is correct.

AI Tools include ChatGPT, Apple Intelligence, Amazon AI and others. Most have a public and private side; public side is free because it wants your data but if you want to keep it private fees are involved from $6 - $30 per month per user. Risks and rewards are evident in free AI. Risks include providing personal data, hallucinations and bias and academic honesty. Rewards include no cost, academic assistance and business process automation.

AI is used in higher education and can be quite helpful when used with predictive analytics, adaptive learning, optimize course schedules, automated grading and others. There is room for improvement and growth using AI under the right supervision.

The proposed AI Guideline policy will reference the current three policies we have to define classification of data and how AI can be used and the approval process.

A lengthy Q&A followed the presentation.

The power point presentation is attached for reference.

Vice Chair Larvey thanked Mr. Mitchell for the extensive review of his presentation.

Trustee Kistler referenced the committee meeting minutes of October 21. The open job report was reviewed as well as the resolution for Sponsorship Resident Policy. At the next meeting in November there will be a double Executive Session, first with the Auditor and second for the board self-evaluation and Dr. Bieber's contract.

PACCC Legislative/ Governmental Affairs Update	Trustee Thompson reported Dr. Bieber has been invited to the White House to attend a reception for 'Classroom to Career Summit' on November 13, 2024. Also, to note, the attachments on the agenda for the Legislative update are informative and should be reviewed if you have not done so already. A complete report for this committee can be found in its minutes of October 21, 2024.
Finance and Facilities Committee	Trustee Mohr reviewed this committee's minutes for October 21, 2024. An Executive Session was held for a 2025-2026 Budget Workshop. The committee reviewed the Cash Flow and Revenue and Expenditures reports along with the Net Asset, SGA and Auxiliary budgets. The committee reviewed the Accounts Receivable report, the First Quarter Training Contracts report, the First Quarter Grants Progress report and the Quarterly Unemployment Compensation update. The Enrollment Dashboard was reviewed, as well as the Capital Project Status update report. There are no resolutions for review. A complete report for this committee can be found in its minutes of October 21, 2024.
Negotiations Committee	No report.
Joint Coordinating Committee	The first meeting of the academic year is next week, Friday, November 15, 2024.
LCCC Foundation	Dr. Kistler reports the Rocky Bleier event was a huge success; there were approximately 125 guests and proceeds of $11,000 will be used to support scholarships for veterans. Trustee Hein represented the Board at the event. A half-day 'Goal Setting Retreat' will be held on Wednesday, November 20, focusing on

key areas where the Foundation can support the college. Trustee Kistler gave a gentle reminder to contribute to the Foundation Annual Fund if you have not done so already, she would like to see 100% participation, noting it is not the amount of the gift that is important but the participation is key.

Old Business
None.

New Business
Trustee Krause asked that it be noted in the minutes that Trustee Bosket arrived at the meeting at 5:35pm.

Public Comment – Non-Agenda
None.

Announcements
Vice Chair Larvey announced the PACCC Statewide Virtual meeting is being held on November 20. If anyone is interested in attending, please let Tracy know so that she can register you.

Adjournment
Trustee Larvey called for a motion to adjourn. Trustee Hein motioned and Trustee Korp second the motion.
The meeting adjourned at 6:17pm.

Executive Session
Executive Session was held to discuss legal matters.

Respectfully submitted,

Ms. Sharon Albert, Secretary
Board of Trustees
Lehigh Carbon Community College

/tlb
Attachments

ARTIFICIAL INTELLIGENCE (AI)

Josh Mitchell – Chief Information Officer / Chief Information Security Officer
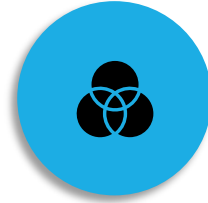November 2024

