Research Report

Objectives and Learning Outcomes

- Research modern IT solutions applicable to improving operational efficiency and service delivery within Australian schools, considering key technologies such as cloud computing and AI, and important concepts such as cybersecurity and data safety.

- Contributes to *LO2: Research, analyse and discuss possible alternative implementation strategies for some core systems software features*

Expectations and submission guidelines

- This task must be completed **individually**

- Collaboration with peers is **not permitted**

- You will be producing a **written report** and a **3-minute video with slides**

- Submission must be in the form of:
    - 1 x PDF of written report (2,000 words maximum)
    - 1 x PDF of slides
    - 1 x MP4 of recorded presentation (3 minutes maximum)

- **If you have trouble uploading the MP4 to Canvas:** upload it to OneDrive or similar and include the link in the **comments** of your submission

- Any **updates or edits** to any portion of the assignment **after the due date** will incur the **same penalty** as if the whole assignment was submitted at the time of the last edit

- **Late penalty:** 5% per 24-hour period for every day late

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Use of artificial intelligence (AI)

For this assessment you may use AI tools to **brainstorm initial ideas** during the planning stage of your work and to **edit your work** for the purpose of improving its clarity and quality.

If you do use AI, you must:

(1) attach an **appendix** that includes:

- a copy of your **original work** with no AI content or editing
- the AI **prompts** you used
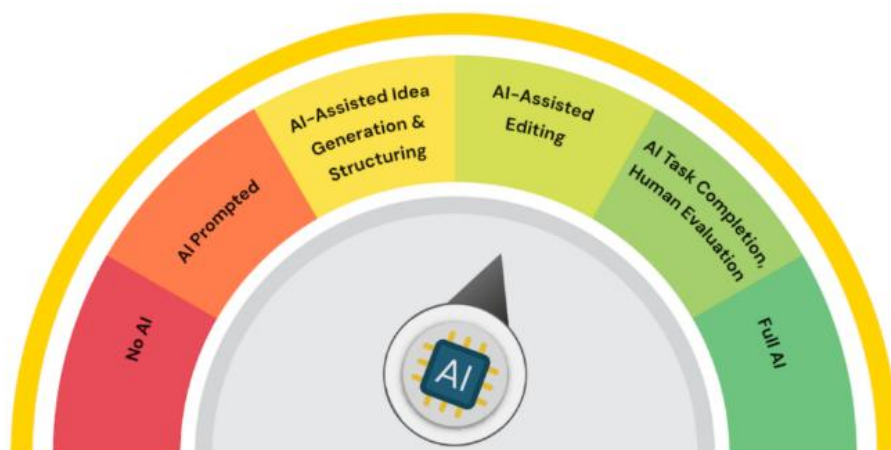- the AI **responses** you received

You may upload this as a separate PDF file or include it at the end of your report

(2) include at the start of your report a **declaration** acknowledging which AI technologies have been used and how, for example:

- I acknowledge the use of ChatGPT in paraphrasing original content (OpenAI, 2025). The prompts and output from ChatGPT are included in Appendix 1

(3) keep any **drafts** demonstrating authorship, as these may be requested by assessors

Please note that Turnitin and other tools will be used to assist with checking for plagiarism and other academic integrity issues. Failure to acknowledge AI assistance or properly reference AI generated content will result in a **score of 0** for the assignment and a **report of academic misconduct**.

Adapted from the AI Assessment Scale Perkins, M., Furze, L., Roe, J., & MacVaugh, J. (2023). Navigating the generative AI era: Introducing the AI assessment scale for ethical GenAI assessment. arXiv preprint arXiv:2312.07086. https://leonfurze.com/2023/12/18/the-ai-assessment-scale-version-2/

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Background

As a senior IT consultant for **TeachTech Consultancy**, you work within a **multi-disciplinary team** to provide cutting-edge IT solutions for **schools** across Australia. The company specialises in delivering customised IT solutions for educational institutions, with a focus on enhancing operational efficiency, improving student services, and aiding decision-making.

The CEO has tasked you with investigating and proposing modern IT solutions that can streamline school operations while ensuring **compliance with Australian educational regulations**. While previous proposals have suggested long-established systems like **Spiceworks**, your goal is to explore more **current and scalable IT solutions** that may better serve the ever-evolving needs of schools. This includes evaluating **cloud computing**, **AI-based solutions**, **data analytics**, and/or **cybersecurity** frameworks that adhere to Australian educational standards and privacy laws.

