



GCSE MARKING SCHEME

SUMMER 2025

GCSE

HISTORY

UNIT 3: THEMATIC STUDY

**3B. CHANGES IN HEALTH AND MEDICINE, c.1340
TO THE PRESENT DAY**

3100UK0-1

About this marking scheme

The purpose of this marking scheme is to provide teachers, learners, and other interested parties, with an understanding of the assessment criteria used to assess this specific assessment.

This marking scheme reflects the criteria by which this assessment was marked in a live series and was finalised following detailed discussion at an examiners' conference. A team of qualified examiners were trained specifically in the application of this marking scheme. The aim of the conference was to ensure that the marking scheme was interpreted and applied in the same way by all examiners. It may not be possible, or appropriate, to capture every variation that a candidate may present in their responses within this marking scheme. However, during the training conference, examiners were guided in using their professional judgement to credit alternative valid responses as instructed by the document, and through reviewing exemplar responses.

Without the benefit of participation in the examiners' conference, teachers, learners and other users, may have different views on certain matters of detail or interpretation. Therefore, it is strongly recommended that this marking scheme is used alongside other guidance, such as published exemplar materials or Guidance for Teaching. This marking scheme is final and will not be changed, unless in the event that a clear error is identified, as it reflects the criteria used to assess candidate responses during the live series.

UNIT 3: THEMATIC STUDY

3B. CHANGES IN HEALTH AND MEDICINE, c.1340 TO THE PRESENT DAY

SUMMER 2025 MARK SCHEME

Instructions for examiners of GCSE History when applying the mark scheme

Positive marking

It should be remembered that learners are writing under examination conditions and credit should be given for what the learner writes, rather than adopting the approach of penalising him/her for any omissions. It should be possible for a very good response to achieve full marks and a very poor one to achieve zero marks. Marks should not be deducted for a less than perfect answer if it satisfies the criteria of the mark scheme.

GCSE History mark schemes are presented in a common format as shown below:

This section indicates the assessment objective(s) targeted in the question

Mark allocation:	AO1	AO2	AO3	AO4
6	6			

Question: e.g. **Describe the theory of the four humours.**

[6]

Band descriptors and mark allocations

This is the question and its mark tariff.

	AO1 6 marks	
BAND 3	Demonstrates detailed knowledge to fully describe the issue set within the appropriate historical context.	4-6
BAND 2	Demonstrates knowledge to partially describes the issue.	3-4
BAND 1	Demonstrates limited knowledge to describe the issue.	1-2

Use 0 for incorrect or irrelevant answers.

This section contains the band descriptors which explain the principles that must be applied when marking each question. The examiner must apply this when applying the marking scheme to the response. The descriptor for the band provides a description of the performance level for that band. The band descriptor is aligned with the Assessment Objective(s) targeted in the question.

Indicative content

This content is not prescriptive and candidates are not expected to refer to all the material identified below. Some of the issues to consider are:

- The theory of the four humours, rooted in ancient Greek medicine, was a belief system that attributed human health and behaviour to the balance or imbalance of four bodily fluids, or "humours."*
- The theory is most notably associated with the ancient physician Hippocrates and later expanded upon by Galen,*
- The theory proposed the following humours:*
- Blood (Sanguine): Thought to be associated with the air and spring season, the sanguine humour was believed to impart qualities of warmth, cheerfulness, and an optimistic temperament.*
- Phlegm (Phlegmatic): Associated with water and winter, phlegm was linked to qualities of calmness, sluggishness, and a peaceful disposition.*
- Yellow Bile (Choleric): Aligned with fire and summer, yellow bile was believed to be responsible for characteristics like aggressiveness, ambition, and a choleric temperament.*

- *Black Bile (Melancholic):* Linked to the earth and autumn season, black bile was associated with qualities of introspection, seriousness, and a melancholic disposition.
- According to this theory, good health and well-being were believed to result from a harmonious balance of these four humours.
- Illness or disease was thought to arise when there was an imbalance or excess of one or more humours, and treatments often involved interventions to restore this balance, such as dietary changes, bloodletting, or purging.
- While the theory of the four humours has been largely discredited in modern medicine, it had a profound influence on medical practices in the ancient and medieval periods, persisting for centuries until the advent of more scientifically grounded approaches to understanding health and disease.

