4E5N Prelim Section A Suggested Answer (MSHS 2023)

1 Study Source A and B.

How far would the cartoonist in Source A agree with the teacher in Source B? [6]

Suggested Answer		Success Criteria
Note:		
- Answers using similar / different $ ightarrow$ 0		
- When disagreeing / refuting, always use opposite meaning words		
Source A will not agree (A) with Source B because of differing opinion on	•	ATQ
the use of ChatGPT in teaching and learning. (CC) Source A is	•	Common Criteria
unsupportive (CC) of the use of ChatGPT, while (CW) Source B is supportive (CC) of the use of ChatGPT in class. The author in Source A seems to		Common Cinena
suggest that students are so dependent on the use of ChatGPT that it	•	Comparison word
paralyses their ability to think. (EXP) From Source A, the student is not able	•	Evidence x2
to answer a very simple math problem (2+2=?) and he even has to resort		1 best line
to asking ChatGPT, which ends up giving a very ridiculous answer. (EV) However (CW), the teacher in Source B is very supportive of the use of L		
ChatGPT in class as it helps them to deepen their thinking (EXP). Source B	•	Explanation x2
claims that "with ChatGPT addressing the more straightforward and		
factual questions, he (teacher) has more time to help students delve		
deeper into the subject matter, resulting in more engaging and fruitful discussions."(EV)		
Source A will agree (A) with Source B in that ChatGPT can be used by	•	ATQ
students in classrooms. (CC) Source A shows how students rely on asking		Common Criteria
ChatGPT what the response is for "2+2" (EV) suggesting that students are turning to ChatGPT to help them answer question set by teacher.(Exp)	•	Common Chiena
Similarly,(CW) in Source B, "students may clarify their learning against what	•	Comparison word
ChatGPT throws up and evaluate the accuracy of the information it	•	Evidence
generates before sharing their thoughts with Mr Leung. (EV) suggesting that		1 best line
the use of Chatgpt is used to deepen learning in classrooms.		Explanation
Course A will request grown (A) with Course B are Course A is at limited to a grown		Explanation
Source A will never agree (A) with Source B as Source A is a limited personal negative experience of the use of ChatGpt in the classroom while Source		
B is by MOE who is pushing forth the positive use of ChatGPT in classrooms.		
Given MOE's direction to encourage teachers across the island to		
embrace AI in their classrooms, B will never agree with A's limited view of		
Al as a hindrance to the classroom. Similarly, A will never agree with B because as a single teacher, (Provenance of A) he will not be able to see		
the large variety of ways Al can be used positively in the classroom, (EXP		
of A) the way MOE (Provenance of B) can have access to the use of Al in		
the classroom. (EXP of B)		

How useful is Source C as evidence about the impact of artificial intelligence on people? [6]