The CEO is aware that you are working on other critical projects. Therefore, you have been given a generous 4-week timeframe to deliver the various artefacts for this project.

You are required to deliver an **executive report** and a **video presentation**. The title for all your artefacts/deliverables must be **'IT Solutions for Today's Schools'**.

The following sections elaborate the requirements for each of your artefacts/deliverables.

Task 1: Executive Report (TOTAL MARKS: 50)

Produce an executive report that explores how modern IT solutions can be implemented to address challenges a school may encounter with operational efficiency and service delivery. Your report should include the following information:

- Introduction, background, and objectives (5 marks)

- Investigation, analysis, and findings (must include the following): (25 marks)
  - *Overview of at least 3 cutting edge IT solutions that could be tailored to the operational needs of Australian schools (5 marks)*
  - *Balanced, objective comparison of these solutions against at least 1 relevant long-established system, such as Spiceworks (5 marks)*
    - *Include comparison of cost, scalability, ease of use, regulatory compliance, and at least 1 other criterion of your choosing*
  - *Discussion of current best practices in educational technology innovation, supported by peer-reviewed sources (5 marks)*
  - *Discussion of student safety and data safety (5 marks)*
    - *Discuss how these solutions safeguard student data, ensure cybersecurity, and comply with regulatory standards (e.g. Privacy Act 1988, Australian Privacy Principles)*
    - *Analyse potential risks in implementing AI, automation and other innovations in the highly regulated education sector, addressing both ethical concerns and privacy issues*
  - *Discussion of integration of new technologies into school environments, considering both technical and user adoption related challenges (5 marks)*

- Conclusion and evidence-based recommendations (5 marks)

- References (10 marks)
  - *Reference list (5 marks) – correctly formatted, includes at least 2 academic sources*
  - *In-text citations (5 marks) – correctly formatted, used appropriately within the report*

- Overall structure and presentation of the report (5 mark)

Task 2: Video Presentation Recording (TOTAL MARKS: 30)

You are required to do a 3-minute video recording where you are giving a clear, engaging presentation on 'IT Solutions for Today's Schools':

- Record a 3-minute presentation using PowerPoint or Microsoft Teams
- Show your **face** alongside your **student ID card** to the camera before you begin
- Produce relevant slides and use these effectively in your presentation
- See below for presentation marking rubric

NOTE: any information presented after the 3-minute mark WILL NOT count towards your grade, i.e. **assessors will stop watching after 3 minutes**

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Written report (50 marks total)