This section contains indicative content (see below under banded mark schemes Stage 2). It may be that the indicative content will be amended at the examiner's conference after actual scripts have been read. The indicative content is not prescriptive and includes some of the points a candidate might include in their response.

Banded mark schemes

Banded mark schemes are divided so that each band has a relevant descriptor. The descriptor for the band provides a description of the performance level for that band. Each band contains marks. Examiners should first read and annotate a learner's answer to pick out the evidence that is being assessed in that question. Once the annotation is complete, the mark scheme can be applied. This is done as a two stage process.

Banded mark schemes Stage 1 – Deciding on the band

When deciding on a band, the answer should be viewed holistically. Beginning at the lowest band, examiners should look at the learner's answer and check whether it matches the descriptor for that band. Examiners should look at the descriptor for that band and see if it matches the qualities shown in the learner's answer. If the descriptor at the lowest band is satisfied, examiners should move up to the next band and repeat this process for each band until the descriptor matches the answer.

If an answer covers different aspects of different bands within the mark scheme, a 'best fit' approach should be adopted to decide on the band and then the learner's response should be used to decide on the mark within the band. For instance if a response is mainly in band 2 but with a limited amount of band 3 content, the answer would be placed in band 2, but the mark awarded would be close to the top of band 2 as a result of the band 3 content. Examiners should not seek to mark learners down as a result of small omissions in minor areas of an answer.

Banded mark schemes Stage 2 – Deciding on the mark

Once the band has been decided, examiners can then assign a mark. During standardising (marking conference), detailed advice from the Principal Examiner on the qualities of each mark band will be given. Examiners will then receive examples of answers in each mark band that have been awarded a mark by the Principal Examiner. Examiners should mark the examples and compare their marks with those of the Principal Examiner.

When marking, examiners can use these examples to decide whether a learner's response is of a superior, inferior or comparable standard to the example. Examiners are reminded of the need to revisit the answer as they apply the mark scheme in order to confirm that the band and the mark allocated is appropriate to the response provided.

Indicative content is also provided for banded mark schemes. Indicative content is not exhaustive, and any other valid points must be credited. In order to reach the highest bands of the mark scheme a learner need not cover all of the points mentioned in the indicative content but must meet the requirements of the highest mark band.

Where a response is not creditworthy, that is contains nothing of any significance to the mark scheme, or where no response has been provided, no marks should be awarded.

UNIT 3: THEMATIC STUDY

3B. CHANGES IN HEALTH AND MEDICINE c.1340 TO THE PRESENT DAY

Question 1

<i>Mark allocation:</i>	<i>AO1</i>	<i>AO2</i>	<i>AO3</i>	<i>AO4</i>
4	4			

Award one mark for each correct response:

- a. *Dr John Snow*
- b. *Spanish flu*
- c. *Purging / enema*
- d. *David Lloyd George*

Question 2

<i>Mark allocation:</i>	<i>AO1</i>	<i>AO2</i>	<i>AO3</i>	<i>AO4</i>
4		2	2	

Question: **Use Sources A, B and C to identify one similarity and one difference in attempts to prevent illness and disease over time.** [4]

Band descriptors and mark allocations

	AO2 2 marks		AO3 2 marks	
BAND 2	Identifies clearly one similarity and one difference.	2	Uses the sources to identify both similarity and difference.	2
BAND 1	Identifies either one similarity or one difference.	1	Uses the sources to identify either similarity or difference	1

Use 0 for incorrect or irrelevant answers.

Indicative content

This content is not prescriptive and candidates are not expected to refer to all the material identified below. Some of the issues to consider are:

Similarities

Both sources B and C are wearing masks so that they don't catch the disease.

Both sources A and C are trying to prevent themselves from catching a disease.

Source B and C are trying to help others from catching a disease.

Both A and C show physical remedies.

Differences

Source A and C are different because A is punishing themselves to prevent the illness while C is preventing the illness by vaccination.

Source B and C are fully clothed to protect themselves while Source A isn't wearing a shirt / top.

Source B and C are helping others while Source A is trying to prevent the plague from reaching them.

Source A is using superstition to prevent illness while C is using scientific research and development.