Suggested Answer		Success Criteria
Note:		
-Always begin with USEFUL		
-Infer about the impact of AI on peopole		
-Successful Cross referencing (CR) requires reliability therefore useful /		
unreliability therefore less useful.		
C is useful (A) as evidence that AI has a negative impact (A)on people as it is reliable (LOR) as it is supported by D (LOR). Both (CW) C and D suggest	•	ATQ + LOR
that AI has a negative impact on people. (CC) This can be seen from Source C "unauthorised use of their (singers') music and that violates	•	Common Criteria
the rights of artists and other creators." (EV) which suggests that it affects	•	Comparison word
people's livelihood and intellectual property. (EXP) Similarly, D shows hows the singer and song producer laments "oh great it even sings" (EV)	•	Evidence x2
suggesting that people's careers are affected negatively.		1 best line
	•	Explanation x2
C is less useful (A) as evidence that AI has a negative impact (A) on people as it is unreliable as refuted by B. C suggests that AI has a negative	•	ATQ + LOR
impact but B suggests that AI has a positive impact. This can be seen from C "unauthorised use of their (singers') music and that violates the rights	•	Common Criteria
of artists and other creators." (EV) which suggests that it negatively affects	•	Comparison word
people's livelihood and intellectual property. (EXP) However (CW) Source B says "He says this can in turn cultivate more higher order thinking and	•	Evidence
active learning." suggesting that Al as a positive impact as it improves his		1 best line
livelihood as a teacher	•	Explanation
Possible highest levels have to include the holistic use of provenance, context and content (L5/6)	•	ATQ + LOR
Less useful: Use of Limited Scope – need to recognize What and Whose	•	Who is represented
view is represented + What and Whose view is not represented.	•	What view is
D is less useful (A) as it is limited (LOR), it is the negative experience (WHAT) of only 1 type of people, namely musicians, people who are creating		represented
music (Who), and thus cannot represent the positive experiences (What	•	Who is NOT
not) of other groups of people such as educators, content creators (Who not) However, not every teacher is this way, and they may struggle and		represented
have a negative experience with social mixing (What not) and hence her	•	What view is NOT
experience is limited, unable to fully represent that social mixing is in a		represented
good state (Exp) and thus not useful.	•	Explanation of
		limitation hence less
		useful.

Less useful: Purpose/ Explained provenance - one sided- only positive view		ATO LIOD
is presented.	•	ATQ + LOR
PAMFASEE should explain why the source is unreliable, not explain	•	PAMFASE
evidence at this level.		
Less useful (A) because it is one-sided (LOR) has a motive as a MNC music	•	Explanation of how it
corporation that is profit driven (Provenance) to convince (P) consumers		makes the source
and platform owners (A) that AI is creating and abusing copyrighted		unreliable and
content by artistes (M) so that these platform owners and consumers will		
be careful not to report, share copyrighted work without permission (A) so		hence less useful
that their artiste's work is protected and can continue to generate		
revenue for the company. (Exp linked to provenance) Hence it is less		
useful as due to this purpose, it will naturally only focus on the harmful and		
detrimental effect of AI (Exp linked to why unreliable) and hence because		
of this one sided nature, the source is less useful.		
Useful: Explained provenance	•	ATQ + LOR
Source C is useful (A) It is a firsthand account by UMG MNC (D1) who, as		D 1 11 6
a Dutch American MNC music corporation (D1) will naturally be very	•	Details from
aware of how detrimental Al-generated music can harm and limit the		Provenance (D1, D2)
growth of original music content creation. (EXP 1) As such, UMG is	•	Explanation on why
genuinely concerned about how Al-generated tracks may affect the		reliable therefore
livelihood of their singers and music producers. (Exp 1) Hence, UMGs make		
this statement to warn users who generate Al-tracks and also social media		useful (Exp 1, Exp 2)
platforms to stop such illegal acts. UMG has firsthand information, over the		
years, from before to after the increasing use of AI (Exp 1) and		
experienced firsthand hence how disruptive AI can be and is protecting		
the rights of their artists to the best of their ability. As such, Source C is		
reliable and useful.		

3. Study Source D.

Why do you think this cartoon (Source D) was posted on the forum? Explain your answer. [6]

Suggested Answer		Success Criteria
Take note: Good answers should link to concepts/ overall		
topic mentioned in BI.		
The cartoon was posted on the forum to warn [P] members of the AI forum [A] that AI is so powerful /	•	Powerful verb
disruptive that it can replace jobs [M] so that people will	•	Audience (Aud)
feel worried [F] and be pressured to update their skills so that they can stay competitive and relevant in an Al world	•	Message
[A]. Because at that time, on 18 Apr 2023, there was a		-Inference of main idea in source
recent Al-generated track which went viral online by		-Cant be lifted from source
emulating the rapping style of international singer, Drake.	•	Feelings (optional)

This can be seen from the picture, where the workers from	•	Action by Aud
the music industry (singer and song producer) are threatened by the ability of AI in song creation. In fact, the	•	Situation / context
song producer lamented that AI can now "even sing"		-BI or
		-Source / other sources
	•	Evidence
	•	Explanation

