CoSN & the Council of the Great City Schools present:

K-12 Gen Al Maturity Tool

November 2024



Introduction

This Generative Artificial Intelligence (Gen AI) Maturity Tool is intended to serve as a starting point for school districts to intelligently and thoughtfully implement AI technologies that align with instructional and operational objectives. This tool builds on The AI Readiness Checklist as described below. We hope you find it useful and informative.

Readiness Checklist

The Council of the Great City Schools (CGCS) and CoSN -Consortium for School Networking worked in partnership with Amazon Web Services (AWS) to develop a K-12 Generative AI (Gen AI) Readiness Checklist Questionnaire. The questionnaire was designed to guide K-12 school districts in understanding key factors to consider before implementing Gen Al technologies. While not an exhaustive readiness assessment, the checklist served as a preliminary tool for district leaders—including superintendents, district leaders, and technology experts—to evaluate the safety, privacy, security, and ethical implications of using Gen Al. The goal is to help districts prepare adequately, ensure data privacy and security, and avoid bias or algorithmic discrimination while gaining a foundational understanding of the related tactical considerations.

K-12 Gen Al Maturity Tool

Our next phase is built upon the foundational considerations outlined in the checklist. The K-12 Gen Al Maturity Tool is a more comprehensive tool allowing districts to self-evaluate their maturity in implementing Gen Al technologies. This tool will help districts identify their maturity level in terms of Gen Al readiness and pinpoint specific areas that require further attention and investment to ensure the safe and secure adoption of this transformative technology.

We hope that school districts will find the K-12 Gen Al Maturity Tool both useful and informative. This tool is intended to serve as a starting point for school districts to intelligently and thoughtfully implement Al technologies that align with instructional and operational objectives. We encourage district leaders to adapt this resource to their unique needs.

Tool Development

The Maturity Tool used the information provided in a checklist format to create categories or major domains to coordinate improvement efforts. The Al Maturity Tool Domains are Executive Leadership, Operational, Data, Technical, Security, and Risk/Legal. Each domain is further defined by subdomains.

A three-level maturity rubric was developed and applied to each of the subdomains to assist districts in developing an understanding of their current state and also help design what moving to the next level of maturity for the district would be for each subdomain.

K-12 Gen Al General Maturity Level Descriptions:

Emerging

At the Emerging level, an organization is in the initial stages of Gen Al adoption. Awareness of Gen Al and its potential is limited, and there are minimal dedicated resources or infrastructure for Gen Al initiatives. Policies, governance, and staff skill sets regarding Gen Al are either undeveloped or very basic. Gen Al implementation is experimental or infrequent, and there is little systematic evaluation of strategic planning for Gen Al integration.

Developing

In the Developing stage, the organization has a moderate understanding of Gen Al and its applications. There is a growing investment in Gen Al infrastructure and resources. Policies and governance structures for Gen Al are taking shape, and there is an increasing focus on staff training in Al. The use of Gen Al technologies is more regular and is starting to be integrated into operational and strategic processes. Efforts towards systematic evaluation and deployment, and continuous improvement of Gen Al initiatives are evident.

Mature

At the Mature level, the organization demonstrates a deep understanding and expertise in Al. There is significant investment in advanced Gen Al infrastructure and resources. Comprehensive and dynamic policies and governance structures are in place to manage Gen Al effectively. Staff exhibit a high level of Gen Al proficiency, supported by a culture of continuous learning. Gen Al is fully integrated into the organization's operational and educational processes, driving innovation and strategic decision–making. There is a strong commitment to ongoing evaluation, adaptation, and improvement in Gen Al usage.

Seven Major Domains for Gen Al Readiness:

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7.2 Teacher Professional Development in Al Error Bookmark not defined.
7.3 Ethical AI Use and Policy/Guidance DevelopmentError! Bookmark not defined
7.4 Evaluating AI ImpactError! Bookmark not defined
7.5 Al Accessibility and Equity Error! Bookmark no defined.
7.6 Operational Automation Error! Bookmark nodefined.

The Executive Leadership Readiness domain focuses on ensuring that school district leadership is equipped to effectively oversee and integrate Generative Artificial Intelligence (Gen AI) technologies in alignment with educational goals and ethical standards.

The Maturity Rubric for this domain includes:

- 1.1 Strategy
- 1.2 Legislation and Administrative Rules
- 1.3 Use Policy
- 1.4 Equity

1.1 Strategy

Concentrates on aligning Gen AI initiatives with the district's overall mission and objectives, ensuring robust infrastructure, effective cross-functional team collaboration, strategic planning, and performance evaluation.

Subdomain Elements	Emerging Level	Developing Level	Mature Level
Alignment with Educational Objectives: Ensuring Gen Al initiatives align with the district's mission, vision, goals, and values.	Description: There is awareness of Gen Al potential but no clear alignment with educational objectives. Evidence: Gen Al initiatives are considered without a direct link to the district's mission or goals. Recommendations: Begin aligning Gen Al efforts with the district's broader educational objectives.	Description: There is a moderate alignment of Gen Al initiatives with educational goals. Evidence: Some Gen Al projects reflect the district's mission but lack full integration. Recommendations: Strengthen the connection between Gen Al initiatives and the district's educational objectives.	Description: Gen Al initiatives are fully aligned with and integral to educational objectives. Evidence: Gen Al is a key component in fulfilling the district's mission and educational goals. Recommendations: Continue to innovate and ensure that Gen Al initiatives evolve with educational objectives.
Infrastructure and Resource Management: Assessing and preparing the necessary infrastructure and resources for Gen Al implementation.	Description: Minimal infrastructure exists for Gen Al; resources are not specifically allocated. Evidence: There is a lack of dedicated tools and resources for Gen Al implementation. Recommendations: Assess current infrastructure capabilities and identify necessary resources for Gen Al projects.	Description: Infrastructure is developing for Gen Al with increasing resource allocation. Evidence: Emerging infrastructure supports Gen Al but requires expansion. Recommendations: Enhance infrastructure and allocate more resources specifically for Gen Al initiatives.	Description: An advanced and dedicated infrastructure exists for Gen AI with strategic resource allocation. Evidence: Infrastructure and resources are optimally aligned with the district's Gen AI needs. Recommendations: Maintain and upgrade infrastructure as needed to keep pace with evolving Gen AI technologies.

Subdomain Elements	Emerging Level	Developing Level	Mature Level
1.1.3 Cross-functional Team Dynamics: Forming and managing cross-functional teams to provide comprehensive oversight of Gen Al initiatives.	Description: No established cross-functional teams exist for overseeing Gen Al initiatives. Evidence: Gen Al initiatives lack comprehensive oversight due to missing cross-functional collaboration. Recommendations: Form initial cross-functional teams involving diverse stakeholders for Gen Al oversight.	Description: Cross-functional teams exist but may not fully cover all Gen Al aspects. Evidence: There is some oversight by cross-functional teams but with limited scope. Recommendations: Expand cross-functional teams to include wider expertise and responsibilities.	Description: Fully functional, comprehensive cross-functional teams are in place for Gen Al initiatives. Evidence: There is effective collaboration and oversight by cross-functional teams on Gen Al projects. Recommendations: Continue fostering cross-functional collaboration and adapt teams as Gen Al evolves.
1.1.4 Strategic Planning and Governance: Developing and executing strategic plans for the adoption and governance of Gen Al.	Description: There is an absence of specific strategic plans for Gen Al adoption. Evidence: Gen Al initiatives are not integrated into broader strategic planning. Recommendations: Develop initial strategic plans that include Gen Al considerations.	Description: Strategic plans that include Gen AI exist, but are not comprehensive. Evidence: Gen AI is part of strategic planning, but integration could be deeper. Recommendations: Refine strategic plans to fully integrate Gen AI considerations in governance and operations.	Description: Comprehensive and dynamic strategic planning fully integrates Gen Al. Evidence: Gen Al is a central element of strategic planning and governance. Recommendations: Regularly update strategic plans to reflect new developments in Gen Al.

Subdomain Elements	Emerging Level	Developing Level	Mature Level
Monitoring Performance Metrics and Financial Considerations: Establishing metrics to evaluate the impact and challenges of Gen AI and consider its financial implications.	Description: No specific metrics or financial plans exist for evaluating Gen AI impact. Evidence: Gen AI impact and financial implications are not systematically assessed. Recommendations: Begin establishing basic metrics for evaluating Gen AI and consider its financial implications.	Description: No specific metrics or financial plans exist for evaluating Gen AI impact. Evidence: Gen AI impact and financial implications are not systematically assessed. Recommendations: Begin establishing basic metrics for evaluating Gen AI and consider its financial implications.	Description: There are sophisticated metrics and financial models for Gen Al impact evaluation. Evidence: Gen Al impact and financial aspects are thoroughly evaluated and inform decisionmaking. Recommendations: Continuously refine metrics and financial models to accurately assess Gen Al's evolving impact.

1.2 Legislation and Administrative Rules

Focuses on ensuring compliance with legal and regulatory frameworks, integrating Gen AI into educational policies, and keeping the board educated and involved.

Subdomain Elements	Emerging Level	Developing Level	Mature Level
1.2.1 Legal Compliance and Restrictions: Ensuring adherence to federal and state	Description: There is a basic awareness of legal requirements for Gen AI without comprehensive compliance.	Description: Adherence to legal frameworks exists with an increased understanding of Gen Al implications.	Description: There is full compliance with legal and regulatory frameworks for Gen Al.
laws and district rules regarding the use of Gen Al.	Evidence: There is inadequate adherence to state laws and district rules for Gen Al usage.	Evidence: Better alignment with legal requirements exists but there are still gaps in	Evidence: Gen AI usage fully adheres to state laws and district rules.
	Recommendations: Develop an understanding of relevant laws and begin aligning Gen Al usage with these requirements.	comprehensive compliance. Recommendations: Enhance efforts to comply fully with legal standards and district rules regarding Gen AI.	Recommendation: Maintain and continuously update compliance measures as legal standards evolve.
1.2.2 Educational Policy Integration: Integrating Gen Al within the existing educational policies and	Description: Initial efforts have been made to integrate Gen Al into existing policies without full alignment.	Description: There is progress in integrating Gen AI into educational policies, but it is not yet fully systemic.	Description: Gen Al is completely and systemically integrated into educational policies.
frameworks.	Evidence : Gen Al usage is not yet fully integrated into educational policies.	Evidence: Gen AI is partially integrated into educational policies, but integration is not	Evidence: Gen AI is fully embedded within the educational policy framework.
	Recommendations: Start aligning Gen Al with current educational policies and frameworks.	yet complete. Recommendations: Continue to refine and fully integrate Gen Al into all relevant educational policies.	Recommendations: Ensure ongoing alignment and adaptation of policies as Gen Al evolves.
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Subdomain Elements	Emerging Level	Developing Level	Mature Level
1.2.3 Board Education and Policy Updates: Keeping the School Board educated, informed, and updated on Gen Al usage and policies.	Description: There are limited or ad-hoc efforts to educate the School Board about Gen Al. Evidence: The School Board is not fully informed or involved in Gen Al-related decisions. Recommendations: Initiate regular updates and education sessions for the School Board on Gen Al.	Description: There are regular but not fully comprehensive education updates for the School Board. Evidence: The School Board is more informed about Gen Al but not engaged in all aspects. Recommendations: Increase the depth and frequency of Gen Al-related communications and involvement with the School Board.	Description: There are comprehensive and proactive education and policy updates for the School Board. Evidence: The School Board is fully involved and kept up-to-date on all aspects of Gen Al. Recommendations: Sustain and evolve the board's education and involvement with ongoing Gen Al advancements.

1.3 Use Policy

Addresses the development, adoption, dissemination, and enforcement of policies for responsible Gen AI usage, including compliance tracking, vendor agreements, and educational content aspects.

Subdomain Elements	Emerging Level	Developing Level	Mature Level
1.3.1 Policy Development and Publication: Creating and disseminating formal policies for the responsible use of Gen Al.	Description: Policies for Gen Al usage are in the initial stages of development. Evidence: There is a lack of formalized policies for responsible Gen Al usage. Recommendations: Start creating and disseminating basic policies for Gen Al usage.	Description: More comprehensive Gen Al use policies are developing. Evidence: Policies are in place but may not cover all aspects of Gen Al usage. Recommendations: Expand and refine the scope of Gen Al use policies.	Description: Comprehensive and well-established policies for Gen Al usage are in place. Evidence: Policies cover all aspects of responsible Gen Al use and are widely understood. Recommendations: Continually review and update policies to reflect evolving Gen Al technologies and uses.
1.3.2 Compliance Tracking and Enforcement: Monitoring and enforcing adherence to Gen Al use policies.	Description: There is ad-hoc monitoring and limited enforcement of Gen Al policies. Evidence: Adherence to Gen Al use policies is inconsistent. Recommendations: Develop methods for tracking compliance and begin enforcing existing policies.	Description: There is improved tracking of compliance and enforcement measures. Evidence: Compliance with Gen Al policies is better, though inconsistencies remain. Recommendations: Strengthen compliance tracking systems and enforcement mechanisms.	Description: Robust systems exist for tracking compliance and enforcing policies. Evidence: There is a high level of adherence to Gen AI use policies across the district. Recommendations: Maintain and periodically enhance compliance monitoring and enforcement practices.

Subdomain Elements	Emerging Level	Developing Level	Mature Level
1.3.3 Vendor Contractual Obligations: Incorporating Gen Al use considerations into vendor contracts.	Description: There is minimal consideration of Gen Al in vendor contracts. Evidence: Vendor contracts do not adequately cover Gen Al usage terms. Recommendations: Start incorporating Gen Al considerations into new and existing vendor contracts.	Description: The inclusion of Gen Al considerations in contracts is increasing. Evidence: Some vendor contracts include Gen Al terms, but not uniformly. Recommendations: Ensure all vendor contracts systematically include Gen Al usage clauses.	Description: Gen Al considerations are thoroughly integrated into all vendor contracts. Evidence: Vendor contracts consistently include detailed Gen Al usage terms. Recommendations: Regularly review and update contractual terms to stay current with Gen Al advancements.
1.3.4 Data Training and Professional Development: Implementing training programs for the responsible use of Gen Al.	Description: There are limited or no training programs on responsible Gen Al usage. Evidence: Staff lack guidance on the responsible use of Gen Al. Recommendations: Initiate basic training programs on responsible Gen Al usage.	Description: Training programs for responsible Gen Al usage are developing. Evidence: More staff are receiving training, but the content may not be comprehensive. Recommendations: Enhance the depth and breadth of Gen Al training programs.	Description: Comprehensive training programs are in place for responsible Gen Al usage. Evidence: Staff are well-trained and knowledgeable about Gen Al usage. Recommendations: Continue to adapt and evolve training programs to keep pace with Gen Al developments.

Subdomain Elements	Emerging Level	Developing Level	Mature Level
1.3.5 Content Creation and Attribution: Ensuring proper attribution in content created with Gen Al tools.	Description: There is little emphasis on attribution for Gen Al-created content. Evidence: Issues of content ownership and attribution are not addressed. Recommendations: Begin establishing guidelines for content creation and attribution using Gen Al.	Description: There is a growing awareness of the need for proper attribution in Gen Al content. Evidence: Some measures are in place for content attribution, but not consistently applied. Recommendations: Implement more thorough guidelines and practices for content creation and attribution.	Description: There is a strong emphasis and clear practices for attribution in Gen Al-created content. Evidence: Content creation and attribution issues are effectively managed. Recommendations: Keep refining attribution guidelines and practices as Gen Al capabilities evolve.