ARTIFICIAL INTELLIGENCE

DEFINITIONS

TOOLS
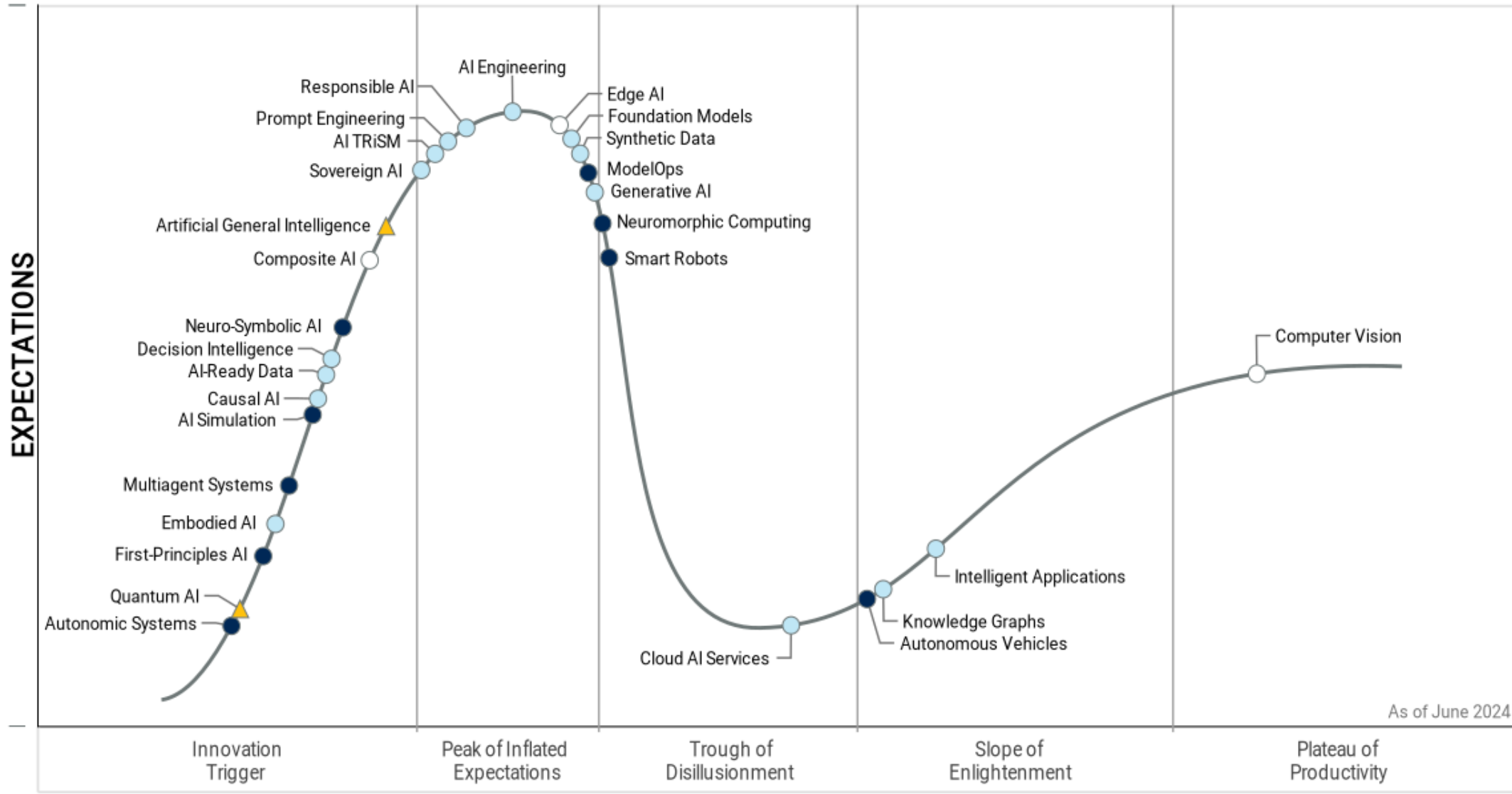
RISKS & REWARDS

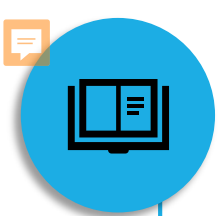USES IN HIGHER EDUCATION

COLLEGE POLICIES

Q&A

Hype Cycle for Artificial Intelligence, 2024

EXPECTATIONS (y-axis)

TIME (x-axis)

Data points along the curve:

Innovation Trigger:
- Autonomic Systems
- Quantum AI
- First-Principles AI
- Embodied AI
- Multiagent Systems
- AI Simulation
- Causal AI
- AI-Ready Data
- Decision Intelligence
- Neuro-Symbolic AI
- Composite AI
- Artificial General Intelligence
- Sovereign AI
- AI TRiSM
- Prompt Engineering
- Responsible AI

Peak of Inflated Expectations:
- AI Engineering
- Edge AI
- Foundation Models
- Synthetic Data
- ModelOps
- Generative AI
- Neuromorphic Computing
- Smart Robots

Trough of Disillusionment:
- Cloud AI Services

Slope of Enlightenment:
- Knowledge Graphs
- Autonomous Vehicles
- Intelligent Applications

Plateau of Productivity:
- Computer Vision

As of June 2024

Plateau will be reached: ○ <2 yrs. ○ 2–5 yrs. ● 5–10 yrs. ▲ >10 yrs. ⊗ Obsolete before plateau

Gartner https://www.gartner.com/en/documents/5505695

LEVELS OF AI

Reactive Machine AI

1990's IBM Deep Blue

Netflix Recommendation Engine

Narrow AI

YOU ARE HERE

Generative & Predictive AI

- ChatGPT
- Siri
- Alexa
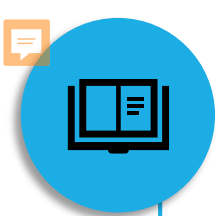- Self-driving cars
- Cancer detection