Question 3

Mark allocation:	AO1	AO2	AO3	AO4
6	6			

Question: **Describe the theory of the four humours.** [6]

Band descriptors and mark allocations

	AO1 6 marks	
BAND 3	Demonstrates detailed knowledge to fully describe the issue set within the appropriate historical context.	5-6
BAND 2	Demonstrates knowledge to partially describe the issue.	3-4
BAND 1	Demonstrates limited knowledge to describe the issue.	1-2

Use 0 for incorrect or irrelevant answers.

Indicative content

This content is not prescriptive and candidates are not expected to refer to all the material identified below. Some of the issues to consider are:

- *The theory of the four humours, rooted in ancient Greek medicine, was a belief system that attributed human health and behaviour to the balance or imbalance of four bodily fluids, or “humours.”*
- *The theory is most notably associated with the ancient physician Hippocrates and later expanded upon by Galen.*
- *The theory proposed the following humours:*
 - *Blood (Sanguine): Thought to be associated with the air and spring season, the sanguine humour was believed to impart qualities of warmth, cheerfulness, and an optimistic temperament.*
 - *Phlegm (Phlegmatic): Associated with water and winter, phlegm was linked to qualities of calmness, sluggishness, and a peaceful disposition.*
 - *Yellow Bile (Choleric): Aligned with fire and summer, yellow bile was believed to be responsible for characteristics like aggressiveness, ambition, and a choleric temperament.*
 - *Black Bile (Melancholic): Linked to the earth and autumn season, black bile was associated with qualities of introspection, seriousness, and a melancholic disposition.*
- *According to this theory, good health and well-being were believed to result from a harmonious balance of these four humours.*
- *Illness or disease was thought to arise when there was an imbalance or excess of one or more humours, and treatments often involved interventions to restore this balance, such as dietary changes, bloodletting, or purging.*
- *While the theory of the four humours has been largely discredited in modern medicine, it had a profound influence on medical practices in the ancient and medieval periods, persisting for centuries until the advent of more scientifically grounded approaches to understanding health and disease.*

Question 4

Mark allocation:	AO1	AO2	AO3	AO4
6	6			

Question: **Describe the work of Marie Curie.** [6]

Band descriptors and mark allocations

	AO1 6 marks	
BAND 3	Demonstrates detailed knowledge to fully describe the issue set within the appropriate historical context.	5-6
BAND 2	Demonstrates knowledge to partially describes the issue.	3-4
BAND 1	Demonstrates limited knowledge to describe the issue.	1-2

Use 0 for incorrect or irrelevant answers.

Indicative content

This content is not prescriptive and candidates are not expected to refer to all the material identified below. Some of the issues to consider are:

- *In 1895, Marie married another scientist called Pierre Curie. Together they worked on the theory of 'radioactivity', a word that she created, building on the work of the German physicist Roentgen and the French physicist Becquerel.*
- *Marie Curie and her husband Pierre discovered that radioactive elements like radium and polonium destroyed tissue, opening up a way of treating cancer.*
- *In 1895 Marie and Pierre discovered that a metal called radium could kill cancer cells.*
- *In July 1898, the Curies announced the discovery of a new chemical element, polonium. At the end of the year, they announced the discovery of another, radium.*
- *She was the first woman to become a Professor at the University of Paris and the first woman to win the important Nobel Prize. Together with her husband Pierre, she was awarded the Nobel Prize in 1903, and went on to win another in 1911.*
- *During the First World War, she helped put x-ray machines in ambulances, which she herself drove to the front lines. This helped doctors see where bullets were in the body of a soldier.*
- *The International Red Cross made her head of its radiological service and she held training courses for medical orderlies and doctors in the new techniques.*
- *Her 1911 Nobel Prize was for discovering a means to measure radiation.*
- *She died on 4 July 1934 from leukaemia, caused by exposure to high-energy radiation from her research.*

Question 5

<i>Mark allocation:</i>	<i>AO1</i>	<i>AO2</i>	<i>AO3</i>	<i>AO4</i>
12	2	10		

Question: **Explain how public health was improved in Cardiff in the nineteenth century.** [12]

Band descriptors and mark allocations

	AO1 2 marks			AO2 10 marks	
			BAND 4	Fully explains the issue with clear focus set within the appropriate historical context.	9-10
			BAND 3	Explains the issue set within the appropriate historical context.	6-8
BAND 2	Demonstrates detailed knowledge and understanding of the key features in the question.	2	BAND 2	Partially explains the issue with some reference to the appropriate historical context.	4-5
BAND 1	Demonstrates some knowledge and understanding of the key features in the question.	1	BAND 1	Mostly descriptive response with limited explanation of the issue.	1-3

Use 0 for incorrect or irrelevant answers.