1.4 Equity

Emphasizes the importance of ethical considerations, fairness in algorithmic decision-making, oversight mechanisms, and ensuring equitable access to Gen Al tools for all stakeholders.

Subdomain Elements	Emerging Level	Developing Level	Mature Level
1.4.1 Bias Prevention and Data Ethics: Addressing potential biases in Gen Al and promoting ethical data use.	Description: There is initial awareness of bias issues in Gen Al with minimal action taken. Evidence: Potential biases in Gen Al are not systematically addressed. Recommendations: Start recognizing and addressing biases in Gen Al and promote ethical data use.	Description: There is a growing recognition of bias issues and ethical data use in Gen Al. Evidence: Efforts to address biases in Gen Al are underway but not comprehensive. Recommendations: Enhance initiatives to mitigate bias and promote ethical data usage in Gen Al.	Description: Comprehensive strategies are in place to prevent bias and ensure ethical data use in Gen Al. Evidence: Systematic and effective measures are in place to mitigate bias in Gen Al. Recommendations: Continuously update and refine strategies for bias prevention and ethical data use.
1.4.2 Vendor Selection and Algorithmic Fairness: Selecting vendors with a commitment to algorithmic fairness.	Description: There is limited consideration of algorithmic fairness in vendor selection. Evidence: Vendor selection does not fully account for algorithmic fairness. Recommendations: Begin incorporating algorithmic fairness criteria in vendor selection processes.	Description: There is an increased emphasis on algorithmic fairness in vendor selection. Evidence: Algorithmic fairness is considered in vendor selection but not consistently applied. Recommendations: Strengthen criteria and processes for ensuring algorithmic fairness in vendor selection.	Description: There is a systematic and thorough consideration of algorithmic fairness in all vendor selections. Evidence: Vendor selection rigorously accounts for algorithmic fairness in Gen Al tools. Recommendations: Maintain high standards for algorithmic fairness in vendor selection and regularly reassess criteria.

Subdomain Elements	Emerging Level	Developing Level	Mature Level
1.4.3 Model Oversight and Human Intervention: Implementing oversight mechanisms for Gen AI models and human intervention protocols.	Description: There are minimal oversight mechanisms for Gen Al models. Evidence: There is a lack of structured protocols for overseeing Gen Al model decisions and human intervention. Recommendations: Develop initial oversight mechanisms and protocols for human intervention in Gen Al.	Description: Oversight mechanisms for Gen Al models with some human intervention are developing. Evidence: Oversight mechanisms are in place but may not cover all aspects of Gen Al usage. Recommendations: Expand and strengthen oversight mechanisms and human intervention protocols.	Description: Robust oversight mechanisms for Gen Al models are in place with effective human intervention. Evidence: Comprehensive and effective oversight and human intervention protocols are in place for Gen Al. Recommendations: Continually enhance and adapt oversight mechanisms to evolving Gen Al technologies.
1.4.4 Equitable Access and Inclusivity Practices: Ensuring equitable access to Gen AI tools and fostering inclusivity.	Description: There is basic awareness of the need for equitable Gen Al access but limited practices. Evidence: Equitable access to Gen Al tools is not adequately addressed. Recommendations: Start implementing practices to ensure equitable access and inclusivity in Gen Al usage.	Description: Practices to ensure equitable access to Gen Al tools are developing. Evidence: Efforts towards equitable access are present but not fully effective. Recommendations: Improve and broaden initiatives for equitable access and inclusivity in Gen Al.	Description: Systemic and effective practices ensure equitable access to Gen Al tools. Evidence: Equitable access and inclusivity are fully integrated into Gen Al tool usage. Recommendations: Sustain and evolve practices to maintain and enhance equitable access and inclusivity in Gen Al.
1.4.5 Data Management and Privacy: Prioritizing data management and privacy in AI tool procurement.	Description: There are basic data management and privacy considerations in AI procurement. Evidence: Data management and privacy are not centrally prioritized in Gen AI procurement. Recommendations: Begin prioritizing data management and privacy in AI tool procurement.	Description: The focus on data management and privacy in Al procurement is improving. Evidence: Data management and privacy are considered in procurement but need further emphasis. Recommendations: Further prioritize data management and privacy considerations in all aspects of Al procurement.	Description: There is advanced prioritization of data management and privacy in all Al procurements. Evidence: Data management and privacy are central to Al tool procurement processes. Recommendations: Continue to lead in data management and privacy practices, adapting to new challenges and technologies.

2. Operational Readiness

Operational Readiness in the context of Gen AI encompasses the essential organizational processes and human resource considerations necessary to successfully adopt and integrate AI technologies in school districts.

The Maturity Rubric for this domain includes:

- 2.1 Procurement
- 2.2 Staffing

2 Operational Readiness Domain

2.1 Procurement

Focuses on the ethical, compliant, and strategic acquisition of Gen Al tools, ensuring that they align with educational objectives, legal standards, and data privacy requirements.

Subdomain Elements	Emerging Level	Developing Level	Mature Level
Al Procurement Standards and Ethics: Establishing ethical standards and guidelines for procuring Gen Al tools, aligned with the Al Bill of Rights and privacy laws.	Description: There is initial awareness of the importance of ethical standards in Al procurement, but a lack of formalized guidelines. Evidence: The organization recognizes the need for ethical procurement but has not yet established clear guidelines. Recommendations: Develop basic ethical standards and guidelines for Al procurement, taking into account the Al Bill of Rights and privacy laws.	Description: More comprehensive ethical standards and guidelines for Al procurement are developing. Evidence: Ethical considerations are increasingly integrated into procurement decisions, but the process is not yet fully standardized or comprehensive. Recommendations: Continue to refine and expand the ethical standards and guidelines, ensuring they are well-aligned with the Al Bill of Rights and privacy laws.	Description: Comprehensive and well-established ethical standards and guidelines for Al procurement are in place. Evidence: The organization has a robust framework for ethical Al procurement that is fully aligned with legal standards and privacy laws. Recommendations: Regularly review and update the ethical procurement guidelines to adapt to evolving Al technologies and ethical considerations.

Subdomain Elements	Emerging Level	Developing Level	Mature Level
2.1.2 Procurement Process Compliance: Ensuring that procurement processes for Gen Al tools adhere to established standards and undergo proper review and approval.	Description: The district is in the initial stages of acknowledging the need for compliance in procurement processes. Lack of structured review and approval systems. Evidence: Procurement processes for Gen Al tools are irregular and not consistently aligned with standards. Recommendations: Establish basic compliance procedures and review mechanisms for procurement processes.	Description: Implementation of compliance standards in procurement processes is improving, but not yet fully comprehensive. Evidence: Procurement processes are increasingly adhering to standards, but some inconsistencies remain. Recommendations: Enhance the standardization and thoroughness of compliance and review processes for Gen AI tool procurement.	Description: There are comprehensive and well-established compliance standards and review processes for Gen Al procurement. Evidence: Procurement processes are consistently executed with high adherence to established standards. Recommendations: Continuously monitor, review, and update procurement compliance procedures to ensure ongoing alignment with best practices and evolving standards.
2.1.3 Asset Evaluation and Upgrade Protocols: Implementing protocols for evaluating, upgrading, and renewing assets to include Gen AI capabilities.	Description: Limited processes exist for asset evaluation and upgrades specific to Gen Al. Evidence: There is inadequate consideration of Gen Al capabilities in current asset management. Recommendations: Develop initial protocols for assessing and upgrading assets to incorporate Gen Al features.	Description: Protocols for asset evaluation and upgrades, with some inclusion of Gen Al capabilities, are developing. Evidence: Protocols are in place but not fully comprehensive or systematically applied. Recommendations: Enhance and standardize protocols for asset evaluation and upgrades, ensuring consistent incorporation of Gen Al.	Description: Comprehensive protocols for asset evaluation and upgrades exist, fully integrating Gen AI considerations. Evidence: There is a systematic and thorough evaluation of assets for Gen AI integration. Recommendations: Continuously review and update protocols to align with the latest Gen AI advancements and organizational needs.

Subdomain Elements	Emerging Level	Developing Level	Mature Level
2.1.4 Vendor Notification Requirements: Requiring vendors to notify the district about the addition of Gen Al capabilities to existing assets.	Description: There is a minimal or no requirement for vendors to inform the district about Gen Al capabilities in assets. Evidence: There is a lack of awareness about Gen Al enhancements in vendor-supplied assets. Recommendations: Establish basic protocols requiring vendor notification about Gen Al capabilities.	Description: Requirements for vendor notification regarding Gen Al capabilities are developing. Evidence: Some vendor notifications are in place, but practices are not uniformly applied. Recommendations: Strengthen and standardize vendor notification requirements for Gen Al capabilities.	Description: There are comprehensive requirements for vendor notification about Gen Al enhancements. Evidence: Systematic and effective communication from vendors regarding Gen Al capabilities. Recommendations: Continuously evaluate and update vendor notification protocols to reflect current Gen Al developments.
2.1.5 Data Management and Privacy: Ensuring that data management and privacy are central considerations in the procurement of Gen Al tools.	Description: There is limited focus on data management and privacy during the procurement process. Evidence: Data management and privacy are not central considerations in procurement decisions. Recommendations: Begin to prioritize data management and privacy in the procurement of Gen Al tools.	Description: Attention to data management and privacy in the procurement process is improving. Evidence: Consideration of data management and privacy is increasing, but integration is not fully comprehensive. Recommendations: Further integrate data management and privacy considerations into procurement practices.	Description: There is advanced integration of data management and privacy into procurement decisions. Evidence: Data management and privacy are central and consistent elements of the procurement process. Recommendations: Continually lead and adapt data management and privacy practices in line with evolving technologies and standards.

Subdomain Elements	Emerging Level	Developing Level	Mature Level
2.1.6 Vendor Relationship Management: Including guidelines for managing ongoing relationships with Gen AI tool vendors, ensuring continuous alignment with district goals and standards.	Description: Initial efforts exist to establish guidelines for vendor relationships, with a limited focus on Gen Al alignment. Evidence: Vendor relationships are not strategically managed for Gen Al tool integration. Recommendations: Develop basic guidelines for managing vendor relationships and ensuring alignment with district goals.	Description: Practices for managing vendor relationships with a focus on Gen Al alignment are developing. Evidence: Management of vendor relationships have improved, but are not fully aligned with Gen Al objectives. Recommendations: Enhance guidelines and practices for vendor relationship management, focusing on continuous alignment with district goals.	Description: Management of vendor relationships is comprehensive and fully aligned with Gen Al goals and district standards. Evidence: Effective and strategic vendor relationship management is in line with Gen Al objectives. Recommendations: Continuously review and evolve vendor management strategies to maintain alignment with district goals and Gen Al advancements.
2.1.7 Sustainability Considerations: Addressing the environmental impact of Gen Al tools, encouraging the selection of sustainable and energy-efficient options.	Description: There is minimal consideration of sustainability in the selection of Gen Al tools. Evidence: There is a lack of emphasis on the environmental impact of Gen Al tools. Recommendations: Begin to incorporate sustainability considerations into the procurement process.	Description: Awareness of sustainability in Gen Al procurement is increasing, but not yet a central focus. Evidence: Sustainability considerations are being integrated, but practices are not comprehensive. Recommendations: Strengthen the integration of sustainability considerations in Gen Al tool procurement.	Description: There is a strong emphasis on sustainability and environmental impact in all Gen Al procurement decisions. Evidence: Sustainability is a central factor in Gen Al tool selection and procurement. Recommendations: Lead in sustainable procurement practices and regularly adapt to evolving environmental standards and technologies.

2 Operational Readiness Domain

2.2 Staffing

Addresses the need for a skilled workforce capable of evaluating, implementing, and managing Gen AI technologies, including the development and adaptation of job roles and training programs.

Subdomain Elements	Emerging Level	Developing Level	Mature Level
2.2.1 Continuous Professional Development: Emphasizing the need for ongoing training and	Description: There is initial recognition of the importance of ongoing professional development for Gen Al.	Description: Progress is being made in implementing ongoing training programs for Gen Al, but not yet fully comprehensive.	Description: Comprehensive and ongoing professional development programs for Gen Al are wellestablished.
professional development for staff to keep pace with evolving Gen Al technologies.	Evidence: Structured training programs for staff on Gen Al technologies are lacking. Recommendations: Begin developing basic training and professional development programs focused on Gen Al.	Evidence: Training initiatives are present but need further development to cover all aspects of Gen Al. Recommendations: Expand and enhance professional development programs to encompass a broader range of Gen Al topics.	Evidence: Staff are regularly trained and kept up-to-date with the latest Gen Al advancements. Recommendations: Continually adapt and enhance professional development programs to keep pace with evolving Gen Al technologies.

Subdomain Elements	Emerging Level	Developing Level	Mature Level
2.2.2 Staff Well-being and Change Management: Including strategies for addressing the impact of Gen Al on staff well-being and the importance of effective change management.	Description: Early awareness of the impact of Gen Al on staff wellbeing exists, but there are minimal change management strategies. Evidence: There are insufficient measures in place to address staff concerns and changes due to Gen Al. Recommendations: Start formulating strategies to support staff well-being and effective	Description: Strategies for staff well-being and change management in response to Gen Al are developing. Evidence: Some measures are in place to support staff, but more systematic change management is needed. Recommendations: Strengthen change management strategies and initiatives to better support	Description: Robust strategies and practices are in place for staff well-being and effective change management regarding Gen Al. Evidence: Strong support systems and change management protocols ensure staff well-being during Gen Al adoption. Recommendations: Regularly review and refine strategies to maintain staff well-being and
	change management in the context of Gen Al.	staff well-being during Gen Al integration.	effective change management as Gen AI evolves.
2.2.3 Workforce Skills Assessment and Development: Evaluating and enhancing staff skills for Gen Al.	Description: There is a basic evaluation of staff skills related to Gen Al, with minimal development initiatives.	Description: Progress is being made in assessing and developing workforce skills for Gen Al, but not fully comprehensive.	Description: There is a comprehensive assessment and development of workforce skills for Gen Al.
	Evidence: Staff skills in Gen AI are not systematically assessed or developed.	Evidence: There is an increased focus on skill development, yet coverage of all relevant Gen Al	Evidence: Staff skills are thoroughly aligned with Gen Al requirements.
	Recommendations: Start assessing workforce skills for Gen Al and initiate basic development programs.	skills is lacking. Recommendations: Expand and deepen workforce skills assessment and development programs for Gen Al.	Recommendations: Continually adapt workforce development programs to align with evolving Gen AI technologies.

