

INFORMATION TECHNOLOGY IN A GLOBAL SOCIETY - PAPER 2

INSTRUCTIONS TO CANDIDATES

What follows is the article required for information technology in a global society higher level and standard level paper 2.

You would normally have 1 hour 15 minutes – but this is a practice paper and so is for homework and will give you maximum time to perfect your essay. Remember this is just an extension of the ITGS triangle analysis we have used for a number of articles so far – and also remember what we have discussed in today's class.

ARTICLE

School installs £9,000 facial recognition cameras to stop students turning up late... and teachers could be next target

By [Andrew Levy](#)

It could make the time-honoured tradition of taking the school register a thing of the past. Cutting-edge cameras are being used to scan children's faces as they enter school. The face-recognition technology makes sure they have turned up, records whether they were on time or late and keeps an accurate roll call.

It can also deliver messages to pupils as they sign in. Ten schools have started using the system, which is likely to be introduced elsewhere if considered a success. But privacy campaigners reacted angrily yesterday, warning that the technology was another 'encroachment on civil liberties'. Britons are already subjected to the greatest level of electronic surveillance in the world, with our movements said to be recorded in some way about 3,000 times a week.

Facial recognition systems are in use in airports to catch those using fake passports. The face REGISTER systems that are being installed in schools take 3D digital images of faces and infra-red scans. Pupils must face a box which is the size of an A3 piece of paper while their image is taken. They then punch in their four-digit pin on a number pad to confirm their identity.

Clocking on: A Sir Christopher Hatton pupil uses the face recognition system that is attracting a great deal of interest among schools nationwide. The technology, made by Northamptonshire firm Aurora Computer Services, is said to be so accurate that there is no chance of pupils signing in for their friends. The system is being used in schools in Northamptonshire, Hertfordshire and Cambridgeshire. Sir Christopher Hatton School, a comprehensive in Wellingborough, Northamptonshire, started testing it on A-level pupils last month.

The technology has been installed in reception and the sixth-form block at a cost of £9,000. Head of sixth form Kelli Foster said: 'The technology is just incredible. Before, each pupil had to sign in and out of the reception by filling in a form but now it takes under ten seconds to gather so much more information.' But Big Brother Watch campaign director Daniel Hamilton said: 'This is another worrying development in the expansion of the surveillance state. 'There is no need for schools to hold such sensitive information about their pupils. Such systems have limited benefits yet are wide open to abuse – from the risk of data theft to misuse by unscrupulous individuals.'

‘Rather than spend money on gimmicks like this, schools should focus on educating their pupils. Both parents and pupils should resist this encroachment on civil liberties.’

PAPER 2 EXAMINATION PAPER

INSTRUCTIONS TO CANDIDATES

Read the article above carefully.

In the actual examinations you would write a response in the spaces provided. For our purposes please type up in a Google Document making sure to present the essay neatly and with titles etc.

Timing

It is recommended that 15 minutes is spent reading the article before writing the response. 1 hour 15 minutes. However this is a practice paper and so take as long as you feel necessary.

Read the article and write your responses to the questions below. Your response should be approximately 750 words in total. Write under the criteria headings A, B, C and D. Use clear and precise language. Use appropriate ITGS terminology. Develop answers that demonstrate understanding beyond what is explicitly stated in the article.

Criterion A – The issue and stakeholder(s) [4 marks]

Describe one social/ethical concern related to the IT system in the article above.

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Describe the relationship of one primary stakeholder to the IT system that is mentioned in the article.

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Criterion B – The IT concepts and processes [6 marks]

Describe, step by step, how the process of facial recognition works.

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Explain the relationship between the IT system (facial recognition) and the social/ethical concern described in Criterion A.

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Criterion C — The impact of the social/ethical issue(s) on stakeholders [8 marks]
Evaluate the impact of the social/ethical issues on the relevant stakeholders.

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Criterion D — A solution to a problem arising from the article [8 marks]
Evaluate one solution that addresses at least one problem identified in Criterion C.