Indicative content

This content is not prescriptive and candidates are not expected to refer to all the material identified below. Some of the issues to consider are:

- *Public health was improved in Cardiff in a variety of ways.*
- *As a city, Cardiff grew quickly during the nineteenth century. There were regular outbreaks of disease. e.g. Cholera in 1849, 1854 and 1866.*
- *The Rammell Report of 1850, highlighted the problems e.g. poor water supply, lack of sewers, poor housing etc.*
- *In 1848, the Public Health Act gave towns the right to set up local Boards of Health to improve conditions.*
- *As a result, a petition from the people of Cardiff persuaded Cardiff Corporation to set up its local Health Board.*
- *Cardiff Corporation appointed Dr Henry James Paine as Medical Officer of Health for Cardiff in 1853 (he was in this role until 1889).*
- *He helped make a number of improvements - working with Cardiff Waterworks Company to provide clean water and build a new sewage system (this reduced the threat from Cholera).*
- *HMS Hamadryad was converted into a hospital ship to isolate and treat sailors with infectious diseases and people were inoculated against smallpox.*
- *By-laws were passed to prevent rubbish being tipped into the Taff.*
- *Cardiff Corporation also took control of the water supply in 1879 and built extra reservoirs.*
- *A new hospital was built in 1883. It became known as the Cardiff Infirmary.*
- *Public baths were built so that the poor could afford to bathe.*
- *New cemeteries were opened on the edge of town.*
- *The Public Health Act (1875) made public health the responsibility of local councils however by that time, Cardiff had made many improvements independently.*
- *By the end of the century the death rate in Cardiff had fallen considerably, with its infant mortality rate one of the lowest for a town its size in the UK.*

Question 6

<i>Mark allocation:</i>	<i>AO1</i>	<i>AO2</i>	<i>AO3</i>	<i>AO4</i>
12	2	10		

Question: **How significant was the work of Edwin Chadwick in improving public health and welfare?** [12]

Band descriptors and mark allocations

	AO1 2 marks			AO2 10 marks	
			BAND 4	Fully explains the significance of the issue with clear focus set within the appropriate historical context.	9-10
			BAND 3	Explains the significance of the issue set within the appropriate historical context.	6-8
BAND 2	Demonstrates detailed knowledge and understanding of the key features in the question.	2	BAND 2	Partially explains the significance of the issue with some reference to the appropriate historical context.	4-5
BAND 1	Demonstrates some knowledge and understanding of the key features in the question.	1	BAND 1	Mostly descriptive response with limited explanation of the significance of the issue.	1-3

Use 0 for incorrect or irrelevant answers.

Indicative content

This content is not prescriptive and candidates are not expected to refer to all the material identified below. Some of the issues to consider are:

- *Edwin Chadwick was significant in improving public health and welfare. He played a crucial role in advocating for sanitary improvements and better living conditions.*
- *Chadwick was a civil servant employed by the Poor Law Commission.*
- *Chadwick was asked by Parliament to look into living conditions in Britain.*
- *Chadwick's 'Report on the Sanitary Conditions of the Labouring Population' in 1842 said that much poverty and ill health was caused by terrible living conditions and not by idleness. This shocked people and changed public opinion.*
- *Statistics in the report demonstrated how unhealthy industrial towns and cities were, even for the wealthier inhabitants. The statistics compare Manchester (an industrial city) with Rutland (a rural area).*
- *Chadwick concluded that three main things were needed to improve health: refuse removal; an effective sewerage system and clean running water in every house and a qualified medical officer appointed in each area.*
- *For a few years, there was little change and his report was strongly opposed by many MP's, who were nicknamed the Dirty Party.*
- *Chadwick's recommendations meant that councils would have to increase the rates, and this would be unpopular with wealthier citizens.*
- *The cholera epidemic of 1848, where 52,000 people died in England and Wales, with 14,137 in London alone, led to a change of mind in government.*
- *The 1848 Public Health Act set up the Board of Health. Local authorities were given the power to appoint an officer of health, who had to be a doctor. They could also improve sanitation in their area by organising the collection of rubbish, building sewers and providing a clean water supply. However, because this law was not compulsory, the Board of Health could not force councils to act on its recommendations.*
- *Chadwick was very significant as he led to an improvement with Public Health reforms and his report was important. He had an influence on the Public Health Act of 1848 and influenced changes in the Poor Law System.*