Subdomain Elements	Emerging Level	Developing Level	Mature Level
2.2.4 Job Role Adaptation and Creation: Adapting and creating roles to support Gen Al operations.	Description: There is limited adaptation of job roles to accommodate Gen Al, with few new roles created. Evidence: Job roles are not effectively aligned with the district's Gen Al needs. Recommendations: Begin adapting existing job roles and considering the creation of new roles to support Gen Al operations.	Description: The processes for adapting and creating job roles for Gen AI are developing, but not fully realized. Evidence: Some job roles are adapted, and new roles are emerging, but integration with Gen AI is not thorough. Recommendations: Enhance job role adaptation and creation processes to fully support Gen AI operations.	Description: Well-established processes exist for adapting existing job roles and creating new roles for Gen Al. Evidence: Job roles are effectively aligned with and support Gen Al operations. Recommendations: Regularly review and update job roles to ensure ongoing alignment with Gen Al advancements and operational needs.
2.2.5 Financial Planning for Staff Development: Budgeting for staff training and development in Gen Al.	Description: Budgeting for staff training in Gen AI is in the initial stages, with limited financial resources allocated. Evidence: Financial planning for staff development in Gen AI is not comprehensive or well-structured. Recommendations: Begin allocating budget and resources for staff training and development in Gen AI.	Description: Budget and resource allocation for staff training in Gen AI is developing, but not yet fully adequate. Evidence: There is some financial investment in staff development for Gen AI, but gaps remain in coverage and depth. Recommendations: Increase and optimize budget allocation for comprehensive staff development in Gen AI.	Description: There is comprehensive financial planning and resource allocation for staff training in Gen Al. Evidence: Robust budgeting and resource allocation support extensive staff development in Gen Al. Recommendations: Continually reassess and adapt financial planning to support evolving training needs in Gen Al.

Subdomain Elements	Emerging Level	Developing Level	Mature Level
2.2.6 Data Preparation and Management Skills: Equipping staff with skills for effective data management in Gen Al contexts.	Description: There is a basic level of skill development for data management in Gen Al contexts. Evidence: Staff skills in data management for Gen Al are rudimentary and need enhancement. Recommendations: Initiate training programs to develop foundational data management skills for Gen Al.	Description: There is progress in equipping staff with data management skills for Gen AI, but not yet comprehensive. Evidence: Improved staff skills in data management exist, yet a need for broader and deeper skill development exists. Recommendations: Enhance and expand training programs to cover advanced data management skills for Gen AI.	Description: There are advanced skill development programs for data management in Gen Al contexts. Evidence: Staff possess comprehensive data management skills suitable for Gen Al applications. Recommendations: Regularly update and enhance training programs to keep staff skills aligned with the latest Gen Al data management trends.

3. Data Readiness

Data Readiness ensures the school district is prepared for Gen Al implementation with robust data governance, quality, and privacy measures, coupled with effective identity and access management, tracking, technical control, and security safeguards.

The Maturity Rubric for this domain includes:

- 3.1 Data Governance
- 3.2 Data Quality
- 3.3 Data Privacy

3 Data Readiness Domain

3.1 Data Governance

Data Governance focuses on managing data responsibly, ensuring its proper stewardship, compliance with policies, secure storage, and effective lifecycle management.

Subdomain Elements	Emerging Level	Developing Level	Mature Level
3.1.1 Stewardship and Ownership of Data: Assigning clear responsibilities for data management.	Description: The district is in the initial steps to assign responsibilities for data management, with unclear or informal roles. Evidence: A lack of clear data stewardship and ownership leads to inconsistent data management. Recommendations: Begin establishing clear roles and responsibilities for data stewardship and ownership.	Description: Structured roles for data stewardship and ownership are developing, but not fully comprehensive. Evidence: The assignment of data management responsibilities is improving, but some gaps remain. Recommendations: Enhance and clarify roles for data stewardship and ownership to cover all critical data assets.	Description: Comprehensive and well-established roles for data stewardship and ownership are in place. Evidence: Data assets are clearly and effectively managed through assigned stewardship and ownership. Recommendations: Continuously review and refine data stewardship and ownership roles to align with evolving data needs and technologies.

Subdomain Elements	Emerging Level	Developing Level	Mature Level
3.1.2 Policy Compliance and Enforcement: Ensuring adherence to data governance policies.	Description: There is a basic awareness of data governance policies, but limited enforcement mechanisms. Evidence: Data governance policies exist but are not consistently enforced or adhered to. Recommendations: Develop basic compliance and enforcement mechanisms for data governance policies.	Description: Progress in enforcing data governance policies is developing, but enforcement is not yet systematic. Evidence: Data governance policies are more widely recognized, but adherence varies. Recommendations: Strengthen compliance mechanisms and ensure consistent enforcement of data governance policies.	Description: There is a robust and systematic enforcement of data governance policies. Evidence: Data governance policies are strongly adhered to across the organization. Recommendations: Regularly update and reinforce enforcement mechanisms to maintain high compliance with data governance policies.
3.1.3 Data Storage and Classification: Systematically storing and classifying district data.	Description: Basic or ad-hoc approaches are in place for data storage and classification. Evidence: Data is not systematically stored or classified, leading to inefficiencies and potential risks. Recommendations: Initiate systematic data storage and classification protocols to improve data organization and access.	Description: Structured processes for data storage and classification are developing, but not fully comprehensive. Evidence: Improvements have been made in data organization, but gaps in systematic classification and storage persist. Recommendations: Enhance data storage and classification systems to ensure complete and organized data management.	Description: There are comprehensive and systematic approaches to data storage and classification. Evidence: Data is efficiently organized and accessible, with robust classification systems in place. Recommendations: Continuously review and update data storage and classification protocols to align with evolving data requirements and technologies.

Subdomain Elements	Emerging Level	Developing Level	Mature Level
3.1.4 Asset Lifecycle Management: Managing the lifecycle of data assets from creation to disposal.	Description: There is limited management of data asset lifecycles, with informal or inconsistent practices. Evidence: Lifecycle management of data assets is inadequate, resulting in inefficiencies and potential data loss. Recommendations: Develop basic asset lifecycle management practices to better manage data from creation to disposal.	Description: The district is progressing in managing the lifecycle of data assets, but not fully integrated or systematic. Evidence: Some lifecycle management practices are in place, but not consistently applied across all data assets. Recommendations: Strengthen and standardize asset lifecycle management processes to cover all data assets effectively.	Description: Management of the lifecycle of data assets is comprehensive, with systematic and integrated practices. Evidence: Management of data assets is effective and consistent throughout their lifecycle. Recommendations: Regularly reassess and refine asset lifecycle management strategies to stay aligned with best practices and technological advancements.
3.1.5 Data Lifecycle Management: Emphasizing policies and practices for the entire lifecycle of data, from creation to disposal, ensuring data integrity and compliance throughout.	Description: There is an initial recognition of the importance of managing the entire data lifecycle, with rudimentary policies. Evidence: Inconsistent practices in data lifecycle management lead to potential data integrity issues. Recommendations: Establish basic policies and practices for managing the entire data lifecycle.	Description: Processes and policies for data lifecycle management are developing, but not yet fully systematic. Evidence: Some improvements in data lifecycle management exist, but comprehensive coverage is lacking. Recommendations: Enhance and standardize data lifecycle management practices to ensure data integrity and compliance.	Description: Management of the data lifecycle is comprehensive and systematic, ensuring data integrity and compliance. Evidence: Robust practices are in place for managing data throughout its lifecycle, with strong adherence to policies. Recommendations: Continuously review and update data lifecycle management policies to stay aligned with evolving data needs and regulations.

Subdomain Elements	Emerging Level	Developing Level	Mature Level
3.1.6 Data Literacy Programs: Including initiatives to improve data literacy among staff, enhancing their understanding of data governance principles.	Description: There are limited efforts to enhance data literacy among staff, with minimal training initiatives. Evidence: There are low levels of data literacy among staff, affecting understanding of data governance. Recommendations: Initiate basic data literacy programs to improve staff understanding of data governance.	Description: The district is progressing in implementing data literacy programs, but not yet comprehensive or widely accessible. Evidence: Awareness of data literacy is increasing, yet gaps in staff understanding and application persist. Recommendations: Expand and deepen data literacy initiatives to cover a broader range of data governance topics.	Description: There are advanced and widespread data literacy programs for staff, fully integrated with data governance principles. Evidence: There is a high level of data literacy among staff, enhancing the overall effectiveness of data governance. Recommendations: Regularly update and enhance data literacy programs to keep pace with evolving data governance challenges and technologies.

3 Data Readiness Domain

3.2 Data Quality

Data Quality emphasizes maintaining high standards of data integrity and version control, and ensuring data compatibility with Gen AI technologies.

Subdomain Elements	Emerging Level	Developing Level	Mature Level
3.2.1 Data Audit and Quality Control: Regularly auditing data for accuracy and consistency.	Description: Basic or sporadic data audits are conducted, with limited quality control measures. Evidence: There is inconsistent data accuracy and quality due to infrequent audits. Recommendations: Initiate regular data auditing and establish basic quality control practices.	Description: More structured data auditing and quality control processes are developing, but not fully comprehensive. Evidence: Data quality and consistency is improving, but gaps in auditing coverage remain. Recommendations: Enhance the frequency and thoroughness of data audits and strengthen quality control practices.	Description: Comprehensive and systematic data audits and quality control measures are in place. Evidence: High standards of data accuracy and consistency are maintained through regular audits. Recommendations: Continuously review and update auditing and quality control practices to adapt to evolving data needs.
3.2.2 Versioning and Source Management: Managing data versions and identifying data sources.	Description: Management of data versions and sources is ad-hoc, with minimal tracking. Evidence: Tracking data changes and sources is difficult, leading to potential data integrity issues. Recommendations: Start implementing versioning controls and source identification for data.	Description: Management of data versions and sources is improving, but not yet fully systematic. Evidence: There is better tracking of data changes, but inconsistencies in versioning and source management persist. Recommendations: Standardize versioning and source management practices to ensure consistent data tracking.	Description: There is systematic and thorough management of data versions and sources. Evidence: Data changes and sources are efficiently tracked and managed, ensuring data integrity. Recommendations: Regularly update versioning and source management practices to keep pace with technological advancements.

Subdomain Elements	Emerging Level	Developing Level	Mature Level
3.2.3 Machine-Readability and Gen Al Compatibility: Ensuring data is in a format suitable for Gen Al use.	Description: The focus on ensuring data is in a format suitable for Gen Al use is limited. Evidence: Data formats are not consistently machine-readable, hindering Gen Al applications. Recommendations: Begin transitioning data into formats that are compatible with Gen Al technologies.	Description: Efforts to convert data into machine-readable formats suitable for Gen Al are developing. Evidence: Progress has been made in data format conversion, but not all data is yet compatible with Gen Al. Recommendations: Expand and systematize the process of ensuring data compatibility with Gen Al.	Description: There is a comprehensive approach to ensuring all data is in a machine-readable format compatible with Gen Al. Evidence: Data formats are uniformly suitable for Gen Al, facilitating efficient use. Recommendations: Continuously adapt data formats to align with evolving Gen Al technologies and standards.
3.2.4 Data Standardization Practices: Implementing standardized data formats and practices to ensure consistency and reliability across different systems.	Description: The use of standardized data formats and practices is basic or inconsistent. Evidence: Lack of standardization leads to data inconsistencies and challenges in system integration. Recommendations: Start implementing basic standardized data formats and practices.	Description: Progress is being made in adopting standardized data formats and practices, but not fully integrated. Evidence: Data consistency has improved, but some systems still lack standardization. Recommendations: Strengthen the adoption of standardized data formats and practices across all systems.	Description: Standardized data formats and practices are advanced and consistently used across all systems. Evidence: There is a high level of data consistency and system interoperability due to standardization. Recommendations: Regularly review and update data standardization practices to maintain system compatibility and data reliability.

Subdomain Elements	Emerging Level	Developing Level	Mature Level
3.2.5 Data Integrity Programs: Establishing programs to ensure ongoing data integrity, including regular audits and validation processes.	Description: Programs to maintain data integrity have been initially established, with infrequent audits and validation.	Description: Enhancing data integrity programs are developing, but not yet fully systematic or comprehensive.	Description: Comprehensive data integrity programs are in place, with systematic audits and validation.
	Evidence: Data integrity is not consistently ensured, leading to potential inaccuracies. Recommendations: Develop	Evidence: Data integrity is improving, but regular audits and validations are not fully implemented.	Evidence: High levels of data integrity are maintained through regular and thorough audits and validation.
	basic data integrity programs, including regular audits and validation processes.	Recommendations: Strengthen and standardize data integrity programs to ensure consistent and reliable data.	Recommendations: Continuously review and adapt data integrity programs to align with evolving data needs and technologies.

3 Data Readiness Domain

3.3 Data Privacy

Data Privacy involves vetting vendors for compliance, updating privacy policies, and ensuring third-party adherence to contractual obligations.

Subdomain Elements	Emerging Level	Developing Level	Mature Level
3.3.1 Privacy Vetting and Vendor Compliance: Assessing vendors for their data privacy practices.	Description: Vendors have been assessed at a basic level for data privacy practices, with limited vetting processes. Evidence: Vendors are vetted inconsistently, leading to potential privacy risks. Recommendations: Develop initial vetting procedures to assess vendors' data privacy practices.	Description: More structured vendor vetting processes for data privacy are developing, but not comprehensive. Evidence: The vetting of vendors is improving, but some gaps in data privacy compliance remain. Recommendations: Enhance vendor vetting procedures to ensure a comprehensive assessment of data privacy practices.	Description: There is a comprehensive and systematic vetting of vendors for data privacy compliance. Evidence: Consistent and thorough vetting ensures high standards of vendor data privacy practices. Recommendations: Continuously review and update vendor vetting processes to align with evolving privacy standards and regulations.
3.3.2 Policy Updates and Training Compliance: Updating privacy policies and ensuring staff training.	Description: There are infrequent updates to privacy policies and minimal staff training on compliance. Evidence: Staff are not fully aware or trained on updated privacy policies. Recommendations: Initiate regular updates to privacy policies and implement basic training programs for staff.	Description: Progress in updating privacy policies and staff training is developing, but not yet fully systematic. Evidence: Focus on privacy policy updates and training is increasing, but inconsistencies in staff knowledge and compliance persist. Recommendations: Strengthen the frequency and depth of privacy policy updates and staff training programs.	Description: There are regular and systematic updates to privacy policies and comprehensive staff training. Evidence: Staff are well-informed and trained on the latest privacy policies, ensuring high compliance levels. Recommendations: Maintain and regularly update training programs to keep staff aligned with current privacy policies and practices.
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Subdomain Elements	Emerging Level	Developing Level	Mature Level
3.3.3 Third-Party Auditing and Contractual Rights: Conducting audits and enforcing data privacy in contracts.	Description: There is an initial implementation of third-party audits and contractual rights for data privacy, but processes are not fully developed. Evidence: Enforcement of data privacy in third-party contracts is inadequate, and auditing is limited. Recommendations: Establish basic procedures for third-party auditing and ensure data privacy is included in contracts.	Description: Processes are developing for third-party auditing and reinforcing contractual rights for data privacy. Evidence: Some improvements have been made in contract enforcement and auditing, but not consistently applied. Recommendations: Enhance and standardize third-party auditing processes and contractual privacy provisions.	Description: There is comprehensive and systematic third-party auditing and contractual enforcement for data privacy. Evidence: Consistent and effective enforcement of data privacy exists in all third-party contracts and regular audits. Recommendations: Continuously review and update auditing and contractual practices to maintain high standards of data privacy.
3.3.4 Privacy by Design Principles: Integrating privacy by design principles in all Gen Al-related initiatives.	Description: There is an awareness of privacy by design principles, but limited integration into Gen AI initiatives. Evidence: Privacy considerations are not systematically incorporated into Gen AI-related projects. Recommendations: Start integrating privacy by design principles in the early stages of Gen AI-related initiatives.	Description: Progress in integrating privacy by design principles is developing, but not yet fully embedded in all Gen Al initiatives. Evidence: The use of privacy by design is increasing, but the approach is not yet uniform across all projects. Recommendations: Expand the application of privacy by design principles to cover all aspects of Gen Al initiatives.	Description: Privacy by design principles are fully integrated and standard in all Gen Al-related initiatives. Evidence: Privacy is a foundational aspect in the development and execution of all Gen Al projects. Recommendations: Regularly update and adapt privacy by design strategies to keep pace with evolving Gen Al technologies and privacy challenges.

