

White Paper

Implementing NO or LOW-Risk Artificial Intelligence (NLRAI) in Primary Schools



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SO, WHAT DOES IT ALL MEAN?

While numerous frameworks, guidelines, and risk evaluation tools are available for AI in education, what's notably absent is practical advice on how to implement AI effectively in the classroom.

THE QUESTION BECOMES..

"How do I actually use AI in MY classroom without running into compliance issues?"

THE ANSWER IS..

USE "NO TO LOW-RISK AI" Applications – (NLRAI)

Summary

The introduction of No to Low-Risk Artificial Intelligence (**NLRAI**) in primary schools provides a remarkable opportunity to enhance education while ensuring the protection of student privacy and safety. As AI becomes integral to various aspects of life, integrating these technologies in classrooms is critical to preparing young learners for a digital future. However, the implementation of AI must focus on safe, effective tools that pose minimal risk and educate about AI use. NLRAI can be fast-tracked for use in primary schools, ensuring that students can benefit from AI without concerns over data privacy, ethics, or equity.

The NSW AI Assessment Framework further supports this by establishing that NLRAI does not pose elevated risks in terms of operational impact, autonomy, data sensitivity, unintended harms, or explainability. This White Paper highlights the potential benefits of NLRAI in primary education, such as educating students about how AI works, so they become informed users, enhancing personalized learning, streamlining administrative tasks, and fostering engagement for ALL students. The framework helps distinguish NLRAI from high-risk AI applications, advocating for the swift adoption of NLRAI in schools.

All recommendations in this paper fall into the NLRAI category using the NSW AI Assessment Framework guidelines. [1][2]

Introduction

Artificial Intelligence (AI) is transforming education, offering tools that can revolutionize how students learn and how teachers facilitate learning. However, the introduction of AI in education has raised concerns about privacy, ethics, and the potential for bias. These concerns, while valid for high-risk AI applications, do not apply to NLRAI. It is essential to distinguish between these two categories to ensure that the educational benefits of AI are not hindered by unnecessary fears.

The NSW AI Assessment Framework [1] provides a structured approach to evaluating whether an AI system is considered high risk. As outlined in the framework, NLRAI applications do not involve operational impact, autonomy, or the processing of sensitive data, nor do they present unintended harms or explainability concerns. Therefore, these tools are ideally suited for the classroom setting, where safety and educational integrity are paramount.

Key Elements of the NSW AI Assessment Framework

The NSW AI Assessment Framework [1] is designed to help organizations assess whether their AI systems are classified as low or elevated risk. The framework evaluates systems based on five key criteria:

1. **Operational Impact:** Does the system influence administrative decisions with legal or significant effects (e.g., government decisions or automated alerts)? NLRAI does not trigger such real-world actions, confirming its low-risk status in educational contexts.
2. **Autonomy:** Does the system operate independently of human action, potentially producing harmful outputs? NLRAI involves systems that do not operate autonomously in a manner that could cause harm. Unless there is human input into an NLRAI, nothing happens.
3. **Data Sensitivity:** Does the system process sensitive or private information? NLRAI systems used, do not involve the collection, storage, or processing of personal data, eliminating concerns about data privacy.
4. **Unintended Harms:** Could the system's failure or misuse cause harm to individuals or groups? NLRAI are well, No to Low Risk, making them appropriate for educational environments.
5. **Explainability and Transparency:** Does the system provide adequate transparency for decision-making and content generation? NLRAI tools, such as The Teachable Machine, Canva Text to Image, Quick Draw, single purpose AI-based assistants and tutors or lesson planners, operate with clear parameters that are explainable to both teachers and students.

According to the framework, when all these categories are assessed as "No," the system is not considered elevated risk, and NLRAI fits well within these guidelines for safe use in education. [1] [2]

Benefits of NLRAI in Primary Schools

1. Enhancing Student Learning

NLRAI tools have the potential to greatly enhance student' understanding of AI. Programs like Google's Teachable Machine and QuickDraw, Canva or Adobe Express, Text to Image offer students hands-on experience with AI, allowing them to understand how AI functions and how it can be used to enhance their learning. By creating their own AI-driven projects, such as Text to Image, AI single purpose assistants, creating machine learning models, students become AI creators,

gaining valuable insights into the strengths and limitations of AI technologies. This gives them a basis for making ethical and informed choices about AI use.