Question 7

<i>Mark allocation:</i>	<i>AO1</i>	<i>AO2</i>	<i>AO3</i>	<i>AO4</i>	<i>SPaG</i>
20	6	10			4

Question: **To what extent has the care of patients improved over time?** **[16+4]**

Band descriptors and mark allocations

	AO1 6 marks		AO2 10 marks	
BAND 4	Demonstrates very detailed knowledge and understanding of the key issue in the question including clear and detailed references to the Welsh context.	5-6	Fully analyses the importance of the key issue. There will be a clear analysis of the extent of change set within the appropriate historical context.	8-10
BAND 3	Demonstrates detailed knowledge and understanding of the key issue in the question including clear references to the Welsh context.	3-4	Partially analyses the key issue along with a consideration of the extent of change in the historical context.	5-7
BAND 2	Demonstrates some knowledge and understanding of the key issue in the question.	2	Basic analysis while considering the extent of change.	3-4
BAND 1	Generalised answer displaying basic knowledge and understanding of the key issue in the question.	1	Offers a generalised response with little analysis of the extent of change.	1-2

Use 0 for incorrect or irrelevant answers.

This question requires candidates to draw upon the Welsh context in their responses. This is assessed in AO1 and candidates who do not draw upon the Welsh context cannot be awarded band 3 or band 4 marks for this assessment objective. Candidates who do not draw upon the Welsh context may, however, be awarded band 3 or band 4 marks for AO2, for an appropriately detailed analysis of the key issue.

Indicative content

This content is not prescriptive and candidates are not expected to refer to all the material identified below. Some of the issues to consider are:

MEDIEVAL AND EARLY MODERN PERIODS : c.1300s -1700s

- *During the Medieval period patient care was often in Monasteries - the infirmary was a type of hospital ward for sick patients, separated from the rest of the monastery to stop infection spreading. The Cistercians built monasteries at Valle Crucis and Aberconwy in the north, Strata Florida in mid-Wales, and Tintern in the south. The Franciscans built friaries at Bangor, Brecon, Cardiff, Denbigh and Rhuddlan.*
- *Hospitals were run by monks and nuns (named because they offered 'hospitality' - shelter to travellers, the poor and elderly to stay); there were no doctors within these hospitals; monks would pray for the souls of the patients while the nuns looked after the welfare of the patients with herbal remedies. The Knights of St John of the Order of Hospitallers built a hospital at Ysbyty Ifan to care for pilgrims.*
- *After Henry VIII ordered the dissolution of the monasteries in the 1530s, most hospitals closed as well. Some were taken on by voluntary charities or town councils took over.*
- *In London, 5 major hospitals were endowed with royal funds to care for the sick and poor e.g. St Bartholomew's Hospital serving the poor of the area of West Smithfield and St Mary Bethlehem which looked after the mentally ill.*
- *In the eighteenth century, population growth increased demand for hospitals. They were endowed hospitals Wealthy industrialists paid for them e.g. Thomas Guy, a wealthy printer and bookseller who financed the establishment of Guys Hospital in 1724. 11 new hospitals were founded in London and a further 46 across the country in the growing industrial towns and cities, including Westminster Hospital in London, Addenbrooke's Hospital in Cambridge and the Royal Infirmary Hospitals in Edinburgh and Manchester. The Bluecoat Hospital in Chester opened in 1717.*