Subdomain Elements	Emerging Level	Developing Level	Mature Level
3.3.5 Privacy Impact Assessments: Regularly conducting privacy impact assessments to evaluate the privacy implications of new	Description: Initial attempts to conduct privacy impact assessments exist, but these are infrequent and not comprehensive.	Description: A more structured approach to privacy impact assessments is developing, but not yet fully integrated into all new initiatives.	Description: Comprehensive and regular privacy impact assessments are integrated into all new technology and policy implementations.
technologies or policies.	Evidence: A lack of thorough assessment leads to potential privacy risks in new technologies or policies.	Evidence: Some privacy assessments have been conducted, but coverage and depth are not sufficient.	Evidence: Privacy risks are effectively identified and mitigated in all new initiatives. Recommendations: Continuously
	Recommendations: Start implementing regular and basic privacy impact assessments for new technologies and policies.	Recommendations: Enhance the scope and frequency of privacy impact assessments to cover all new technologies and policies.	adapt and refine privacy impact assessment processes to align with emerging technologies and evolving privacy concerns.

4. Technical Readiness

The Technical Readiness domain ensures that the district's technological infrastructure and practices are primed for the effective and secure implementation of Gen Al. This domain encompasses aspects such as identity and access management, system monitoring, technical controls, and content moderation, focusing on establishing robust policies and systems to support the responsible and efficient use of Gen Al technologies in the educational sector. It emphasizes the need for rigorous policy development, system oversight, technical safeguard implementation, and the management of digital content to facilitate a secure and effective deployment of Gen Al tools.

The Maturity Rubric for this domain includes:

- 4.1 Identity and Access Management
- 4.2 Tracking & Monitoring
- 4.3 Technical Controls
- 4.4 Hallucinations and Inappropriate Content

4.1 Identity and Access Management

Identity and Access Management focuses on ensuring secure and role-appropriate access to data in the context of Gen Al usage.

Subdomain Elements	Emerging Level	Developing Level	Mature Level
4.1.1 Role-Based Data Access Controls: Implementing access controls based on user roles.	Description: There is a basic implementation of role-based access controls, with limited coverage and structure. Evidence: Access control is inconsistent, leading to potential security risks and data breaches. Recommendations: Develop initial role-based access control systems to improve security and compliance.	Description: Role-based access controls are improving, but not yet fully comprehensive or integrated. Evidence: Access control has been improved, but gaps in role definition and enforcement remain. Recommendations: Standardize and expand role-based access controls to cover all critical systems and data.	Description: Comprehensive and well-structured role-based access control systems are in place. Evidence: Role-based access controls are effectively managing user access and enhancing security and compliance. Recommendations: Continuously review and update access control systems to adapt to changing roles and security needs.
4.1.2 Integration with Authentication Systems: Ensuring Gen AI tools work with existing authentication systems.	Description: There is minimal integration of Gen AI tools with existing authentication systems. Evidence: Gen AI tools are not fully secure or aligned with current authentication protocols. Recommendations: Start aligning Gen AI tool integration with existing authentication systems.	Description: A better integration of Gen Al tools with authentication systems is developing, but integration is partial. Evidence: Some progress has been made in aligning Gen Al tools with authentication protocols, but inconsistencies remain. Recommendations: Strengthen integration efforts to ensure full compatibility of Gen Al tools with authentication systems.	Description: A full and seamless integration of Gen Al tools with existing authentication systems is in place. Evidence: Gen Al tools are consistently secure and aligned with authentication protocols. Recommendations: Maintain and continuously enhance the integration of Gen Al tools with authentication systems.

Subdomain Elements	Emerging Level	Developing Level	Mature Level
4.1.3 Continuous Access Evaluation: Implementing processes for ongoing evaluation and adjustment of access controls in response to changes in user roles and system updates.	Description: Initial efforts to evaluate and adjust access controls exist, but processes are ad-hoc and reactive. Evidence: Access controls are not consistently evaluated or updated, leading to security gaps. Recommendations: Develop a basic framework for ongoing evaluation and adjustment of access controls.	Description: Structured processes for continuous access evaluation are developing, but not yet fully systematic. Evidence: Some improvements in access control evaluation exist, but comprehensive and proactive adjustment is lacking. Recommendations: Enhance and systematize continuous access evaluation processes to respond	Description: Comprehensive and proactive processes for continuous access evaluation and adjustment exist. Evidence: Access controls are regularly evaluated and adjusted, ensuring ongoing security and relevance. Recommendations: Continuously review and refine access evaluation processes to adapt to
		to user and system changes.	evolving user roles and system updates.
4.1.4 Integration with Emerging Technologies: Ensuring that access management systems are adaptable to integrate with future technological advancements.	Description: There is limited consideration of the integration of access management systems with emerging technologies. Evidence: Access management systems are not fully prepared for future technological changes. Recommendations: Start planning for the adaptability of access management systems to new technologies.	Description: Progress has been made in planning for the integration of access management systems with emerging technologies. Evidence: There are increased efforts to align access management with new technologies, but integration is not comprehensive. Recommendations: Strengthen strategies to ensure access management systems are adaptable to future technological advancements.	Description: There is advanced integration of access management systems with emerging technologies. Evidence: Access management systems are fully adaptable and aligned with current and future technologies. Recommendations: Maintain and continuously update integration strategies to stay ahead of technological trends.

4.2 Tracking & Monitoring

Tracking & Monitoring involves overseeing Gen AI systems' use and ensuring compliance with district policies

Subdomain Elements	Emerging Level	Developing Level	Mature Level
4.2.1 Gen Al System Tracking and Usage Monitoring: Monitoring the use of Gen Al systems.	Description: There is basic monitoring of Gen AI system usage, with limited tracking mechanisms. Evidence: Inadequate tracking leads to insufficient oversight of Gen AI system usage. Recommendations: Develop initial systems for tracking and monitoring Gen AI usage.	Description: More structured tracking and monitoring of Gen Al system usage is developing. Evidence: Tracking is improved, but comprehensive monitoring of all Gen Al systems is lacking. Recommendations: Enhance tracking systems to cover all Gen Al usage and ensure effective monitoring.	Description: Comprehensive and systematic tracking and monitoring of all Gen AI system usage is in place. Evidence: There is effective oversight of Gen AI usage with robust monitoring systems. Recommendations: Continuously adapt and update tracking systems to align with changing Gen AI technologies and usage patterns.
4.2.2 Non-Compliance Identification and Prevention: Identifying and preventing policy breaches.	Description: There are minimal efforts to identify and prevent policy breaches related to Gen Al. Evidence: Potential policy violations are not effectively detected or prevented. Recommendations: Establish basic protocols for identifying and preventing non-compliance.	Description: Efforts to identify and prevent non-compliance are increasing, but processes are not fully systematic. Evidence: Some measures are in place for policy enforcement, but consistency in identification and prevention is needed. Recommendations: Standardize and strengthen non-compliance identification and prevention strategies.	Description: Processes for identifying and preventing policy breaches related to Gen AI are advanced. Evidence: Identification and prevention of non-compliance with policies are efficient and consistent. Recommendations: Regularly review and refine strategies to stay ahead of potential policy violations and emerging risks.

Subdomain Elements	Emerging Level	Developing Level	Mature Level
4.2.3 Automated Compliance Monitoring: Developing systems for automated monitoring of Gen Al tool usage to ensure compliance with district policies.	Description: There is an initial setup of automated monitoring systems for Gen Al tool compliance, but lacking in depth and scope. Evidence: Automated oversight of Gen Al tool usage in compliance with policies is inadequate. Recommendations: Develop fundamental automated	Description: Automated compliance monitoring is improving, but is not yet fully integrated or comprehensive. Evidence: Some improvements are made in automated monitoring, but coverage and accuracy need enhancement. Recommendations: Expand and refine automated compliance	Description: Comprehensive and integrated automated compliance monitoring systems are in place for Gen Al tools. Evidence: Effective and consistent monitoring ensures compliance with district policies. Recommendations: Continuously review and enhance automated systems to adapt to evolving Gen
	monitoring systems for policy compliance in Gen Al tool usage.	monitoring systems for more effective oversight.	Al technologies and policy changes.
4.2.4 Usage Analytics: Implementing analytics tools to provide insights into the effectiveness and	Description: A basic use of analytics tools for evaluating Gen Al tools exists, with limited insights.	Description: The use of analytics for deeper insights into Gen Al tool usage is developing, but not yet extensive.	Description: Advanced analytics provide detailed insights into the efficiency and effectiveness of Gen Al tools.
efficiency of Gen Al tools.	Evidence: Data analysis is insufficient to gauge the effectiveness of Gen Al tools. Recommendations: Start	Evidence: A better understanding of Gen Al tool effectiveness is growing, but analytics are not fully exploited.	Evidence: Comprehensive analysis offers actionable insights for optimizing Gen Al tool usage. Recommendations: Regularly
	implementing basic analytics tools to gather insights on Gen Al tool usage.	Recommendations: Strengthen the implementation of analytics tools to provide more comprehensive insights.	update analytics tools and methodologies to capture evolving trends and usage patterns.

4.3 Technical Controls

Technical Controls entails evaluating necessary infrastructure and ensuring appropriate technical safeguards are in place for Gen Al.

Subdomain Elements	Emerging Level	Developing Level	Mature Level
4.3.1 Ancillary Architecture Evaluation: Assessing additional infrastructure needs for Gen Al.	Description: An initial assessment of infrastructure needs for Gen Al has been made, but lacks depth and comprehensiveness. Evidence: There is insufficient evaluation of ancillary architecture, potentially leading to inadequate infrastructure for Gen Al. Recommendations: Develop basic procedures for assessing additional infrastructure needs for Gen Al.	Description: A more structured assessment of infrastructure needs is developing, but not yet fully integrated with Gen Al requirements. Evidence: Evaluation of ancillary architecture is improved, but some infrastructure gaps remain. Recommendations: Enhance infrastructure assessment processes to fully support Gen Al initiatives.	Description: There is a comprehensive and integrated assessment of all infrastructure needs for effective Gen Al deployment. Evidence: Ancillary architecture fully supports Gen Al requirements, ensuring robust and efficient operation. Recommendations: Continuously review and adapt infrastructure assessment to align with evolving Gen Al technologies and needs.
4.3.2 Technical Control Implementation and Review: Implementing and reviewing technical controls.	Description: Technical controls for Gen AI are implemented at a basic level, with limited review processes. Evidence: Technical controls are not fully effective or regularly reviewed, leading to potential security risks. Recommendations: Start establishing and reviewing technical controls to enhance Gen AI security and functionality.	Description: The implementation and review of technical controls are being improved, but not yet comprehensive. Evidence: Some improvements in technical safeguards exist, but consistent review and updating are needed. Recommendations: Strengthen and regularly review technical controls to ensure ongoing effectiveness and alignment with Gen Al developments.	Description: There is advanced implementation and regular review of technical controls for Gen Al. Evidence: Technical controls are effectively safeguarding Gen Al systems, with ongoing monitoring and updating. Recommendations: Maintain and continuously refine technical control processes to stay ahead of security and functional requirements.

Subdomain Elements	Emerging Level	Developing Level	Mature Level
4.3.3 Interoperability Assessment: Conducting assessments to ensure that new Gen Al tools are compatible with existing district systems and infrastructure.	Description: Initial assessments of interoperability between new Gen Al tools and existing systems are basic and sporadic. Evidence: Potential compatibility issues with integrating Gen Al tools into the current infrastructure exist. Recommendations: Develop a fundamental process for assessing the interoperability of Gen Al tools with existing systems.	Description: More structured processes for assessing interoperability are developing, but not comprehensive. Evidence: Some progress exists in ensuring compatibility, but gaps in interoperability assessments exist. Recommendations: Enhance the scope and thoroughness of interoperability assessments to ensure seamless integration.	Description: There is a comprehensive and systematic assessment of interoperability for all new Gen Al tools. Evidence: Gen Al tools are effectively integrated with existing systems, ensuring full compatibility. Recommendations: Continuously update and refine interoperability assessments to align with evolving technologies and system changes.
4.3.4 Sustainability and Environmental Impact: Including considerations for the environmental impact of Gen Al tools, focusing on sustainability.	Description: There is minimal consideration of the environmental impact of Gen AI tools, with limited focus on sustainability. Evidence: The sustainability and environmental impact of Gen AI tools are not adequately addressed. Recommendations: Initiate basic strategies to evaluate and minimize the environmental impact of Gen AI technologies.	Description: A focus on sustainability and environmental impact is increasing, but practices are not fully integrated. Evidence: Awareness of sustainability is growing, but consistent application across Gen AI tools is lacking. Recommendations: Strengthen sustainability strategies to cover all aspects of Gen AI tool deployment.	Description: There is an advanced and integrated consideration of sustainability and environmental impact in all Gen Al tool deployments. Evidence: Sustainability is a core aspect of Gen Al tool selection and usage, minimizing environmental impact. Recommendations: Regularly reassess and adapt sustainability strategies to align with current and future environmental standards.

4.4 Hallucinations of Inappropriate Content

This subdomain addresses the challenge of managing inappropriate content generated by Gen AI, ensuring proper moderation and oversight.

Subdomain Elements	Emerging Level	Developing Level	Mature Level
4.4.1 Content Moderation and Human Oversight: Establishing systems for content review and moderation.	Description: There is an initial establishment of content moderation systems, with limited human oversight. Evidence: Content moderation is inadequate, leading to potential exposure to inappropriate content. Recommendations: Develop basic content moderation systems with some level of human oversight.	Description: More structured content moderation processes are developing, but not yet fully comprehensive. Evidence: Content moderation is improved, but gaps in human oversight exist. Recommendations: Enhance content moderation systems and ensure consistent human oversight across all platforms.	Description: Comprehensive and systematic content moderation systems are in place with robust human oversight. Evidence: There is effective management of inappropriate content with consistent human review and moderation. Recommendations: Continuously review and update content moderation systems to adapt to new challenges and technologies.
4.4.2 Vendor Moderation Guardrails: Requiring vendors to implement content moderation features.	Description: There are minimal requirements for vendors to implement content moderation features in their tools. Evidence: Vendors' tools lack sufficient content moderation, risking exposure to inappropriate content. Recommendations: Initiate basic requirements for vendors to include content moderation features.	Description: There are increasing requirements for vendor-implemented content moderation, but not uniformly enforced. Evidence: Some vendors have improved content moderation, but consistency across tools is lacking. Recommendations: Strengthen vendor requirements for content moderation and ensure uniform enforcement.	Description: Advanced and consistent requirements are in place for vendors to implement robust content moderation features. Evidence: Vendors' tools uniformly include effective content moderation, minimizing exposure to inappropriate content. Recommendations: Regularly reassess vendor requirements for content moderation to align with evolving standards and technologies.