Success Criteria

4. Study Sources E & F.

Having read E, are you surprised by Source F? Explain your answer. [7]

Suggested Answer

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Note:		
-Para 1:Must use both sources given \rightarrow compare E & F		
-Para 2: Should move on to higher level skills like CR of main source /		
Explained provenance		
Comparison of E and F	•	ATQ + LOR
Having read E, im surprised by F (A) as E contradicts F (LOR). E and F differ	•	Common Criteria
on the impacts of AI. E suggests that AI only brings challenges (CC) but (CW) Source F suggests that AI can bring both opportunity and	•	Common Ciliena
challenges. (CC) This can be seen in Source E, "a challenge for users,	•	Comparison word
news organisations and social media platforms to vet what's real, after	•	Evidence x2
years of grappling with online misinformation." This means that AI brings about fake news, which is harmful to society. but Source F says "AI		1 best line
continues to improve our lives – from enabling paralysed people to walk		
to discovering superbug-killing antibiotics". This means that AI brings about benefits. At the same time, "AI requires agile leadership to make sure it is developed and used in a way that is appropriate." This means that Ai can pose a danger if it is not used appropriately.	•	Explanation x2
OR		
Having read Source E, I am not surprised (A) by Source F as both sources are similar (LOR). Both(CW) sources claim that AI can bring harm such as fake news(CC). In Source E, it states that "none of these things (famous people doing unimaginable acts) actually happened, but AI-generated images depicting them did go viral online over the past week."(EV) This means that fake news may spread and cause tension in the society.(EXP) Similarly,(CW) Source F suggests that the development of AI "requires agile leadership to make sure it is developed and used appropriately."(EV) This means that AI does bring about harm and danger.(EXP)		

MARKOONEME		
Cross referencing of main source.(F)	•	ATQ + LOR
Having read E I'm not surprised by F (A) as F is supported by BI.(LOR) Both		
(CW) F and BI suggest that AI can bring harm such as fake news. (CC) This	•	Common Criteria
can be seen from F "requires agile leadership to make sure it is developed		Comparison word
and used appropriately."(EV) This means that AI does bring about harm	•	Companson word
and danger.(EXP)Similarly,(CW) BI says abuse of AI can result in	•	Evidence
"convincing fake videos or images can spread false information and		
cause disruption." (Evid) suggesting that AI can be abused to create fake		1 best line
information. (Exp)	•	Explanation
Possible highest levels have to include the holistic use of provenance,	•	ATQ + LOR
context and content (L5/6)		4W 3V
Highest level: Explained provenance	•	Details from
Having read Source E, I am not surprised (A) by Source F as it is expected		provenance
(V) of Source F to make such a statement. Source F is by the Prime		D1, D2, D3
Minister's Office in the UK (D1- Who) and as a global leader/government,		, , ,
it has a duty to ensure that it maintains security and orderly use of Al.	•	Explanation of how
(EXP1) Furthermore, it is hosting a global summit on AI safety in November,		it makes the source
(D2) thus, it is natural ($oldsymbol{V}$) that UK wants to convince other countries that		reliable and hence
they are equipped to ensure the safe development and responsible use		useful
of AI (Exp 2 - Why) by convincing other countries that UK is aware of how		
Al is used positively and negatively and that they are working closely with		Exp 1, Exp 2, Exp 3
researchers and companies to develop an international framework.		What view is
(What). Also, this official statement was mentioned in June 2023,(D3 -		represented
When) after deep fake images (Pope, Elon Musk, Donald Trump, etc) went		
viral with the abuse of AI technology in April 2023 as mentioned in Source		
E (Link E and F timelines, to use as context), hence expected ($oldsymbol{V}$) that as a		
country going to host the global summit, he will need to address the fast		
moving and pressing issue of how AI requires agile leadership to manage		
it (Exp 3)		

5. 'Individual is responsible for managing the challenges brought by Al.'