NLRAI has the potential to greatly enhance student learning by providing personalized, adaptive learning experiences that cater to individual student needs. These tools can provide immediate targeted feedback, assess student performance in real time and adjust the level of difficulty, accordingly, ensuring that all students are challenged appropriately and can progress at their own pace. This personalized approach fosters deeper learning and helps students build essential skills in critical thinking, problem-solving, creativity and digital literacy. [3][4][5][6][7]

2. Streamlining Administrative Tasks – SAVES TIME

AI can help reduce the administrative burden on teachers by automating repetitive tasks such as grading, lesson planning, and managing schedules. This allows teachers to dedicate more time to direct instruction and student engagement, improving the overall efficiency of the classroom. By leveraging AI for administrative tasks, teachers can focus on fostering meaningful interactions with their students and providing personalized support where it is most needed.

For example, AI-powered platforms for lesson planning can help educators create tailored lessons that meet the unique needs of their students, while AI-based grading systems can provide immediate feedback to students, helping them understand their strengths and areas for improvement. [8][9]

3. Supporting Inclusive Education

NLRAI can also play a crucial role in supporting inclusive education by providing tools that are accessible to students with diverse learning needs. For example, text-to-speech and speech-to-text technologies can assist students with disabilities, while adaptive learning platforms can adjust content to meet the specific needs, including deaf and blind students, students with Dyslexia, ADHD and Autism, multilingual learners or students with behavioural challenges. These tools help create a more equitable learning environment where all students can participate and have access to the resources they need to succeed.

Think, immediate feedback, overcoming input challenges, improved attention, able to achieve superior results and able to complete activities. AI can also help teachers identify students who may be struggling and provide targeted interventions to help them catch up with their peers. [10]

Costs of Not Using NLRAI in Primary Schools

1. Not Educating Students

If students are not educated about AI, they may lack the ability to make informed ethical decisions about its use in the future. Without understanding AI's capabilities, limitations, and potential risks, students may be ill-equipped to critically assess issues such as bias, privacy, and responsibility. This could lead to a society where AI is used without sufficient regard for its ethical implications, increasing the risk of harmful outcomes like unfair practices, privacy violations, and unchecked automation. The absence of this foundational education could result in a future workforce that is unprepared for the use of AI.

2. Missed Opportunity for Personalization

Without AI, students may not receive the personalized attention they need to thrive. Traditional teaching methods often struggle to cater to diverse learning styles and paces, which can result in some students falling behind while others may not be sufficiently challenged.

3. Lower Engagement

Without AI, teachers might have limited tools to keep students engaged, particularly in the digital age where students are used to interactive and technology-driven experiences. This can lead to reduced attention spans and motivation.

4. Increased Teacher Workload

Teachers may spend significant time on administrative tasks like grading, lesson planning, and tracking student progress. Without AI to assist with these tasks, teachers could experience burnout, and students might not receive as much one-on-one support.

5. Limited Accessibility for Special Needs Students

Schools that do not integrate AI may not have adequate resources to support students with disabilities or those who require additional help with language, reading, or physical challenges. This could limit these students' ability to fully participate in the learning experience.

6. Unpreparedness for Future Careers

Students who are not exposed to AI in their formative years may enter secondary school or the workforce without basic familiarity with the technology that is driving the future job market. This can hinder their competitiveness and ability to adapt to new roles and industries.

7. Widening Educational Gaps

Schools that do not adopt AI could contribute to an educational divide, where students in AI-equipped schools are better prepared academically and

technologically. Over time, this gap may expand, placing students from AI-lacking schools at a disadvantage.

8. Less Innovation

A lack of AI could stifle creativity and innovation in the classroom, as students are not exposed to the tools that could help them experiment and develop new ways of thinking.