Subdomain Elements	Emerging Level	Developing Level	Mature Level
4.4.3 Feedback and Reporting Mechanisms: Establishing clear mechanisms for staff and students to report inappropriate content or hallucinations.	Description: Basic systems are in place for reporting inappropriate content, but these are not widely known or used. Evidence: There is limited awareness and use of feedback	Description: More structured feedback and reporting systems are developing, but not yet fully effective. Evidence: Reporting mechanisms are improved, but comprehensive	Description: Comprehensive and well-utilized feedback and reporting mechanisms are in place for inappropriate content. Evidence: There is effective feedback collection and response,
	and reporting mechanisms among staff and students.	and proactive feedback collection is lacking.	ensuring swift action on reported content issues.
	Recommendations: Develop and promote initial mechanisms for reporting inappropriate content or hallucinations.	Recommendations: Enhance feedback and reporting systems to encourage more active use and responsiveness.	Recommendations: Continuously adapt feedback and reporting systems to changing needs and technologies.
4.4.4 Community Engagement: Involving the broader school community in understanding and	Description: There is minimal engagement with the school community on content moderation challenges in Gen Al.	Description: Efforts to engage the community in content moderation discussions are increasing but with limited engagement.	Description: There is strong and continuous engagement with the school community on content moderation in Gen Al.
addressing the challenges of content moderation in Gen Al tools.	Evidence: The community lacks awareness and involvement in addressing content moderation issues.	Evidence: Some community involvement exists, but broader engagement and understanding are needed.	Evidence: There is a high level of community involvement and understanding of content moderation challenges.
	Recommendations: Start involving the school community in discussions and initiatives related to content moderation.	Recommendations: Expand community engagement initiatives to cover a wider range of stakeholders and topics.	Recommendations: Maintain and deepen community engagement efforts to foster a collaborative approach to content moderation.

5. Security Readiness

The Security Readiness domain is dedicated to establishing and maintaining robust security measures and practices in the context of Gen Al usage within a school district. This domain encompasses developing comprehensive cybersecurity frameworks, specific security protections tailored for Gen Al applications, and thorough cybersecurity training programs. It emphasizes the importance of having designated individuals responsible for cybersecurity, ensuring that security frameworks are comprehensive and include Gen Al-specific considerations, and providing role-based cybersecurity education. The focus is on creating a secure environment for Gen Al technologies, ensuring that all stakeholders are well-prepared to handle potential security challenges and threats in an educational setting.

The Maturity Rubric for this domain includes:

- 5.1 Security Safeguards
- 5.2 Cybersecurity Training

5. Security Readiness Domain

5.1 Security Safeguards

Security Safeguards focus on establishing robust cybersecurity frameworks and specific protections for Gen AI applications.

Subdomain Elements	Emerging Level	Developing Level	Mature Level
5.1.1 Cybersecurity Leadership and Framework - Designating leadership and frameworks for cybersecurity.	Description: There is an initial establishment of cybersecurity leadership roles, with basic frameworks in place. Evidence: Cybersecurity leadership and frameworks are underdeveloped, leading to potential security gaps. Recommendations: Develop fundamental cybersecurity leadership roles and establish basic frameworks.	Description: More structured cybersecurity frameworks are developing, but not fully comprehensive. Evidence: Improved cybersecurity governance exists, but gaps in framework effectiveness remain. Recommendations: Enhance cybersecurity frameworks and ensure they are comprehensive and regularly reviewed.	Description: Comprehensive and well-established cybersecurity leadership and frameworks exist. Evidence: Cybersecurity is effectively governed and managed, ensuring robust protection. Recommendations: Continuously review and adapt cybersecurity frameworks to evolving threats and technologies.
5.1.2 Gen Al-Specific Security Protections - Implementing specific security measures for Gen Al usage.	Description: Minimal implementation of specific security measures for Gen Al exists, with limited scope. Evidence: There are insufficient security protections for Gen Al applications, leading to vulnerabilities. Recommendations: Initiate the development of specific security measures tailored for Gen Al usage.	Description: There is an increasing focus on Gen Alspecific security measures, but implementation is partial. Evidence: Some progress in Gen Alsecurity has been made, but consistent and comprehensive protections are needed. Recommendations: Strengthen the implementation of Gen Alspecific security measures to ensure thorough coverage.	Description: Advanced and fully implemented Gen Al-specific security measures are in place. Evidence: Gen Al applications are securely protected against a wide range of threats. Recommendations: Regularly update and refine Gen Al-specific security measures to stay ahead of emerging security challenges.

Subdomain Elements	Emerging Level	Developing Level	Mature Level
5.1.3 Incident Response Planning – Developing and regularly updating an incident response plan that includes protocols for Gen Alrelated security incidents.	Description: A basic incident response plan is in place, but lacks specific protocols for Gen Alrelated incidents. Evidence: There is inadequate preparedness for Gen Alrelated security incidents, leading to potential risks. Recommendations: Develop initial incident response protocols specifically for Gen Al-related scenarios.	Description: More structured incident response plans are developing, including some Gen Al-specific protocols. Evidence: Some improvements in response readiness for Gen Al incidents have been made, but are not fully comprehensive. Recommendations: Enhance incident response planning to cover all potential Gen Al-related security scenarios.	Description: A comprehensive and regularly updated incident response plan is in place, fully encompassing Gen AI scenarios. Evidence: There is effective preparedness and rapid response capability for any Gen AI-related security incidents. Recommendations: Continuously review and adapt the incident response plan to evolving Gen AI technologies and threats.
5.1.4 Regular Security Audits - Implementing a schedule for regular security audits to assess the effectiveness of existing safeguards and identify areas for improvement	Description: There are infrequent security audits, with limited focus on Gen AI systems and safeguards. Evidence: Security audits are not effectively assessing the robustness of Gen AI safeguards. Recommendations: Initiate a regular schedule for security audits that includes a specific focus on Gen AI systems.	Description: There is an increasing frequency and scope of security audits, but not yet fully encompassing Gen Al systems. Evidence: Assessment of security measures is better, but comprehensive audits of Gen Al systems are lacking. Recommendations: Expand the scope and depth of security audits to thoroughly assess Gen Al systems and safeguards.	Description: Regular and comprehensive security audits are being made, fully integrating the assessment of Gen Al systems and safeguards. Evidence: A thorough and effective evaluation of all security measures is being made, ensuring robust protection of Gen Al systems. Recommendations: Maintain a consistent schedule for comprehensive security audits and adapt as needed to new security challenges.

5. Security Readiness Domain

5.2 Cybersecurity Training

Cybersecurity Training emphasizes role-based education and the development of comprehensive training programs for cybersecurity in the context of Gen Al.

Subdomain Elements	Emerging Level	Developing Level	Mature Level
5.2.1 Role-Based Cybersecurity Education - Tailoring cybersecurity training to different roles.	Description: Basic cybersecurity training is in place, but not tailored to specific roles within the organization. Evidence: Lack of role-specific training leads to uneven cybersecurity knowledge and practices. Recommendations: Initiate the development of role-based cybersecurity education programs.	Description: More structured role-based cybersecurity training is developing, but not yet fully effective. Evidence: Role-specific training has improved, but gaps in coverage and depth remain. Recommendations: Enhance and standardize role-based cybersecurity training to cover all relevant roles.	Description: Comprehensive role-based cybersecurity education exists and is tailored to all organizational roles. Evidence: Consistent and effective cybersecurity knowledge and practices are evident across all roles. Recommendations: Continuously review and adapt role-based training to changing cybersecurity needs and technologies.
5.2.2 Training Program Development and Delivery - Developing and delivering comprehensive cybersecurity training programs.	Description: Initial efforts in developing cybersecurity training programs exist, but these are not comprehensive or regularly updated. Evidence: Training programs are not fully effective in covering all aspects of cybersecurity in the Gen Al context. Recommendations: Develop foundational cybersecurity training programs that are relevant to Gen Al usage.	Description: The development and delivery of cybersecurity training programs are improving, but not yet comprehensive. Evidence: Some progress in training program effectiveness exists, but consistent updating and coverage are needed. Recommendations: Strengthen the development and delivery of comprehensive cybersecurity training programs.	Description: Advanced and regularly updated cybersecurity training programs are in place, covering all aspects of cybersecurity in Gen Al. Evidence: Training programs are highly effective in enhancing cybersecurity awareness and skills. Recommendations: Maintain and continuously enhance the development and delivery of cybersecurity training programs.

Subdomain Elements	Emerging Level	Developing Level	Mature Level
5.2.3 Continuous Learning Framework - Establishing a continuous learning framework for cybersecurity, incorporating the latest trends and threats, including those related to Gen Al.	Description: Initial efforts to establish a continuous learning framework for cybersecurity exist, but are lacking in depth and Gen Al focus. Evidence: Cybersecurity training is not keeping pace with evolving trends and threats, especially in Gen Al. Recommendations: Develop a	Description: A more structured continuous learning framework is being developed, but there is only partial integration of Gen Al trends. Evidence: Some progress exists in updating cybersecurity training, but comprehensive coverage of Gen Al threats is needed. Recommendations: Enhance the	Description: There is a comprehensive and regularly updated continuous learning framework, fully incorporating Gen Al cybersecurity trends. Evidence: There is an effective adaptation of cybersecurity training to current and emerging threats, including those related to Gen Al.
	basic continuous learning framework that includes updates on Gen Al-related cybersecurity.	continuous learning framework to fully integrate Gen AI trends and threats.	Recommendations: Continuously adapt the learning framework to stay ahead of the latest cybersecurity trends and threats.
5.2.4 Community Awareness Programs - Developing programs to raise cybersecurity awareness among the broader school community, including parents and other stakeholders.	Description: Minimal programs are in place to raise cybersecurity awareness among the school community. Evidence: There is limited awareness of cybersecurity issues among parents, students, and other stakeholders. Recommendations: Initiate basic awareness programs to improve community understanding of cybersecurity.	Description: There are increasing efforts to develop community awareness programs, but not yet widespread or comprehensive. Evidence: There is a growing awareness among the community, but consistent and in-depth understanding is lacking. Recommendations: Expand and strengthen community awareness programs to cover a broader range of cybersecurity topics.	Description: Advanced and widespread community awareness programs exist, effectively raising cybersecurity awareness among all stakeholders. Evidence: There is a high level of community engagement and understanding of cybersecurity challenges. Recommendations: Maintain and continuously enhance community awareness programs to align with evolving cybersecurity landscapes.

6. Legal/Risk Readiness

Legal/Risk Readiness ensures the school district is prepared to manage the legal aspects and potential risks associated with the implementation and usage of Gen AI, encompassing legal remediation, risk management, and loss notification.

The Maturity Rubric for this domain includes:

- 6.1 Legal Remediation
- 6.2 Risk Management
- 6.3 Loss Notification

6. Legal/Risk Readiness Domain

6.1 Legal Remediation

Legal Remediation focuses on ensuring that Gen Al usage complies with contractual terms, addressing policy violations effectively, and educating on copyright laws and fair use

Subdomain Elements	Emerging Level	Developing Level	Mature Level
6.1.1 Contractual Compliance with Gen Al Usage - Ensuring Gen Al use adheres to contractual agreements.	Description: Basic processes are in place for ensuring Gen AI usage adheres to contractual terms, but these are not fully developed. Evidence: There are potential risks of non-compliance with contractual agreements related to Gen AI. Recommendations: Develop initial procedures and checks to ensure contractual compliance in Gen AI usage.	Description: More structured processes for contractual compliance in Gen Al usage are developing, but not comprehensive. Evidence: Compliance with contractual terms has improved, but gaps in enforcement and monitoring exist. Recommendations: Enhance mechanisms to ensure thorough contractual compliance for Gen Al usage.	Description: Comprehensive and systematic processes are in place for ensuring contractual compliance in Gen Al usage. Evidence: Contractual terms are managed effectively, minimizing risks of non-compliance. Recommendations: Continuously review and adapt processes to maintain contractual compliance as Gen Al technologies evolve.
6.1.2 Employee Policy Violation Consequences - Outlining and enforcing consequences for policy violations.	Description: There is minimal enforcement of consequences for employee policy violations related to Gen Al. Evidence: There is inconsistent application of consequences leading to potential policy breaches. Recommendations: Establish clear and enforceable consequences for Gen Al policy violations.	Description: Efforts to enforce consequences for policy violations are increasing, but not yet fully systematic. Evidence: There is some improvement in enforcing policies, but consistent application of consequences is needed. Recommendations: Strengthen the enforcement and communication of consequences for policy violations.	Description: Advanced and consistent enforcement of consequences is in place for employee policy violations related to Gen Al. Evidence: Policy breaches are deterred effectively, ensuring adherence to organizational standards. Recommendations: Regularly review and update policies and consequences to align with evolving Gen Al applications and legal requirements.

Subdomain Elements	Emerging Level	Developing Level	Mature Level
6.1.3 Remediation Plans for Policy Violations - Developing plans to address and remediate policy violations.	Description: Basic plans are in place for addressing policy violations, but not specifically tailored for Gen Al. Evidence: Remediation plans are general and lack specificity for Gen Al-related issues. Recommendations: Develop initial remediation plans that specifically address policy violations in the Gen Al context.	Description: More structured remediation plans for policy violations are developing, including some Gen Al-specific aspects. Evidence: Remediation efforts are improved, but not comprehensive for all Gen Al-related policy violations. Recommendations: Enhance remediation plans to cover a wider range of Gen Al policy violations and scenarios.	Description: Comprehensive and effective remediation plans are in place for all types of policy violations related to Gen Al. Evidence: Policy violations are handled and resolved efficiently, minimizing legal risks in Gen Al usage. Recommendations: Regularly update remediation plans to address evolving Gen Al technologies and associated legal issues.
6.1.4 Copyright Protection and Fair Use Education – Educating on copyright issues and fair use in the context of Gen Al.	Description: There is minimal education on copyright issues and fair use related to Gen Al. Evidence: There is a lack of awareness and understanding of copyright laws and fair use in the context of Gen Al. Recommendations: Initiate basic educational programs on copyright and fair use specifically for Gen Al usage.	Description: Focus on copyright education is increasing, but not yet fully encompassing Gen Alspecific issues. Evidence: There is some improvement in copyright awareness, but an in-depth understanding of fair use in Gen Al is lacking. Recommendations: Expand educational efforts to fully cover copyright and fair use in the context of Gen Al.	Description: There is an advanced and thorough education on copyright and fair use, specifically tailored for Gen Al contexts. Evidence: There is a high level of understanding and compliance with copyright laws and fair use among stakeholders. Recommendations: Continuously enhance copyright education to keep pace with evolving Gen Al applications and legal developments.