Using sources in this case study, explain how far you would agree with this statement. [10]
- AWBRS X4

,	'Individual is responsible for managing the challenges brought by AI'				
	Individual / Student / Teacher	Company	Government	Digital Media Platform	
Source A	✓				
Source B	√		✓		
Source C	✓	✓		✓	
Source D	✓	✓			
Source E	√	√		√	
Source F		√	✓		

Suggested Answer	Success Criteria

MARK SCHEME	1	
I agree (A) as Source A is saying that individuals (W) like students need to manage the challenges as Source A shows that a student is unable to answer what is the value of 2+2, which is a very simple	•	Who
mathematical task but he relies on ChatGPT instead and gives a wrong answer. (B) It is the responsibility of individuals as only they can decide to use ChatGPT discerningly and not be overly dependent	•	Best evidence 1 line
on it. (R) By doing so, they will check the answers that AI provides (S) → ensure that answers are accurate (S) → be able to use AI to their	•	Reason for who
advantage (S) \rightarrow Therefore managing the challenges.	•	Sequence of outcomes beyond source (\$1→\$2→\$3)
I disagree (A) as Source B suggests it is schools (W) who need to manage the challenges as Source B, "students may clarify their	•	ATQ
learning against what ChatGPT throws up and evaluate the accuracy of the information it generates" (B) Schools have the	•	Who
duty as they are the ones with the expert knowledge and skills to know how to use AI to enhance teaching and learning. (W) By doing	•	Best evidence 1 line
so, students can learn more with the use of AI (B- Paraphrased idea from source) \rightarrow be more encouraged as information is easily accessible (S) \rightarrow more motivated to learn (S) \rightarrow Thus get better results. (S) \rightarrow Therefore managing the challenges.		Reason for who
		Sequence of outcomes beyond source (\$1→\$2→\$3)
I agree (A) as Source D suggests that individuals (W) should be responsible as Source D shows the pervasiveness of AI in disrupting jobs for drivers, writers, artists and even singers and song producer.	•	Who
(B) It should be individuals because only they can decide if they want to make the effort to share their experiences and ideas with	•	Best evidence 1 line
others in this forum. (R)By doing so, people will feel more pressured to upgrade their skills and stay relevant (S) \rightarrow ensure they keep use ideas on using AI to enhance their job rather be replaced (S) \rightarrow be		Reason for who
able to stay employable and keep their jobs (S) $ ightarrow$ Therefore managing the challenges.	•	Sequence of outcomes beyond source (\$1→\$2→\$3)
I disagree (A) because companies (W) such as UMG are responsible. IThis can be seen in Source C which states that "UMG will not hesitate to take steps to protect our rights and those of our artists." (B) Has to	•	ATQ Who
be companies because only they have the power to take legal action and stop illegal use of AI which infringes on copyrights.(R) By doing so, content creators abusing AI will be fearful (S) \rightarrow will stop	•	Best evidence 1 line
producing AI generated fake digital content. (S) \rightarrow reduce amount of fake content online for easy access (S) \rightarrow ensure that creators of	•	Reason for who

•	Sequence of outcomes
	beyond source
	(S1→ S2→S3)

Section B

authorities.

fact-check and if it is a deep fake info, they should report to the

Possible Route	Reason
Current lack / need /	- Not enough volunteers.
gap	- People are not interested due to busy schedule.
	- Government cannot do it alone.
Context	- Ageing population (need more support).
	- Growing ageing population (elderly lonely).
	- Shrinking population.
Benefits	- Forge a closer bond with the community.
	- Help the needy community