Criteria	5 - Excellent	4 - Good	3 - Satisfactory	2 - Needs improvement	1 - Poor	0 - Missing
Introduction and objectives	Clear, concise and engaging; effectively presents topic and objectives.	Clear and concise; presents topic and objectives well, though may lack some detail.	Clearly presents topic and objectives; but lacks depth or clarity.	Introduction and objectives both present, but unclear or insufficient.	Introduction and / or objectives only partially present.	Introduction and objectives are missing.
Overview of IT solutions	Provides a thorough, detailed overview of 3+ relevant solutions.	Provides clear, well organised overview of 3+ relevant solutions but lacks some detail.	Clear, basic overview of at least 3 relevant solutions.	Covers fewer than 3 relevant solutions or provides minimal detail.	Overview is unclear, poorly organised, or not relevant to school needs.	Overview of solutions Is missing.
Comparison with established systems	Thorough, balanced comparison using all given criteria and 1+ chosen criterion.	Clear comparison using all given criteria and 1+ chosen criterion. May lack some detail.	Basic comparison using all given criterion and 1+ chosen criterion but lacks depth / detail.	Limited comparison or 1+ missing criteria.	Insufficient comparison provided.	No comparison provided.
Best practices in educational technology	Insightful discussion supported by multiple peer-reviewed sources.	Good discussion supported by multiple peer reviewed sources but lacks some depth / detail.	Basic discussion supported by some peer reviewed sources but lacks depth / detail.	Limited discussion, or minimal use of peer-reviewed sources.	Poor discussion, and / or missing peer-reviewed sources.	Best practices are not addressed.
Student safety and data protection	Insightful discussion, identifies key risks and solutions, good use of relevant examples.	Good discussion, includes variety of risks and solutions, uses some examples.	Basic discussion including some risks and solutions.	Minimal discussion, minimal to no use of examples.	Insufficient discussion, no use of examples.	Safety and data protection are not addressed.
Integration challenges	Insightful discussion including both technical and user adoption challenges.	Covers technical and user adoption challenges but may lack detail.	Discusses integration challenges but lacks depth or misses some key aspects.	Limited discussion with unclear or general statements.	Insufficient and / or irrelevant discussion.	No meaningful discussion of challenges.
Conclusion and recommendations	Strong conclusion and clearly articulated, evidence-based recommendations.	Solid conclusion with relevant recommendations, though lacks some depth and / or minor gaps exist.	Conclusion and recommendations present but lack depth / evidence.	Weak conclusion, missing key points, limited recommendations and / or lacking justification.	Insufficient conclusion and / or poor / unjustified recommendations.	No clear conclusion or recommendations.
Reference list	Wide range of credible sources in a correctly formatted reference list.	Multiple credible sources in a mostly correctly formatted reference list.	At least 2 credible academic sources, and / or has formatting errors or inconsistencies.	Limited sources and / or significant inconsistencies or formatting errors.	Few sources and / or poorly formatted reference list.	No reference list.
In-text citations	Accurate in-text citations used at all appropriate points.	Accurate in-text citations used at most required points.	Basic use of in-text citations, possibly minor formatting errors.	Limited use of in-text citations, or consistently poor formatting.	Poor use of in-text citations, or significantly poor formatting.	No in-text citations.
Clarity, structure & presentation	Visually appealing, well-structured with good use of headings, tables, imagery and other techniques. Clear use of language, minimal errors.	Well-structured with good use of headings, tables, imagery and other techniques. Mostly well written with only minor errors.	Mostly well-structured and easy to follow, some use of headings, tables, imagery or other techniques. May have some writing errors.	Basic structure, minimal use of headings, tables, imagery or other techniques, some writing errors.	Poor structure, difficult to follow, or frequent writing errors.	Disorganized and / or poorly presented.

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Presentation and slides (30 marks total)

Criteria	5 (Excellent)	4 (Good)	3 (Satisfactory)	2 (Needs Improvement)	1 (Poor)	0 (Missing)
Introduction and conclusion	Introduction and conclusion are both clear, concise, and impactfully bookend the presentation.	Introduction and conclusion are clear but with a minor issue (e.g. missing information, some verbosity).	Introduction and conclusion are adequate, but with some clarity issues or missing details.	Unclear or incomplete introduction and/or conclusion.	Introduction or conclusion is missing, or both are insufficient.	No introduction or conclusion.
Selection of topic content	Chose highly relevant, focused content that effectively addresses the topic.	Chose relevant content, but some sections could be better focused or developed.	Content is mostly relevant but lacks clear focus or misses key points.	Content selection is unclear or incomplete; important areas are left out.	Chose irrelevant or mostly unrelated content.	No relevant content selected.
Quality of topic content	Thoroughly covers the topic with depth and clarity.	Covers most key aspects of the topic but some areas lack depth or explanation.	Covers basic aspects of the topic but lacks detail or clarity in explanation.	Content coverage is superficial, with important details missing or unclear.	Content is poorly covered, lacking depth and clarity.	No content provided or completely irrelevant information.
Presentation delivery	Speaks confidently, clearly, and with good pacing. Engages the audience well. Does not read directly from the slide.	Mostly confident and clear, with minor pacing or engagement issues. Does not read directly from the slide.	Somewhat hesitant or unclear, lacks confidence. May read directly from the slide.	Low energy, unclear, or hard to follow. May read directly from the slide.	Poor delivery; difficult to understand. May read directly from the slide.	Slides not provided, or insufficient.
Slide design and visual appeal	Slides are well-organised, visually appealing, and enhance understanding of the content.	Slides are clear but could benefit from minor design improvements.	Slides are cluttered or difficult to follow.	Slides are poorly structured or too text heavy.	Poorly designed slides that detract from the content.	Slides not provided, or insufficient.
Use of creativity and visuals during presentation	Highly creative use of visuals that complement and enhance content.	Good use of visuals but could be clearer or better integrated.	Basic use of visuals; not fully integrated into content.	Minimal or irrelevant visuals.	Minimal visuals or poorly chosen visuals.	No use of visuals or creativity.

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