INDUSTRIAL PERIOD : c.1800s

- *There were voluntary hospitals across Wales e.g. 1807 Denbigh General Dispensary and Asylum for the Recovery of Health opens; 1833 Wrexham established a dispensary, followed by an infirmary in 1838; 1837 the Glamorgan and Monmouth Infirmary and Dispensary in Cardiff.*
- *Hospitals became centres for treating illness with herbal remedies, performing simple surgery and dispensing medicine. Treatment was usually free.*
- *Specialist hospitals were opened e.g Stanley Sailors' Hospital, Holyhead – opened 1861 to treat sick sailors; paid for by William Owen Stanley of Penrhos; taken over by the NHS in 1948; Royal Hamadryad Hospital, Cardiff – opened 1866, to treat sick sailors, to stop infectious diseases such as smallpox from entering the town.*
- *The professionalisation of nursing led to an improvement in patient care At first, the quality of nursing in hospitals was generally poor as they lacked training or medical knowledge.*
- *Florence Nightingale was a pioneer in the way she improved standards of patient care. After her work in Crimea, e.g The death rate went from 42 in 100 to 2 in 100, on her return to England in 1856, she began a campaign to reform army medical services; she called for purpose-built hospitals with trained nurses, clean floors, plenty of light and fresh air and better food. In 1859, Nightingale published Notes on Nursing.*
- *By 1900, nursing had become recognised as a profession.*
- *In 1854 Elizabeth 'Betsi' Cadwaladr went to the Crimea to help nurse wounded soldiers. She disagreed with Florence Nightingale and left Scutari for a hospital at Balaclava. She worked long hours treating the wounded, nursing the sick. She caught cholera and dysentery and had to leave the Crimea in 1855.*

MODERN PERIOD : c.1900s-present day

- *There were many reforms in the early twentieth century.*
- *The Liberal governments of 1906–14 introduced welfare reforms designed to help people who fell into difficulty through sickness, old age or unemployment. The reforms included medical inspection of school pupils (1907), free school meals (1906), and old age pensions (1908).*
- *The National Insurance Act (1911) meant workers and employers making weekly contributions to give workers sickness benefit and free medical care from a doctor.*
- *The NHS - The Beveridge Report of 1942 identified 'disease' as one of the 'Five Evil Giants' and suggested that there should be a free national health service.*
- *Aneurin Bevan, Labour MP for Ebbw Vale, was appointed Minister of Health in 1945. He argued that everybody had the right to medical treatment according to need – rich or poor. Bevan was inspired by the system for looking after local workers he had seen in Tredegar in South Wales.*
- *From 28 July 1948, the NHS offered a range of services. The demand for health care under the new NHS went well beyond original predictions. In 1947, doctors issued 7 million prescriptions per month; by 1951 the figure was 19 million per month. By 1949, 8.5 million people had received free dental treatment. Poorer people now had free access to medical treatment which previously they could not afford.*
- *The NHS has played an important part in prevention as well as cure; it has launched health campaigns to warn of the dangers of smoking, drinking alcohol and the lack of a healthy diet.*
- *All the following have helped to improve patient care. GP services, ambulances and Accident & Emergency Departments, hospital care (tests, treatment, operations), pharmacies, mental health services, social care (children, the disabled, the elderly), dentists, opticians. Huge demand for prescriptions, glasses and dental treatment led to the introduction of charges in the 1950s.*
- *The NHS prolongs the lives of people, but older patients are more likely to need treatment. New scanning techniques and drugs have also increased the cost of running the NHS.*
- *In Wales in 1999 the Welsh Assembly took over control of the NHS in Wales.*
- *In 2007 the Welsh Assembly changed this so that prescriptions are now free in Wales.*
- *To access AO1 Bands 3 and 4 candidates will need to make reference to the Welsh context.*

After awarding a band and a mark for the response, apply the performance descriptors for spelling, punctuation and the accurate use of grammar (SPaG) and specialist language that follow.

In applying these performance descriptors:

- learners may only receive SPaG marks for responses that are in the context of the demands of the question; that is, where learners have made a genuine attempt to answer the question
- the allocation of SPaG marks should take into account the level of the qualification.

Band	Marks	Performance descriptions
<i>High</i>	4	• Learners spell and punctuate with consistent accuracy • Learners use rules of grammar with effective control of meaning overall • Learners use a wide range of specialist terms as appropriate
<i>Intermediate</i>	2-3	• Learners spell and punctuate with considerable accuracy • Learners use rules of grammar with general control of meaning overall • Learners use a good range of specialist terms as appropriate
<i>Threshold</i>	1	• Learners spell and punctuate with reasonable accuracy • Learners use rules of grammar with some control of meaning and any errors do not significantly hinder meaning overall • Learners use a limited range of specialist terms as appropriate
	0	• The learner writes nothing • The learner's response does not relate to the question • The learner's achievement in SPaG does not reach the threshold performance level, for example errors in spelling, punctuation and grammar severely hinder meaning