Explains ONE OR TWO REASONS		Describe
Award 5 – 6 marks for 1 reason explained Award 6 – 7 marks for 2 reasons explained	•	Example - Name
Reason 1: Singapore continues to need volunteers because there are constantly under-privileged members of the society (D). For example, Willing Hearts runs a soup kitchen who needs volunteers to prepare meals daily for the elderly and poverty-stricken in Singapore (E) By having volunteers, we can ensure that the food is cooked,(O) the food can be effectively delivered (O) and the underprivileged in society will be able to have their basic needs of having food met. (O)	•	- 2 details Outcomes O1 - O2 - O3
Reason 2: Singapore continues to need volunteers in times of emergencies to act as a bridge between the government and the people, helping to carry out governmental initiatives and help meet the needs of people. For example, during the Covid-19 pandemic,(Name) numerous volunteers were needed to help out at covid vaccination centres as ushers. Volunteers were also needed to help in the distribution of the TraceTogether tokens, masks and hand sanitisers.(E) By having volunteers, the practices, ideas and programmes launched by government can be better carried out. \rightarrow (O) more people in society will be able to enjoy the benefits of these programmes/ practices (O) \rightarrow their needs will be better met (O).		

7 Do you agree that the citizens play a more significant role than the government in meeting the needs of society? Explain your answer. [8]

Explains factors Award 5 – 6 marks for explaining one factor Award 6 – 7 marks for explaining second factor	•	Describe
Individual Singaporeans play a crucial role in providing for the needs and	•	Example
interests of society as they contribute to the needs of society by		-Name
volunteering their time, effort, or resources. M s Elisa Ng started the "A Litter		-2 details
at a Time" programme to encourage people to pick up just a piece of litter	•	Outcomes
a day. Ms Ng also went on regular clean –up exercises with her boys. She		- 01 - 02 - 03
encourages Singaporeans to pledge to pick up litter, just a piece of litter		
a day, even though we may not be responsible for creating the mess.		
Through Ms Ng's contribution, it will inspire/encourage more people to		
play a part - picking up our own litter, educating our children and		
grandchildren, and reminding others to do the right thing. Hence, this can		
help to inculcate a self-cleaning culture like Japan and thus promote a		
more gracious society.		
mere gracies seciety.		
The government also plays a crucial role in providing for the needs and		
interests of society. The government devotes resources to improve the well-		
being of citizens. In their daily lives, citizens enjoy benefits from the provision		
of goods and services for the public. These goods and services are		
provided for or subsidised by govt so that all citizens can have access to		
them. Transportation is a service provided by the government, so that we		
have a people-centred public transport system, connecting people and		
places. This enhances commuter experience and boosts an efficient		
transport network in Singapore, which is essential for productivity. Thus, this		
ensures citizens' well-being and needs for basic goods are met. In the long		
term, citizens will feel that their needs are taken care of, which leads to		
higher quality of life and productivity.		
L3 – 2 factors explained + Weighs factors		
Accept any conclusions that are valid.		
The government plays a more crucial role in providing for the needs and interests of society as the government has the ability, means and resources to do so. With governmental initiatives, any plans and agenda can be		

carried out. The government also has the budget to cater to the needs of society should the need require. Furthermore, it is through government speeches or pronouncing of aims and ideals that individuals will feel encouraged and motivated to take on initiatives to contribute to society. Funding and aid by the government are also what helps individual volunteers continue on with their initiatives. Therefore, while Singaporeans are important in providing for the needs and interests of society, the government is a more crucial player, forming the foundation and bulwark that drives the provisions for society.

OR

The citizens play a more crucial role in providing for the needs and interests of society, especially during a crisis or emergency because they can fill in the needs quickly since they are on the ground and can be mobilised readily. For instance, when Singapore was hit with a record high of 401 PSI haze reading in June 2013, Singaporeans set up SG Haze Rescue. Singaporeans have banded together to provide respite for those without air-conditioned homes through Facebook to crowd-source air-conditioned living spaces. Government may take a slightly longer time to mobilise and roll out comprehensive and holistic programmes because it involves multi-agencies and well-planned coordination.