Subdomain Elements	Emerging Level	Developing Level	Mature Level
6.1.5 Continuous Legal Education – Ensuring regular training and updates for the legal team on emerging legal issues related to Gen Al.	Description: There are initial efforts to provide regular legal training on Gen Al issues, but not comprehensive. Evidence: The legal team's knowledge of emerging Gen Al legal issues is limited. Recommendations: Develop foundational training programs for the legal team on Gen Al-related legal developments.	Description: Developing structured legal education programs, but coverage of Gen Al issues is partial. Evidence: There is some improvement in the legal team's understanding of Gen Al issues, but not yet thorough. Recommendations: Enhance continuous legal education to cover all aspects of emerging Gen Al legal issues.	Description: Comprehensive and regular legal education on all aspects of Gen AI legal issues. Evidence: The legal team is well-informed and up-to-date with Gen AI legal developments. Recommendations: Continuously update legal education programs to stay aligned with the latest Gen AI legal trends and challenges.
6.1.6 Stakeholder Communication Strategies - Developing strategies for effective communication with stakeholders about legal policies and their implications.	Description: Basic communication strategies are in place, but not effectively conveying legal policies to stakeholders. Evidence: Stakeholders are not fully informed about legal policies and their implications in Gen Al usage. Recommendations: Initiate the development of strategies to improve communication about legal policies with stakeholders.	Description: Increasing efforts to develop effective communication strategies, but not yet comprehensive. Evidence: Better communication with stakeholders is evident, but consistent and clear messaging is needed. Recommendations: Strengthen communication strategies to effectively convey legal policies related to Gen AI to all stakeholders.	Description: Advanced and well-structured communication strategies effectively conveying legal policies to stakeholders. Evidence: Stakeholders have a clear understanding of legal policies and their implications in Gen Al usage. Recommendations: Regularly review and refine communication strategies to ensure clarity and effectiveness in conveying legal policies.

6. Legal/Risk Readiness Domain

6.2 Risk Management

Risk Management addresses the integration of Gen AI into audit processes, the management of data ownership, and ensuring adequate insurance coverage for Gen AI-related risks.

Subdomain Elements	Emerging Level	Developing Level	Mature Level
6.2.1 Gen Al Integration in Audit Processes – Incorporating Gen Al considerations into auditing practices.	Description: Initial steps to include Gen Al considerations in audit processes are in place, but lacking comprehensive integration. Evidence: Audit processes do not fully account for the unique aspects of Gen Al, leading to potential oversight gaps. Recommendations: Develop basic procedures to integrate Gen Al considerations into audit practices.	Description: More structured integration of Gen AI in audit processes is developing, but not yet fully systematic. Evidence: Some progress has been made in addressing Gen AI in audits, but comprehensive coverage is lacking. Recommendations: Enhance audit procedures to fully incorporate Gen AI considerations and risks.	Description: There is a comprehensive and systematic integration of Gen Al considerations in all audit processes. Evidence: Audits effectively account for Gen Al, ensuring thorough evaluation and risk management. Recommendations: Regularly update audit processes to adapt to evolving Gen Al technologies and associated risks.
6.2.2 Data Retention and Ownership Agreements - Managing agreements related to data retention and ownership	Description: Basic management of data retention and ownership agreements is in place, but not specifically addressing Gen Al implications. Evidence: There are potential risks in data management related to Gen Al due to inadequate agreements. Recommendations: Establish initial agreements and policies specifically for data retention and ownership in the Gen Al context.	Description: Management of data retention and ownership agreements are improving, but not yet fully encompassing Gen Al complexities. Evidence: There is better handling of data agreements, but consistent and thorough coverage of Gen Al issues is needed. Recommendations: Strengthen policies and agreements to cover all aspects of data retention and ownership specific to Gen Al.	Description: Advanced management of data retention and ownership agreements is evident, fully addressing Gen Al implications. Evidence: Data retention and ownership are effectively managed, minimizing risks associated with Gen Al data. Recommendations: Continuously review and adapt data agreements to align with changing Gen Al applications and legal requirements.

Subdomain Elements	Emerging Level	Developing Level	Mature Level
6.2.3 Insurance Coverage for Gen Al-Related Risks - Integrating data loss notification protocols into onboarding and ongoing training programs.	Description: There is an initial evaluation of insurance policies to cover Gen Al-related risks, but coverage is limited. Evidence: Inadequate insurance coverage is in place for the unique risks associated with Gen Al. Recommendations: Begin assessing and updating insurance policies to include specific coverage for Gen Al-related risks.	Description: More comprehensive insurance coverage is developing for Gen Al-related risks, but not fully adequate. Evidence: Some improvements in insurance coverage exist, but gaps in Gen Al risk coverage remain. Recommendations: Enhance insurance policies to fully cover all potential risks associated with Gen Al.	Description: Comprehensive insurance policies are in place, fully covering all risks associated with Gen Al usage. Evidence: Effective insurance coverage is in place for Gen Al, minimizing financial risks and liabilities. Recommendations: Regularly review and update insurance policies to stay aligned with evolving Gen Al technologies and associated risks.
6.2.4 Comprehensive Risk Assessment Framework - Developing a framework for continuous risk assessment that includes Gen Al-related risks.	Description: A basic framework is in place for risk assessment, but does not fully include Gen Alrelated risks. Evidence: Risk assessment processes overlook some critical Gen Al-related risks. Recommendations: Develop an initial risk assessment framework that specifically incorporates Gen Al-related risks.	Description: The risk assessment framework has been enhanced to include Gen Al-related risks, but integration is partial. Evidence: Risk assessment is improved for Gen Al, but comprehensive and systematic analysis is lacking. Recommendations: Strengthen the risk assessment framework to ensure it fully encompasses all Gen Al-related risks.	Description: An advanced and integrated risk assessment framework exists, thoroughly including all Gen Al-related risks. Evidence: There is effective identification and management of all potential risks associated with Gen Al. Recommendations: Continuously adapt and update the risk assessment framework to reflect new Gen Al developments and emerging risks.

Subdomain Elements	Emerging Level	Developing Level	Mature Level
Insurance Policy Review – Regularly reviewing and updating insurance policies to cover risks associated with Gen Al usage.	Description: There is an infrequent and basic review of insurance policies for Gen Al coverage. Evidence: Insurance policies may not adequately cover the specific risks associated with Gen Al. Recommendations: Initiate a process for regular review of insurance policies to ensure adequate coverage for Gen Alrelated risks.	Description: There is an increasing frequency of insurance policy reviews, but they do not fully address all Gen Al-related risks. Evidence: Some improvements in insurance coverage for Gen Al have been made, but a comprehensive review is needed to cover all risks. Recommendations: Enhance the frequency and depth of insurance policy reviews to fully address Gen Al risks.	Description: There are regular and comprehensive reviews of insurance policies to ensure full coverage of Gen Al-related risks. Evidence: Insurance policies are effectively updated to cover all aspects of risks associated with Gen Al. Recommendations: Maintain a consistent schedule for comprehensive insurance policy reviews to adapt to evolving Gen Al technologies and risks.

6. Legal/Risk Readiness Domain

6.3 Loss Notification

Loss Notification entails developing policies for notifying affected parties in case of data loss, monitoring compliance with these policies, and training staff for effective response.

Formal Data Loss Notification notification policies are in place, loss notification policies are well-structured data loss	Subdomain Elements	Emerging Level	Developing Level	Mature Level
notifying stakeholders in the event of data loss. Communicated. Evidence: There is the potential for inadequate or delayed notification to stakeholders in the event of data loss. Recommendations: Develop initial policies for formal data loss notification, ensuring clarity and effective communicated. Evidence: Notification procedures are improved, but gaps in execution and communication remain. Evidence: Notification procedures are improved, but gaps in execution and communication remain. Evidence: Notification procedures are improved, but gaps in execution and communication remain. Recommendations: Enhance data loss notification policies to ensure timely and effective	Formal Data Loss Notification Policies - Establishing policies for notifying stakeholders in the event	notification policies are in place, but not comprehensive or well-communicated. Evidence: There is the potential for inadequate or delayed notification to stakeholders in the event of data loss. Recommendations: Develop initial policies for formal data loss notification, ensuring clarity and	loss notification policies are developed, but not yet fully effective. Evidence: Notification procedures are improved, but gaps in execution and communication remain. Recommendations: Enhance data loss notification policies to ensure timely and effective communication to all	notification policies are in place, effectively communicated, and executed. Evidence: In case of data loss, stakeholders are efficiently and promptly notified, minimizing potential impacts. Recommendations: Regularly review and update data loss notification policies to align with evolving data management

Subdomain Elements	Emerging Level	Developing Level	Mature Level
6.3.2 Compliance Monitoring and Training - Monitoring adherence to data loss notification policies and conducting related training	Description: There is minimal monitoring of compliance with data loss notification policies and limited training. Evidence: Adherence to notification policies is inconsistent, leading to potential gaps in response. Recommendations: Initiate processes for regular monitoring of policy compliance and basic training for relevant staff.	Description: There are increasing efforts to monitor compliance with data loss notification policies and provide related training, but not comprehensive. Evidence: There is some improvement in compliance monitoring, but consistent training and adherence are needed. Recommendations: Strengthen monitoring and training processes to ensure full compliance with data loss notification policies.	Description: There is regular and thorough monitoring of compliance with data loss notification policies, accompanied by comprehensive training. Evidence: There is a high level of compliance and staff preparedness for data loss notification, ensuring effective response. Recommendations: Maintain consistent monitoring and ongoing training to ensure adherence to data loss notification policies and preparedness for potential incidents.
6.3.3 Data Loss Notification Onboarding and Training – Integrating data loss notification protocols into onboarding and ongoing training programs.	Description: There is a basic integration of data loss notification protocols into onboarding, but lacking in ongoing training. Evidence: New staff are minimally aware of data loss notification procedures, leading to potential gaps in response. Recommendations: Begin incorporating data loss notification protocols into both onboarding and ongoing training programs.	Description: More structured integration of data loss notification training is developed, but not fully comprehensive. Evidence: There is some improvement in staff awareness, but consistent and thorough training is needed. Recommendations: Enhance the integration of data loss notification protocols into both onboarding and regular training.	Description: There is a comprehensive integration of data loss notification training into onboarding and ongoing programs. Evidence: There is a high level of staff awareness and preparedness for data loss notification, ensuring effective response. Recommendations: Regularly update training programs to reflect evolving data loss scenarios and notification procedures.

Subdomain Elements	Emerging Level	Developing Level	Mature Level
6.3.4 Automated Alert Systems – Implementing automated systems to detect and alert data loss incidents, especially those related to Gen Al.	Description: There is minimal use of automated systems to detect and alert data loss incidents, particularly those involving Gen Al. Evidence: There is a delayed or missed detection of data loss incidents, increasing the risk of unaddressed breaches. Recommendations: Initiate the development of automated alert systems for timely detection of data loss incidents.	Description: There is increasing implementation of automated alert systems, but not yet fully effective for Gen Al incidents. Evidence: There is better detection of data loss incidents, but comprehensive and reliable automated systems are lacking. Recommendations: Strengthen automated alert systems to ensure effective detection and notification of all data loss incidents.	Description: Advanced and highly effective automated alert systems are in place for all types of data loss incidents, including those related to Gen Al. Evidence: Rapid and accurate detection of data loss incidents, minimizing response time and potential damage. Recommendations: Continuously enhance and adapt automated systems to new technologies and emerging data loss risks.
6.3.5 Community Engagement – Developing protocols for involving the broader school community in understanding and responding to data loss incidents.	Description: There are initial efforts to involve the school community in data loss incident awareness and response, but lacking depth and reach. Evidence: There is limited engagement and awareness of data loss issues among the school community. Recommendations: Start developing protocols to involve the school community in understanding and responding to data loss incidents.	Description: More structured community engagement protocols are developing, but not yet fully effective. Evidence: Some improvement in community involvement and awareness is evident, but comprehensive engagement is needed. Recommendations: Enhance community engagement protocols to ensure broader and more effective involvement.	Description: Comprehensive and well-executed community engagement protocols are in place for data loss incidents. Evidence: A high level of community involvement and understanding in data loss response is evident. Recommendations: Continuously review and adapt community engagement strategies to remain effective and inclusive.

The Academic AI Literacy Readiness Domain focuses on equipping PK-12 school districts with the capabilities to effectively incorporate and utilize Gen AI in achieving academic objectives. This domain assesses the extent to which educators are prepared to integrate AI technologies into educational practices, ensuring that these tools contribute positively to the learning environment and enhance student outcomes. The goal is to develop a foundational understanding among educators (including administrative and support staff), enabling them to leverage AI tools in a way that aligns with and supports the district's academic goals. By fostering AI literacy, this domain aims to facilitate the thoughtful and informed application of AI resources across teaching and learning contexts, promoting innovative and effective educational strategies that respond to the evolving demands of 21st-century education.

The Maturity Rubric for this domain includes:

- 7.1 Al Curriculum Integration
- 7.2 Teacher Professional Development in Al
- 7.3 Ethical AI Use and Policy Development
- 7.4 Evaluating Al Impact
- 7.5 Al Accessibility and Equity
- 7.6 Operational Automation

7.1 Al Curriculum Integration

The "Al Curriculum Integration" subdomain focuses on the systematic inclusion of Al concepts and tools within the educational curriculum across all subjects and grade levels. It aims to establish a foundational understanding of Al among students, ensuring that Al education is not treated as a standalone topic, but is interwoven throughout the educational experience. This subdomain emphasizes the development of curricula that not only introduce Al technologies and principles but also encourage their application across various disciplines, promoting interdisciplinary learning and problem-solving. The goal is to equip students with the necessary Al skills and knowledge that are increasingly relevant in the digital age, thereby enhancing their learning experiences and preparing them for future academic and career pursuits. This integration also includes continuous curriculum development to adapt and evolve with the rapid advancements in Al technology, ensuring that educational content remains current, relevant, and aligned with industry standards and ethical practices.

Subdomain Elements	Emerging Level	Developing Level	Mature Level
7.1.1 Foundation: Establishing a baseline understanding of Al across all grade levels to ensure all students are equipped with essential Al knowledge.	Description: Basic Al concepts are introduced in isolated courses or modules, primarily in technology-related subjects. Evidence: Al topics are mentioned in lessons but lack integration into broader teaching practices. Recommendations: Begin to formalize Al education through workshops or guest lectures to raise awareness among both students and teachers.	Description: Structured AI education is provided across multiple subjects, though integration into core subjects like math or science is still in progress. Evidence: AI concepts are taught in dedicated units or projects within courses, and some interdisciplinary linkage is evident. Recommendations: Develop a more systematic AI curriculum that connects with multiple disciplines and begins to align with state or national educational standards.	Description: Comprehensive Al literacy is embedded throughout the curriculum, enhancing various subject areas and grade levels. Evidence: Al education is fully integrated into the school's curriculum framework, with continuous updates and alignments with the latest technological advancements and ethical considerations. Recommendations: Continue to innovate and update Al curriculum content regularly; ensure ongoing teacher training to keep pace with technological developments.