The long-term advantages of integrating NLRAI in primary schools heavily outweigh the costs of not using it. Using AI tools in Primary School not only supports current educational goals but also future-proofs students for a rapidly evolving digital landscape. By not educating students about AI, we risk fostering a future where AI is applied irresponsibly, leading to issues like bias, privacy invasion, and inequality. Proactive engagement with AI ensures students are not left behind in the fast-evolving digital world. [11]

Types of NLRAI Applications in Education

1. Learning about AI

Using programs such as The Teachable Machine students can train a computer to recognize their own images, sounds, & poses, and create their own machine learning model. Using programs like Quick Draw students can look at data samples and the “guessing” process used by LLMS. Equipping them with the knowledge to make ethical and informed choices about AI use based on a solid understanding of how they work.

2. AI Content Creation Tools

AI-powered content creation tools like Canva, Ideogram and Adobe Express allow students to create visually engaging content quickly and easily. These tools use AI to assist with design, layout, and image generation, helping students bring their creative ideas to life. By using AI to streamline the content creation process, students can focus on developing their ideas and exploring new ways to express themselves.

In addition to content creation, these tools help students develop essential digital literacy skills and gain a deeper understanding of how AI can be used to enhance creativity and communication. [6][7][12]

3. Single-Purpose AI Assistants

Single-purpose AI assistants can be used to provide targeted support for specific tasks such as, guiding students through a learning task, or answering student questions, and lesson planning. These assistants are designed to perform a single function, making them easy to use and understand. They do not collect or store personal data, making them ideal for use in educational settings where privacy is a concern.

For example, AI assistants can provide immediate feedback to students, helping them understand their mistakes, ask follow questions, and improve their performance. AI lesson planning assistants can suggest activities and resources based on the learning objectives set by the teacher.

Students can also become creators of single purpose AI Assistants. [13][14][5][9]

Challenges of Implementing NLRAI in Schools

1. Teacher Proficiency and Support

One of the main challenges to implementing **NLRAI** in schools is overcoming lack of understanding, fear and compliance issues. Many teachers may be unfamiliar with AI technologies and may not feel confident integrating them into their classrooms. Compliance frameworks often seem prohibitive. To address this challenge, schools must provide ongoing professional development and support to help teachers build their skills and confidence in using AI.

Professional development programs should focus on the specific needs of primary school teachers, providing them with practical strategies for incorporating AI into their teaching confidently, with the knowledge that there are no compliance issues, NLRAI offers the solution. Professional development should emphasize the benefits of NLRAI and dispel fear and misconceptions about the use AI.

Teachers need the knowledge and skills to integrate AI into their teaching practices meaningfully, ensuring that AI tools are used effectively to support students while maintaining human-centered approaches.

Teachers need to be AI-savvy, equipped with the critical thinking skills to navigate this new digital landscape. Then, they can show their students how to do the same. They can show students how to use AI practically, responsibly, ethically and wisely. It's not just about using AI; it's about using it right.

2. Navigating Regulatory Frameworks

Another challenge is navigating the regulatory frameworks that govern the use of AI in education. In NSW, for example, the NSW AI Assessment Framework provides guidelines for the safe and responsible use of AI in education. Schools must ensure that their use of AI complies with these guidelines. Using NLRAI ensures that their use of AI does meet state regulations and ethical standards. [1][15]

Recommendations

To support the successful implementation of NLRAI in primary schools, the following recommendations are provided:

1. **Fast-Track NLRAI Adoption:** Regulatory frameworks should be updated to fast-track the adoption of NLRAI in schools. Given that NLRAI poses minimal risk, there is no need for extensive oversight or compliance checks that may delay its integration into classrooms.
2. **Enhance Teacher Training:** Teachers must be provided with the necessary training and resources to effectively use NLRAI in their classrooms. Professional development programs should focus on building teacher confidence and understanding of AI technologies starting with easy to use and integrable applications. This would require ongoing support.

Some of my Videos on this [AI DEMYSTIFIED - What's Next?](#)

[STEEi The Future of AI APP Selection](#)

3. **Promote Local Case Studies:** Highlighting successful examples of NLRAI integration in schools to encourage broader adoption. These case studies could serve as valuable resources for educators and policymakers looking to implement NLRAI in their own schools.

Some of my Video Use Cases [The Teachable Machine](#)
[The Fantastic Mr Fox](#)

4. **Focus on Student Agency:** Educators should focus on helping students understand how AI works and how they can use it responsibly. By teaching students about AI, schools can empower them to become future informed and ethical users of AI technology.

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