

NANAIMO LADYSMITH PUBLIC SCHOOLS EDUCATION COMMITTEE PUBLIC MEETING INFORMATION SHEET

DATE: November 1, 2023
TO: Education Committee

FROM: Scott Saywell, Superintendent

SUBJECT: Al in Education

Background

Artificial Intelligence (AI) has made remarkable strides in enhancing the educational landscape over the years. Its applications, much like spellcheck, Grammarly, and auto-correct, have revolutionized the way students and teachers engage with educational content. These tools have proven invaluable in minimizing errors, enhancing language skills, and improving the overall learning experience. The Department of Learning Services recognizes the significance of AI in our K-12 public schools and aims to provide insight into its benefits, challenges, and future potential.

Benefits of AI in Education

- 1. **Personalized Learning**: All can adapt to individual student needs, offering tailored content and pacing, thereby promoting self-directed learning and academic growth.
- 2. **Efficiency**: Teachers can save time on administrative tasks, allowing them to focus on instruction, while students can enjoy instant feedback on assignments.
- 3. **Accessibility**: Al tools enable students with disabilities to access educational content more easily, promoting inclusivity and equity in education.
- 4. **Data-Driven Insights**: Educators can harness AI to analyze student performance data, identifying trends and areas that need improvement to develop targeted interventions.
- 5. **Global Collaboration**: Al-powered language translation tools break down communication barriers, enabling students to collaborate with peers worldwide.

Challenges of AI in Education

- 1. **Data Privacy**: Protecting student data and ensuring it's used ethically is a concern as AI applications require collecting and analyzing large amounts of information.
- 2. **Teacher Training**: Integrating AI effectively into the curriculum necessitates proper training for educators, who may face a learning curve.

- 3. **Equity Issues**: Not all students may have access to the latest AI tools, potentially creating a digital divide.
- 4. **Over-Reliance on Technology**: There's a risk of students becoming overly dependent on AI, potentially hindering critical thinking and problem-solving skills.
- 5. **Cheating and Plagiarism**: The ease of access to information through AI can sometimes inadvertently facilitate cheating and plagiarism, raising concerns about academic integrity.
- 6. **Accuracy of Information**: While AI is a powerful tool, it does not always provide accurate information. Students and teachers must be cautious and critical in evaluating AI-generated content to ensure it meets academic standards.
- 7. **Lack of Real-Time Updates**: Al tools may not always be up to date with the latest advances in Al technology, which can lead to discrepancies between what is taught and what is currently practiced in the field. It's essential to bridge this gap to ensure students receive the most current information and skills related to Al.

The Future of AI in Education

Al in education is an ever-evolving field. In the future, we can anticipate:

- 1. **Improved Adaptive Learning**: Al will become more sophisticated in personalizing the learning experience, ensuring each student receives the optimal educational content.
- 2. **Enhanced Assessment Tools**: Al will develop more accurate methods for evaluating student performance, reducing the reliance on standardized tests.
- 3. **AI-Powered Tutors**: Advanced AI tutors will provide 24/7 support, helping students with homework, answering questions, and offering guidance.
- 4. **Virtual Reality and Augmented Reality**: Al will integrate with VR and AR to create immersive, engaging learning experiences.
- 5. **Ethical and Inclusive AI**: Continued focus on the ethical use of AI and ensuring equitable access to technology.

Professional Learning Opportunities

To support educators in harnessing the power of AI, professional development opportunities are becoming more available locally, provincially, and internationally. The majority of NLPS Principals and Vice Principals (PVPs) attended a PRO-D session on October 20th, where they had the privilege of learning from Dr. John Spencer, an esteemed expert in AI in education.

Dr. Spencer's keynote address on AI in education focuses on the intersection of technology and pedagogy. He provides actionable strategies for harnessing the power of AI to create more engaging and effective learning environments. His expertise in the field and practical knowledge make him an invaluable resource for educators looking to navigate the evolving landscape of AI in education effectively. His dedication to sharing his insights and experience ensures that NLPS educators are well-equipped to leverage AI's full potential in K-12 public schools. His session was informative, engaging, and filled with humour from his years working as a middle school teacher. He shared links to countless resources. On Friday, October 27th our

secondary principals reviewed some of Dr. Spencer's resources with a focus on identifying the benefits and challenges of using AI related to assessment practices. This is current topic of interest for both teachers and students.

Summary

In conclusion, AI in K-12 public schools presents a wealth of opportunities for students and teachers, from personalized learning to enhanced efficiency. However, it also poses challenges, such as data privacy, potential cheating and plagiarism. The future of AI in education is promising, with improvements on the horizon. Assistant Superintendent, Don Balcombe, will speak to how AI was used to help write this Information Sheet, highlighting the practical application of AI in our education system. We look forward to embracing the potential of AI in our quest to provide the best possible education to the students of NLPS.