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Task 47.3 Mark Scheme

Note: all Paper 2 answers are marked using the criteria on pages 50 - 51 of the ITGS Guide. Examiners should be aware that in some cases, candidates may take a different approach, which if appropriate should be rewarded.

Below shows an outline of the criteria...

SPEC/3/ITGSX/BP2/ENG/TZ0/XX/M 8 pages

MARKSCHEME

SPECIMEN PAPER INFORMATION TECHNOLOGY IN A GLOBAL SOCIETY

Higher Level and Standard Level Paper 2

The assessment criteria must be made available to candidates prior to sitting the examination.

Criterion A — The issue and stakeholder(s) [4 marks]

Describe one social/ethical concern related to the IT system.

Marks Level descriptor

0 - The response does not reach a standard described by the descriptors below.

1 - Either an appropriate social/ethical concern or the relationship of one primary stakeholder to the IT system in the article is identified.

2 - Either an appropriate social/ethical concern or the relationship of one primary stakeholder to the IT system in the article is described or both are identified.

3 - Either an appropriate social/ethical concern or the relationship of one primary stakeholder to the IT system in the article is described; the other is identified.

4 - Both an appropriate social/ethical concern and the relationship of one primary stakeholder to the IT system in the article are described.

Criterion B — The IT concepts and processes [6 marks]

Describe, step by step, how the IT system works.

If there is no additional information to that in the article the candidate cannot be awarded more than [2 marks].

Explain the relationship between the IT system and the social/ethical concern described in Criterion A.

Marks Level descriptor

0 - The response does not reach a standard described by the descriptors below.

1–2 - There is little or no understanding of the step-by-step process of how the IT system works and does not go beyond the information in the article.

The major components of the IT system are identified using minimal technical IT terminology.

3–4 - There is a description of the step-by-step process of how the IT system works that goes beyond the information in the article.

Most of the major components of the IT system are identified using some technical IT terminology.

The relationship between the IT system referred to in the article and the concern presented in criterion A is identified, with the some use of ITGS terminology.

5–6

There is a detailed description of the step-by-step process that shows a clear understanding of how the IT system works that goes beyond the information in the article.

The major components of the IT system are identified using appropriate technical IT terminology.

The relationship between the IT system referred to in the article and the concern presented in criterion A is explained using appropriate ITGS terminology.

Criterion C — The impact of the social/ethical issue(s) on stakeholders [8 marks]

Evaluate the impact of the social/ethical issues on the relevant stakeholders.

Marks Level descriptor

0 - The response does not reach a standard described by the descriptors below.

1–2 - The impact of the social/ethical issues on stakeholders is described but not evaluated. Material is either copied directly from the article or implicit references are made to it.

3–5 - The impact of the social/ethical issues on stakeholders is partially analysed, with some evaluative comment. Explicit references to the information in the article are partially developed in the response. There is some use of appropriate ITGS terminology

6–8 - The impact of the social/ethical issues on stakeholders are fully analysed and evaluated. Explicit, well-developed references to information in the article are made appropriately throughout the response. There is use of appropriate ITGS terminology.

Criterion D — A solution to a problem arising from the article [8 marks]

Evaluate one solution that addresses at least one problem identified in Criterion C.

If the evaluation does not provide any additional information to that in the article, the candidate will be awarded a maximum of [2 marks].

Marks Level descriptor

0 - The response does not reach a standard described by the descriptors below.

1–2 - One feasible solution to at least one problem is proposed and described. No evaluative comment is offered. Material is either copied directly from the article or implicit references are made to it.

3–5 - One appropriate solution to at least one problem is proposed and partially evaluated. The response contains explicit references to information in the article that are partially developed. There is some use of appropriate ITGS terminology.

6–8 - One appropriate solution to at least one problem is proposed and fully evaluated, addressing both its strengths and potential weaknesses. Areas for future development may also be identified. Explicit, fully developed responses to the information in the article are made appropriately throughout the response. There is use of appropriate ITGS terminology.