Subdomain Elements	Emerging Level	Developing Level	Mature Level
7.1.2 Interdisciplinary Applications: Integrating AI learning into various subject areas, promoting creative problem-solving and application across the curriculum.	Description: There are initial attempts to apply AI in subject areas beyond computer science, usually through one-off projects or collaborations. Evidence: Occasional projects or lessons are available that involve AI applications in subjects like arts or social studies. Recommendations: Encourage teachers to collaborate across disciplines to design AI-inclusive projects, supported by professional development sessions.	Description: Al tools and concepts are regularly integrated into multiple subjects, supported by collaboration between departments. Evidence: Al is used to enhance subjects like literature, history, and science, with projects that involve Al tools for data analysis, creative writing, or historical simulations. Recommendations: Formalize interdisciplinary projects as part of the curriculum and provide resources and platforms for teachers to share successful practices.	Description: Al is a core element of interdisciplinary education, with robust collaborations across all subjects that enhance learning and creativity. Evidence: Established programs and consistent use of Al across disciplines demonstrate significant student engagement and enhanced learning outcomes. Recommendations: Continuously evaluate and refine interdisciplinary Al applications to ensure they remain cutting-edge and relevant, expanding into emerging areas like Al ethics and global impacts.

Subdomain Elements	Emerging Level	Developing Level	Mature Level
7.1.3 Curriculum Development: Continuously updating and refining the educational curriculum to include the latest Al technologies and ethical considerations, ensuring relevance and comprehensiveness.	Description: Initial steps are taken to include AI topics in the curriculum, with some curriculum materials developed to introduce AI concepts. Evidence: A few AI-related curriculum resources exist, primarily in technology courses. Recommendations: Start developing a comprehensive curriculum development plan that includes AI literacy as a component across various grades and subjects.	Description: Al concepts are integrated into the curriculum development process, with ongoing efforts to update and expand Al education materials. Evidence: Al education materials are under continuous review and updated, involving stakeholders such as curriculum developers and subject matter experts. Recommendations: Enhance the curriculum development process to ensure it is dynamic and responsive to new Al developments and educational needs.	Description: Al is a fully integrated component of curriculum development, with strategic planning that anticipates future Al advancements and educational requirements. Evidence: The curriculum is frequently updated with the latest Al research and applications, and there is a proactive approach to incorporating future Al trends. Recommendations: Establish a regular review cycle for curriculum materials, engage with Al experts to foresee educational trends, and adapt the curriculum accordingly to maintain relevance and effectiveness.

7.2 Teacher Professional Development in Al

The "Teacher/Admin Professional Development in Al" subdomain focuses on enhancing educators' and school-based administrators' skills and knowledge to effectively integrate Al into their teaching and administrative practices. This subdomain aims to provide comprehensive professional development opportunities that empower teachers and school-based administrators with the latest Al tools, techniques, and pedagogical strategies. It encompasses a range of training and professional development programs designed to elevate teachers' and administrators' proficiency in using Al, from basic introductions to advanced applications in classroom settings. Additionally, this subdomain prioritizes ensuring that educators have ongoing access to up-to-date Al resources, supporting them in staying current with technological advancements. Community building is also a key component, fostering a network of educators who share insights, experiences, and best practices in Al education. The ultimate goal is to cultivate a well-informed and collaborative educator community that leverages Al to enhance student learning and foster an innovative educational environment.

Subdomain Elements	Emerging Level	Developing Level	Mature Level
7.2.1 Training/Professional Development Programs: Providing educators with comprehensive, ongoing training in Al technologies and pedagogical strategies to enhance their ability to effectively integrate Al into their teaching.	Description: Basic Al training/professional development programs are introduced, focusing on raising awareness among educators about Al tools and their potential uses in the classroom. Evidence: Occasional workshops or seminars are offered, primarily introductory in nature. Recommendations: Develop a structured training/professional development calendar that includes Al training at regular intervals and encourage all educators to participate.	Description: Comprehensive AI training/ professional development programs are established, covering not only the use of AI tools but also pedagogical approaches to integrate AI into teaching. Evidence: There is increased participation in AI training sessions, with educators beginning to implement learned techniques in their teaching. Recommendations: Enhance training/professional programs to include advanced AI applications in education and assess the effectiveness of training through teacher feedback and student outcomes.	Description: Al training programs are deeply embedded in training/professional development for educators, continuously updated to include the latest Al advancements and pedagogical research. Evidence: There are high levels of proficiency in Al integration among educators, with visible improvements in teaching effectiveness and student engagement. Recommendations: Maintain a cycle of continuous improvement for training/professional development programs, including peer-led training sessions and opportunities for educators to attend external Al education conferences.

Subdomain Elements	Emerging Level	Developing Level	Mature Level
Resource Access: Ensuring that educators have continuous access to the latest AI resources and tools to support their professional development and classroom practices.	Description: Initial access to Al educational resources is provided, though these are limited and not fully integrated into educators' regular professional tools. Evidence: A basic set of Al tools and resources are available in some schools, but not widely distributed or integrated. Recommendations: Build partnerships with Al technology providers and educational content developers to expand the resources available to teachers.	Description: There is improved access to a wider range of Al resources, including specialized software and online platforms, which are integrated into the school's professional development resources. Evidence: Educators regularly use Al resources for lesson planning and professional development. Recommendations: Continue to expand the library of resources, ensuring that they are relevant and adapted to the diverse needs of educators across subjects.	Description: There is comprehensive access to a broad spectrum of high-quality AI resources that are fully integrated into the educational framework and professional development programs. Evidence: Resources are widely used and highly rated by educators; feedback mechanisms are in place to continuously assess and update the offerings. Recommendations: Keep evaluating and updating the available resources to stay ahead of technological advancements and educational needs; encourage sharing of best practices among educators.

Subdomain Elements	Emerging Level	Developing Level	Mature Level
Community Building: Fostering a collaborative network of educators who share insights, experiences, and best practices in AI education to promote collective learning and innovation.	Description: There are initial efforts to build a community of educators interested in AI, typically through informal groups or networks. Evidence: There are small, localized groups or online forums where educators share experiences and resources related to AI. Recommendations: Formalize these groups into a structured community with regular meetings and shared objectives.	Description: There is a growing professional community that supports the collaborative development and sharing of Albased educational practices and resources. Evidence: There are regular community events and collaborative projects that enhance members' knowledge and application of Al in education. Recommendations: Develop leadership roles within the community, expand its reach to include more schools and districts, and introduce mentorship programs.	Description: There is a robust, well-organized professional community that plays a crucial role in ongoing Al education and innovation within the educational sector. Evidence: There is a large and active community with strong ties between educators, frequent knowledge exchange, joint projects, and significant influence on Al educational policies. Recommendations: Sustain the vitality of the community by continually attracting new members, offering advanced training, and influencing broader educational and technological policies.

7.3 Ethical AI Use and Policy/Guidance Development

The "Ethical AI Use and Policy/Guidance Development" subdomain emphasizes the critical need to ensure that AI technologies are used responsibly and ethically within educational environments. This subdomain focuses on developing, implementing, and maintaining a robust framework of policies that govern the use of AI in schools, addressing key issues such as data privacy, bias in AI algorithms, transparency, and accountability. It also involves providing comprehensive ethical training for educators, administrative, and support staff to equip them with the knowledge and skills necessary to navigate the ethical complexities of AI. Moreover, this subdomain advocates for active stakeholder engagement, ensuring that the perspectives and concerns of all community members, including students, parents, teachers, and administrators, are considered in shaping AI policies. Through these initiatives, the goal is to create a culture of ethical AI use that upholds the values of fairness, inclusivity, and respect for individual rights, thereby enhancing trust and integrity in educational practices powered by AI.

Subdomain Elements	Emerging Level	Developing Level	Mature Level
7.3.1 Policy/Guidance Framework: Developing comprehensive policies to govern the ethical use of AI in educational settings, addressing issues like data privacy, bias, and transparency.	Description: There is an initial development of policies/guidance that address basic ethical considerations of Al use in education, focusing on privacy and data security. Evidence: Draft policies/guidance are in place, primarily reactive to immediate concerns with limited scope. Recommendations: Begin a systematic review of all Al interactions within the school system to develop comprehensive and proactive policies/guidance that cover all aspects of Al use.	Description: A more comprehensive policy/guidance framework is developed that includes guidelines on the ethical use of Al, addressing concerns such as bias, transparency, and accountability. Evidence: Policies/Guidance are being actively discussed and refined with input from a broad range of stakeholders, including teachers, administrators, and possibly students. Recommendations: Implement training sessions for all stakeholders to understand and adhere to these policies/guidance; regularly update the policies/guidance as Al technology and its applications in education evolve.	Description: An advanced, well-established policy/guidance framework is fully integrated into the school's operations, addressing all ethical aspects of Al use and supported by clear enforcement mechanisms. Evidence: Policies/Guidance are well understood and adhered to across the institution; regular audits show high compliance and understanding of ethical Al use. Recommendations: Continue to lead in ethical Al practices by regularly reviewing and revising policies/guidance to adapt to new Al developments and ethical considerations; engage in national or international discussions about ethical Al in education.

Subdomain Elements	Emerging Level	Developing Level	Mature Level
7.3.2 Ethical Training: Providing indepth training for educators and staff on the ethical implications of AI, enhancing their understanding of responsible AI use and decision-making.	Description: Basic ethical training is provided to educators and administrative staff, focusing on the most immediate and obvious ethical issues related to AI use. Evidence: Some occasional workshops or seminars introduce the concept of ethical AI. Recommendations: Develop a formal ethical training program that is required for all new and existing staff, focusing on practical scenarios they might face.	Description: More in-depth ethical training covers a wider range of issues, including bias in AI, the implications of AI decision-making, and the broader societal impacts. Evidence: Regular training sessions are part of professional development programs, with ongoing support and resources available. Recommendations: Incorporate ethical AI use cases into training sessions and provide opportunities for staff to discuss and explore real-life scenarios and their ethical implications.	Description: Comprehensive ethical training is an integral part of the professional development of all staff, continuously updated to include the latest research and case studies. Evidence: There is a high level of engagement in ethical discussions, with staff capable of independently navigating complex ethical issues in Al. Recommendations: Lead initiatives to develop sector-wide ethical guidelines and training materials; share best practices and learning resources across schools and districts.

Subdomain Elements	Emerging Level	Developing Level	Mature Level
7.3.3 Stakeholder Engagement: Engaging a broad spectrum of community stakeholders, including students, parents, and staff, in the development and refinement of Al policies to ensure diverse perspectives and needs are considered.	Description: There are initial efforts to engage stakeholders in discussions about ethical AI use, primarily through informal channels or ad-hoc meetings. Evidence: There is limited engagement with stakeholders, with some feedback collected through surveys or occasional meetings. Recommendations: Formalize stakeholder engagement processes by setting up regular forums and committees that include diverse groups, including students and parents.	Description: There is regular and structured engagement with stakeholders, including dedicated committees or groups that focus on ethical Al use and policy development. Evidence: There is active participation from a diverse range of stakeholders in shaping Al policies and practices, with regular input and feedback mechanisms in place. Recommendations: Enhance stakeholder engagement by using advanced tools for collaboration and feedback collection; ensure all voices are heard and considered in policy development.	Description: There is a deep, sustained engagement with stakeholders, who play a key role in continuously shaping and reviewing Al policies and practices. Evidence: Stakeholders are actively involved in policy creation and revision, with mechanisms in place to ensure their input is integral to decision–making processes. Recommendations: Continue to innovate in stakeholder engagement practices; set benchmarks for effective stakeholder involvement and share these practices within and beyond the educational sector.

7.4 Evaluating AI Impact

The "Evaluating AI Impact" subdomain is dedicated to systematically assessing the outcomes and implications of AI applications within educational settings. This subdomain focuses on conducting rigorous effectiveness studies to measure how AI tools and practices influence educational processes, student learning, and operational efficiency. It emphasizes the importance of establishing robust feedback mechanisms that allow educators, students, and other stakeholders to provide ongoing input on their experiences with AI. This feedback is crucial for identifying strengths and areas for improvement. Furthermore, the subdomain is responsible for facilitating the adaptation and enhancement of AI initiatives based on data-driven insights and stakeholder feedback. The ultimate goal is to ensure that AI technologies are not only effective but also continuously refined to me

Subdomain Elements	Emerging Level	Developing Level	Mature Level
7.4.1 Effectiveness Studies: Conducting rigorous studies to assess the educational impact and effectiveness of Al tools, ensuring they meet learning objectives and improve educational outcomes.	Description: Initial assessments are conducted to determine the basic effectiveness of AI tools in enhancing teaching and learning. Evidence: Simple surveys or feedback forms are used to gather anecdotal evidence from teachers and students about their experiences with AI tools. Recommendations: Establish baseline data on AI tool usage and impact. Start developing more structured effectiveness studies involving quantitative and qualitative metrics.	Description: Systematic studies are conducted to measure the impact of AI on educational outcomes across various subjects and student demographics. Evidence: Data-driven analyses are conducted, and results are used to adjust AI tool deployment and teaching practices. Recommendations: Expand the scope of effectiveness studies to include long-term impact on learning outcomes and teacher satisfaction. Incorporate external benchmarks and comparisons with non-AI teaching methods.	Description: Comprehensive, ongoing evaluations of AI tools are integrated into the school's continuous improvement processes. Effectiveness studies are aligned with educational standards and industry best practices. Evidence: There is regular publication of impact studies and case studies demonstrating clear benefits and areas for improvement. Data informs strategic decisions at the administrative level. Recommendations: Regularly update evaluation methodologies to incorporate the latest research in educational technology and pedagogy. Foster partnerships with academic institutions for independent evaluations

Subdomain Elements	Emerging Level	Developing Level	Mature Level
7.4.2 Feedback Mechanisms: Establishing robust systems for collecting and analyzing feedback from educators, students, and other stakeholders to continuously improve Al implementations.	Description: Basic feedback mechanisms are in place, typically through direct channels such as email or informal meetings. Evidence: Limited, ad-hoc feedback is collected primarily from educators directly involved with Al tools. Recommendations: Develop a formal feedback system that allows for easy and anonymous input to encourage more comprehensive and honest feedback.	Description: Structured feedback systems are established, including regular surveys and focus groups that engage a broader range of stakeholders. Evidence: Feedback is systematically collected and reviewed at regular intervals, with some responsiveness to the issues raised. Recommendations: Enhance feedback mechanisms to be more responsive and actionable. Implement changes based on feedback more rapidly and transparently communicate these changes and their rationale to stakeholders.	Description: Advanced, dynamic feedback mechanisms are in place that provide real-time insights into the use and impact of Al tools. Feedback is integral to the ongoing development and adjustment of Al strategies. Evidence: There are high levels of stakeholder engagement in providing feedback, with a clear impact on policy and practice. Feedback leads to regular updates and improvements in Al applications. Recommendations: Continuously innovate in feedback collection and analysis techniques. Use Al and data analytics to enhance the processing and responsiveness to feedback.