 See Definitions Worksheet

- LLM
- NLP
- Hallucinations

Artificial General Intelligence (AGI)

Currently theoretical

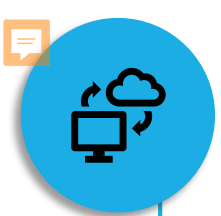General ability to learn, reason, think, and perceive without human intervention

AI DEFINITIONS

- Artificial Intelligence

    coined in 1955, was defined as "the science and engineering of making intelligent machines"

- Artificial General AI (AGI)

    general ability to learn, reason, think, and perceive without human intervention

- Machine Learning (ML)

    field and practice of using algorithms that are able to "learn" by extracting patterns from a large body of data

- Narrow AI

    performs specific tasks that normally require human intelligence, visual perception, speech recognition, decision-making, and translation

- Large Language Model (LLM)

    a deep-learning algorithm that uses massive amounts of parameters and training data to understand and predict content

- Natural Language Processing (NLP)

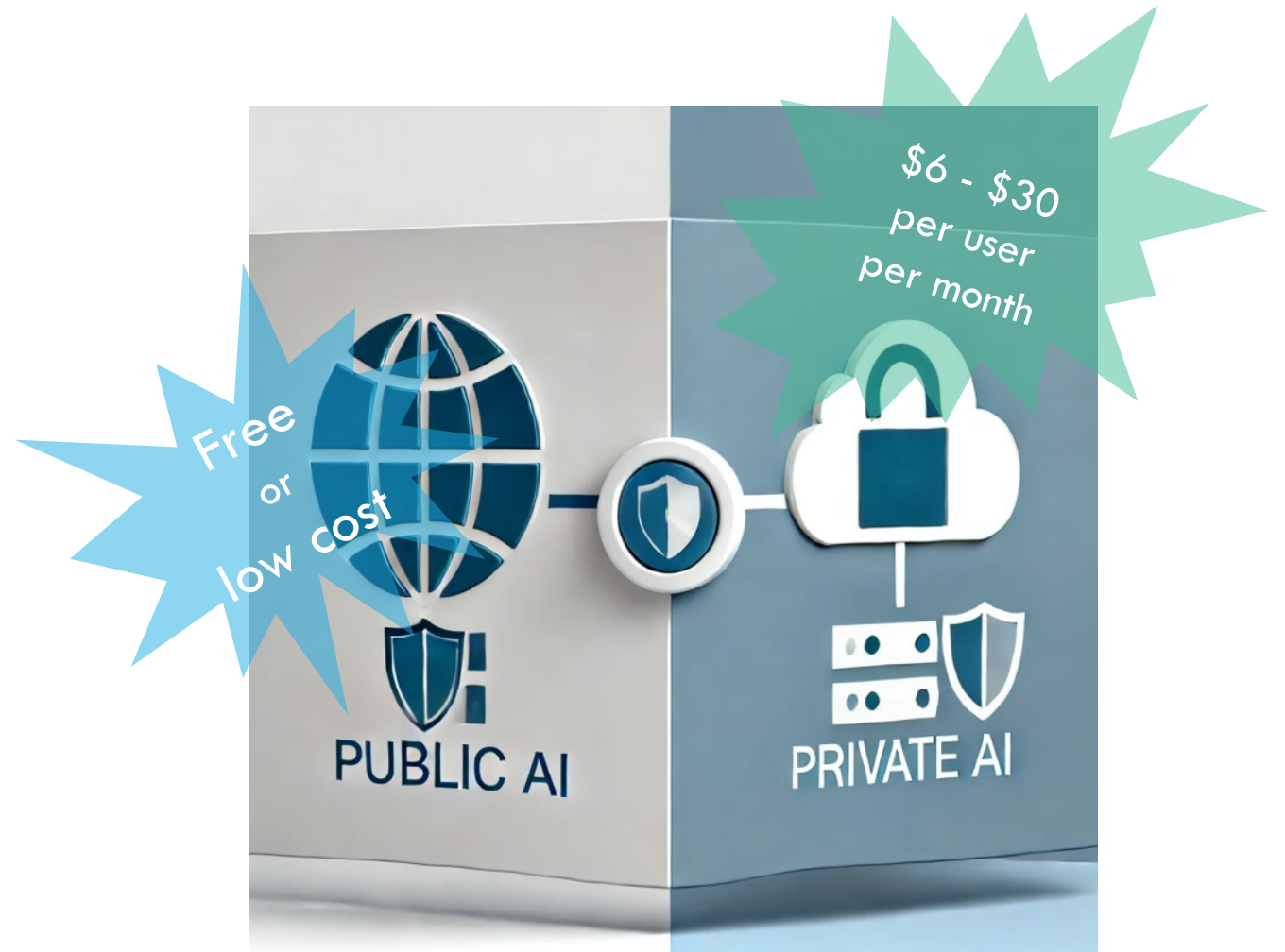   subfield of AI using machine learning to enable computers to understand and communicate with human language
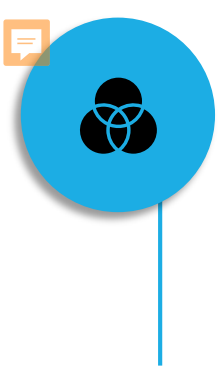
AI DEFINITIONS