Subdomain Elements	Emerging Level	Developing Level	Mature Level
7.4.3 Adaptation and Improvement: Implementing a dynamic process for adapting AI tools and strategies based on data-driven insights and stakeholder feedback, ensuring ongoing relevance and effectiveness.	Description: Initial adaptations to AI tools and methods are made in response to basic feedback and obvious issues. Evidence: There are occasional updates to AI tools or teaching strategies based on limited feedback. Recommendations: Set up a dedicated team or role responsible for monitoring AI tool performance and leading adaptation efforts.	Description: Systematic processes are in place for adapting Al usage based on comprehensive feedback and detailed effectiveness studies. Evidence: Regular updates to Al tools and educational practices are documented and communicated within the organization. Recommendations: Formalize the process of adaptation to ensure it is systematic and aligned with educational goals. Engage more deeply with users to understand their needs and experiences.	Description: Al tool adaptation is a continuous, integral part of educational strategy, with clear policies and processes for implementing improvements based on robust data and stakeholder input. Evidence: Al adaptations are proactive and anticipate future needs and technological developments, with a clear positive impact on educational outcomes. Recommendations: Maintain a leadership role in educational technology by pioneering new practices and technologies. Share successful adaptations and improvements with the broader educational community.

7.5 Al Accessibility and Equity

The "AI Accessibility and Equity" subdomain focuses on ensuring that AI technologies are accessible to all students and staff within educational institutions, regardless of their socio-economic backgrounds, abilities, or other potential barriers. This subdomain is committed to improving the necessary infrastructure to support the widespread and equitable use of AI, such as enhancing internet connectivity and providing appropriate devices. It also emphasizes the importance of inclusivity measures to tailor AI applications to the diverse needs of all learners, including those with disabilities and those from varied cultural and linguistic backgrounds. Furthermore, the subdomain involves continuous monitoring and adjustment of AI initiatives to identify and address any disparities in access and usage. The goal is to promote fairness and equity in AI-enhanced education, ensuring that every member of the educational community has the opportunity to benefit from the transformative potential of AI technologies.

Subdomain Elements	Emerging Level	Developing Level	Mature Level
7.5.1 Infrastructure Improvement: Enhancing the necessary technological infrastructure to ensure that all students and staff have equitable access to AI tools and resources.	Description: Initial efforts are in place to improve infrastructure that supports basic Al accessibility, focusing on essential hardware and internet connectivity. Evidence: There is limited access to Al tools due to inadequate hardware or unreliable internet connections in some areas of the school district. Recommendations: Prioritize investments in critical infrastructure upgrades and seek funding or partnerships to ensure all students and educators have the necessary tools for Al access.	Description: Significant infrastructure improvements are in place, with robust hardware and high-speed internet more widely available, enabling better access to Al tools. Evidence: There is more consistent access to Al tools across the district, with ongoing efforts to address remaining gaps in infrastructure. Recommendations: Continue to monitor and upgrade infrastructure as needed, ensuring that new technologies are accommodated and that access remains equitable.	Description: State-of-the-art infrastructure is in place that fully supports the demands of advanced AI tools, with universal access across the district. Evidence: There are high levels of engagement with AI tools, with no reported access issues related to infrastructure. Recommendations: Maintain and future-proof infrastructure to ensure it continues to meet the evolving needs of educational technology. Regularly reassess the infrastructure to anticipate further advancements in AI.

Subdomain Elements	Emerging Level	Developing Level	Mature Level
7.5.2 Inclusivity Measures: Implementing specific strategies to make AI tools accessible and useful for all students, including those with disabilities and those from diverse linguistic and cultural backgrounds.	Description: Basic measures to promote inclusivity, primarily focused on ensuring that Al tools are available to all students, including those with disabilities. Evidence: Initial policies aimed at reducing barriers to Al tool access, but implementation is inconsistent. Recommendations: Develop more comprehensive strategies and policies that specifically address the needs of diverse learners, including multilingual support and accommodations for students with disabilities.	Description: More sophisticated inclusivity measures are in place, with Al tools increasingly adapted to meet the needs of a diverse student population. Evidence: Implementation of adaptive technologies and personalized learning tools that cater to various learning styles and abilities. Recommendations: Evaluate the effectiveness of inclusivity measures and continue to refine Al tools to ensure they support all students equally.	Description: Full inclusivity in AI tool access and usage, with advanced adaptations that ensure all students benefit equally from AI technologies. Evidence: Strong performance and satisfaction indicators across all student groups, with AI tools effectively supporting a wide range of needs. Recommendations: Continue to lead in the development and implementation of inclusive educational technologies. Share best practices and innovations with other districts and educational bodies.
7.5.3 Monitoring and Adjusting: Continuously monitoring the usage and impact of AI tools to identify and address any disparities, ensuring fairness and equity in AI-enhanced education.	Description: Initial monitoring of Al tool deployment to assess access and usage disparities. Evidence: Ad-hoc reports and feedback suggest uneven access and usage among different student groups. Recommendations: Establish regular monitoring systems to track Al tool access and usage, identify disparities, and develop targeted interventions.	Description: Systematic monitoring is in place, with ongoing adjustments made to address identified access and usage issues. Evidence: Regular data collection and analysis inform targeted improvements, with some success in reducing disparities. Recommendations: Enhance data analysis capabilities to more precisely identify and address subtle disparities in Al tool access and usage.	Description: Comprehensive, proactive monitoring and rapid adjustment processes ensure equitable access to and usage of Al tools across all demographics. Evidence: Data-driven approach results in high equity in access and positive outcomes across all student groups. Recommendations: Continue refining monitoring and adjustment processes, staying responsive to new challenges and opportunities as Al technology evolves.

7.6 Operational Automation

The "Operational Automation" subdomain focuses on leveraging AI to streamline and enhance the efficiency of administrative processes within educational institutions. It aims to automate routine tasks such as data entry, scheduling, and resource management, reducing the administrative burden on staff and freeing up time for more strategic activities. This subdomain encompasses the implementation of AI-driven systems that handle data management tasks with greater accuracy and speed, and support strategic planning by providing actionable insights and predictive analytics. The goal is to optimize operational efficiency across the board, ensuring that administrative functions are both cost-effective and responsive to the needs of the education community.

Subdomain Elements	Emerging Level	Developing Level	Mature Level
7.6.1 Operational Automation: Implementing Al-driven solutions to automate routine administrative tasks, enhancing efficiency and accuracy across school operations.	Description: Initial integration of AI tools to automate basic administrative tasks such as attendance recording or basic data entry. Evidence: Some administrative tasks are partially automated, but many processes still require manual intervention. Recommendations: Identify additional routine administrative tasks that can be automated using AI. Begin planning and implementing more comprehensive AI solutions to enhance operational efficiency.	Description: Increased use of AI for a wider range of administrative tasks, including more complex operations like scheduling and inventory management. Evidence: Notable improvements in administrative efficiency and accuracy. Reduced manual workloads for staff. Recommendations: Continue to expand AI integration into administrative processes. Evaluate the impact on staff workload and operational costs, adjusting AI strategies accordingly.	Description: Comprehensive automation of administrative tasks across the board, with AI systems fully integrated into the school's operational infrastructure. Evidence: High level of operational efficiency and accuracy. Administrative tasks are largely automated, allowing staff to focus on higher-level responsibilities. Recommendations: Maintain and upgrade AI systems to ensure they stay current with the latest technology. Monitor and optimize AI operations to continue providing high levels of efficiency and support.

Subdomain Elements	Emerging Level	Developing Level	Mature Level
7.6.2 Data Management: Utilizing AI to manage and analyze large datasets effectively, supporting informed decision-making and improving administrative processes.	Description: Basic use of AI to manage educational data, such as student performance and attendance. Evidence: Initial attempts at using AI to analyze and report on data, with mixed results. Recommendations: Develop a more structured approach to data management using AI, ensuring data quality and relevance.	Description: More sophisticated data management systems are in place, with AI used to analyze trends and provide insights that inform decision-making. Evidence: Improved decision-making based on reliable data analysis. Greater confidence in the data provided by AI systems. Recommendations: Expand the use of AI in data management to include predictive analytics and other advanced techniques. Provide training for administrators on how to interpret and use AI-generated insights.	Description: Use of advanced data management systems fully driven by Al, providing comprehensive insights and forecasts that are integral to strategic planning. Evidence: Al-driven data management is critical to operational success and strategic decision-making. Data is used proactively to improve educational outcomes and operational efficiency. Recommendations: Continue to innovate in the use of Al for data management. Regularly reassess and update systems to harness new Al capabilities and data sources.

Subdomain Elements	Emerging Level	Developing Level	Mature Level
7.6.3 Strategic Planning: Integrating Al tools into strategic planning processes to optimize resource allocation, forecast future trends, and enhance overall institutional effectiveness.	Description: Initial use of AI to support basic strategic planning tasks, such as analyzing current resource allocation. Evidence: AI tools are used sporadically for planning, with limited impact on overall strategy formulation. Recommendations: Begin to integrate AI more deeply into the strategic planning process. Train leaders on the capabilities and potential of AI in strategic planning.	Description: Increased integration of AI into strategic planning, with tools used to simulate outcomes and optimize resource distribution. Evidence: AI contributes to more informed and effective strategic decisions. Initial evidence of improved outcomes from AI-supported plans. Recommendations: Further develop the strategic use of AI, incorporating more complex modeling and scenario analysis. Ensure that AI tools are used to complement, not replace, human judgment.	Description: Comprehensive use of AI in strategic planning, with AI systems fully integrated into the planning process, providing deep insights and forecasts. Evidence: AI is a key tool in formulating and adjusting strategy, clearly demonstrating value in optimizing outcomes and resource use. Recommendations: Continue to advance the use of AI in strategic planning. Stay abreast of developments in AI technology that could further enhance planning accuracy and effectiveness.

Appendix 1 - Glossary of Terms

	Term	Definition
1.	Al Testing Framework for K-12	Standardization of protocols and procedures established to calibrate the functionality, efficiency, and effectiveness of AI tools in an educational setting. IT must ensure that AI applications are reliable, produce expected outcomes, and align with educational standards. This involves guarding against hyper or advantaged usage based on advanced knowledge or grade level.
2.	3rd party vendors	Organizations that provide products or services to your organization under contract.
3.	Algorithmic Discrimination	Algorithmic discrimination occurs when automated systems contribute to unjustified differential treatment or impacts disfavoring people based on their race, color, ethnicity, sex (including pregnancy, childbirth, and related medical conditions, gender identity, intersex status, and sexual orientation), religion, age, national origin, disability, veteran status, genetic information, or any other classification protected by law.
4.	Assets (Operational Readiness - Procurement section)	Hardware and software purchases.
5.	Compliant Gen AI tools vs Non-compliant Gen AI tools	Compliance within an individual organization's established policies.
6.	Copyright Protection Policy	Under the Copyright Act, a copyright owner has the exclusive right to reproduce, adapt, distribute, publicly perform, and publicly display the work (or authorize others to do so). In the case of sound recordings, the copyright owner has the right to perform the work publicly through a digital audio transmission. Note: Content created by artificial intelligence without any human input cannot be copyrighted under current U.S. law.

Term	Definition
7. Data Classification Model	A data classification model tags data according to its type, sensitivity, and value to the organization. It helps an organization understand the value of its data, determine whether the data is at risk, and implement controls to mitigate risks.
8. Data Sharing Partners	External partners outside of 3rd party vendors that you contractually work with, such as community partners, non-profits, etc.
9. Data Steward	An oversight role within an organization responsible for ensuring the quality and fitness for purpose of the organization's data assets.
10. Foundational Model	A large machine learning model pre-trained on a vast quantity of data at scale resulting in a model that can be adapted to a wide range of downstream tasks.
11. Generative AI (Gen AI)	A subset of artificial intelligence that leverages machine learning techniques to generate new content and ideas (conversations, stories, images, videos, music) that resemble your training data.
12. Generated Content	Content generated by Gen Al machine learning systems that are capable of generating text, images, video, and other types of content.
13. Generative Liability & Insurance Requirements	Student Accountability: Students who engage in nefarious activities can face disciplinary actions, including suspension and in severe cases, legal consequences.
	School Liability: If a school fails to monitor, prevent, or address malicious Al usage, it may face reputational harm, legal actions from affected parties, or potential financial consequences.
	Parental Responsibility: Depending on jurisdiction and the age of the student, parents or guardians may bear some legal or financial responsibility for their child's malicious actions.
	Al Vendor Responsibility: If an Al tool facilitates illegal or harmful actions due to its design or vulnerabilities, the vendor could be held partially responsible, especially if they failed to provide proper safeguards or warnings.
	Insurance requirements and parental/caregiving waivers should be strongly considered.

Term	Definition
14. Hallucinations of inappropriate content	Instances when an AI generates unexpected, untrue results not backed by real-world data, including false content, news, or information about people, events, or facts.
15. Machine-Readable Format	A digital representation of data or information in a file that can be imported or read into a computer system for further processing. Content that can be readily processed by computers.
16. Source Systems (Data Readiness - Data Quality section)	An authoritative data source for data elements.
17. Toxic and inappropriate content	Any content potentially pertaining to sex, nudity, violence, gore, profanity, alcohol, drugs, and/or other harmful or offensive content.

Appendix 2 - Policies

Policy	Definition	References
Acceptable / Responsible Use Policy	An Acceptable/Responsible Use Policy is a written contract listing terms and conditions explaining the acceptable uses of the Internet and digital tools within the district, schools, and classrooms.	Executive Leadership, Sections 2 & 4
Data Governance Policy	A Data Governance Policy is a formal set of guidelines and procedures established by a school district to ensure the consistent, secure, and lawful management and protection of data. This policy provides explicit directions on the storage, use, and sharing of data maintained by the district. It is designed to comply with applicable state and federal laws and includes specific provisions covering data security measures, access controls, quality control mechanisms, and procedures for secure data exchange and reporting.	Data Readiness, Section 1
Code of Conduct Policy	A Code of Conduct Policy is a set of principles, expectations, and/or rules given to staff, students, and parents, which outlines the standards of conduct expected and the consequences for violating those standards.	Executive Leadership, Section 2; Data Readiness, Sections 1 & 3; Legal/Risk Management, Section 3
Data Privacy Policy	A Data Privacy Policy addresses the district's collection, use, and sharing of student and staff personal data in a manner that is consistent with applicable federal and state laws. It should be made available to all individuals whose personal data is covered by the policy.	Data Readiness, Section 3
Data Loss Notification Policy	A Data Loss Notification Policy is a set of guidelines that outlines the procedures for notifying affected parties in the event of a data breach. The policy should cover the notification process, including who should be notified, and what information should be included in the notification. The policy should also specify the roles and responsibilities of those involved in the notification process.	Legal/Risk Management, Section 3

Policy	Definition	References
AI RMF	An <u>Al Risk Management Framework</u> is a policy or framework that would be specifically tailored to address the potential risks associated with the integration and use of artificial intelligence tools and technologies in primary and secondary education settings.	Risk Management
Ethical Considerations Policy	An Ethical Considerations Policy outlines the understanding that AI respects students' rights and doesn't inadvertently harm or disadvantage any group of students.	
Fundamental Data Governance Policies	Fundamental Data Governance Policies are foundational sets of guidelines and procedures established by a school district to ensure the consistent, secure, and lawful management and protection of data. Check out CoSN's Trusted Learning Environment seal recommended <u>Fundamental Data Governance Policies</u> .	Data Readiness