○ Generative AI

crafts probable answers to prompts based on past data or LLM (text, images, audio, video)

○ Predictive AI

uses LLM data to assess future outcomes

○ ChatBot

form of Generative AI that uses Natural Language Processing to answer questions or engage in conversation with humans

○ Hallucinations

nonsensical or inaccurate outputs created when a LLM perceives patterns or objects that are nonexistent

○ Supervised Learning

uses labeled data sets to train algorithms to classify data or predict outcomes accurately. Humans pair each training example to an output label

○ Unsupervised Learning

uses ML algorithms to analyze and cluster unlabeled data sets. These algorithms discover hidden patterns or data groupings without the need for human intervention

○ Deep Learning

uses multilayered neural networks, that more closely simulate the complex decision-making power of the human brain

AI TOOLS

- OpenAI ChatGPT | DALL-E | Sora

- Anthropic Claude

- Google Gemini

- Apple Intelligence (Siri)

- Microsoft Copilot

- Amazon AI (Alexa)

AI RISKS & REWARDS

Rewards

FREE!!!!

Translation & Image recognition

Academic assistance

Business process automation

Risks

Companies want your data

Hallucinations and bias

Academic honesty

Protected data being shared with LLM

AI IN HIGHER EDUCATION

Academic

- Adaptive learning
- Automated grading
- Academic planning
- Immediate student feedback
- Generate curriculum drafts based on learning objectives
- Proctoring and cheating detection

Administrative

- Predictive analytics
- Optimize course schedules
- Forecast course demand and optimize scheduling
- Task automation and/or validation
- Organize, update, and secure student records
- Chatbots to guide students through applicant and new student pipelines
- Identify and respond to cyberattacks

Workflow Steps With AI/GenAI Applications

Admission Process	Student Enrollment	Curriculum Development	Student Record Management	Student Support
Collect Applicant Information	Collect Personal Details	Identify Relevant Content For Courses	Update Academic Transcripts	Assign Inquiry To A Counselor
Meet Qualification Requirements	Gather Academic Records	Review Learning Objectives	Record Attendance Changes	Assess The Urgency Of The Inquiry
Assign Application For Review	Cross-Check Personal Details	Review Content For Relevance	Validate Data Accuracy	Verify Provided Details
Conduct Applicant Interview	Send Notification of Enrollment Status	Summarize Necessary Revisions	Authorize Access	Cross-Check With Existing Records
Assess Interview Feedback			Record Data Changes	Assign Session Resources
Make Admission Decision			Track Access History	Confirm Session Attendance
				Retrieve Student Performance Data
				Assess Academic Performance

COLLEGE POLICIES RELATED TO AI

○ Academic Honesty Policy 2-202

○ LCCC Code of Student Conduct Policy 4-226

○ Student Records (FERPA) Policy 2-708

○ Dissemination of Data Policy 3-210

○ Technology – Institutional Data Security Policy 3-236

○ Proposed AI Guidelines Policy

Q & A

Josh Mitchell – jmitchell@lccc.edu

Artificial Intelligence Definitions Worksheet

Artificial Intelligence	coined in 1955, was defined as "the science and engineering of making intelligent machines"
Artificial General AI (AGI)	general ability to learn, reason, think, and perceive without human intervention
Machine Learning (ML)	field and practice of using algorithms that are able to "learn" by extracting patterns from a large body of data
Narrow AI	performs specific tasks that normally require human intelligence, visual perception, speech recognition, decision-making, and translation
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Generative AI	crafts probable answers to prompts based on past data or LLM (text, images, audio, video)
Predictive AI	uses LLM data to assess future outcomes
ChatBot	form of Generative AI that uses Natural Language Processing to answer questions or engage in conversation with humans
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Unsupervised Learning	uses ML algorithms to analyze and cluster unlabeled data sets. These algorithms discover hidden patterns or data groupings without the need for human intervention
Deep Learning	uses multilayered neural networks, that more closely simulate the complex decision-making power of the human brain