




CONTEXT OF THE STUDY (20%)




GROUP 1 Names:

Criteria	Comments	S a t i s f a c t o r y	Competent	Advanced	
Instructions: Use these criteria to evaluate the text.	Instructions: Input relevant sections from the text with your comments here. Use colour/highlight to annotate interesting parts.		Instructions: Input a sticker of your choice in the suitable band below.		
1. The explanations of the context are appropriately tailored to the assumed knowledge base of potential readers through explanatory strategies, suitable and sufficient information, and appropriate word choice. Both key and supplementary concepts are clear to non-specialist readers.	<p>Non-highlighted : Move 3 (Provision of general background) - Section 3-5</p> <p>Highlighted : Move 4 (Provision of rationale) Section 6 Words such as "could" helps to bolster the rationale.</p> <p>Cholera infects millions of people each year, leading to thousands of deaths. Often communities do not realize an epidemic is underway until infected individuals swarm hospitals. Advanced warning for impending epidemics could help health workers prepare for the onslaught stockpiling rehydration supplies, medicines and vaccines which can save lives and quell the disease's spread. Back in May 2017 a team of</p> <p>Cholera can spread two ways: endemically or epidemically. Coastal communities are hot spots for endemic episodes. Ocean-dwelling cholera flourish in dry and hot seasons, and can be carried ashore by high tides. Coastal towns and villages become infected, but in many locales the process happens regularly and residents are reasonably prepared for these waves of infection.</p> <p>Epidemic contamination is much less predictable, and can take inland communities by surprise. "They are not prepared—they don't have vaccines, they don't have dehydration solutions," says Antarpreet Jutla, a hydrologist and civil engineer at West Virginia University who led the Yemen study. Cholera can spread easily via water, and with a burst of warm temperatures, high precipitation and poor water infrastructure, an epidemic can blossom quickly.</p> <p>MOVE 5: Source .. says Antarpreet Jutla, a hydrologist and civil engineer at West Virginia University who led the Yemen study</p> <p>The author shows clear understanding of the subject and demonstrates use of straightfoward language without beating around the bush. The context follows a clear comprehensive point and link format.</p>	<p>Cholera is a waterborne bacterial disease that causes intestinal distress and dehydration. The illness can progress rapidly, peaking within hours or days. An overwhelming majority of cases occur in developing countries, exacerbated by poor sanitation, urban slums and refugee camps.</p>			
2. All ideas are presented coherently and logically which leads to understanding of the study's objective. Links between ideas are always explicit, and achieved through a range of cohesive devices (e.g. determiners, conjunction phrases, synonyms, repetition, transitional words).	<p>Coherence (logical link between background and rationale) Clearly shows the challenges of collecting ground data, leading to the need for a new method (from the sky: Section 6)</p> <p>Cohesion "Impending epidemic <=> Prepare for the onslaught" "Could" "overwhelming majority"</p> <p>(Section 2): Back in May 2017 a team of scientists used satellite information to assess whether an outbreak would occur in Yemen, and they ended up predicting an outburst that spread across the country in June.</p> <p>Synonyms: Cholera (disease/illness)</p>				
3. The writing is fluent; the author shows good control of language use with few or no sporadic grammar/syntax errors occurring only as 'slips'.	Fluent, no obvious grammar/syntax errors.				

There is a range of bands here.
Overall score: Low Competent
due to (4) being the highest priority




THE REPORTED STUDY (30%)

GROUP 2 Names:

Criteria	Comments	Satisfactor y	Competent	Advanced
Instructions: Use these criteria to evaluate the text.	Instructions: Input relevant sections from the text with your comments here. Use colour/highlight to annotate interesting parts.	Instructions: Input a sticker of your choice in the suitable band below.		
4. The explanations of the reported study are appropriately tailored to the assumed knowledge base of potential readers through explanatory strategies, suitable and sufficient information, and appropriate word choice. Both key and supplementary concepts are clear to non-specialist readers.	<p>Move 1 – Introduce the key finding Scientists are also using data satellites to solve a worldwide problem: predicting cholera outbreaks. (section 1)</p> <p>Move 5 – Provide the source "Antarpreet Jutla, a hydrologist and civil engineer at West Virginia University who led the Yemen study." (section 5)</p> <p>Move 6 – State the methods & findings "The team used a handful of satellites to monitor temperatures, water storage, precipitation and land around the country. By processing that information in algorithms they developed, the team predicted areas most at risk for an outbreak over the upcoming month." (section 7)</p> <ul style="list-style-type: none"> The author mentioned the parameters used in this study but did not go in-depth (which would turn off non-specialised readers) on how they are used or collected in the algorithms. <p>Weeks later an epidemic occurred that <u>closely resembled</u> what the model had predicted (section 8)</p> <ul style="list-style-type: none"> The model seems to work! <p>Move 7 – Explain the result</p> <p>MIA</p> <ul style="list-style-type: none"> Lack of explanation of the result in the article Key concepts are not clear: the author didn't explain how 'satellite data on temperatures, water storage, precipitation and land around the country' can help scientists predict a cholera outbreak. <p>Explanatory strategies - could be used more and more effectively (e.g. technical terms like hydrology, epidemiology, endemically, epidemically are not explained) Definition – explain unknown words Description – explain unknown things Analogies & metaphors – express comparison and highlight similarities Exemplification – providing a more concrete example Non-technical words – change technical terms used in research article Functional recontextualization</p>			
5. All ideas are presented coherently and logically which support the key finding/claim introduced in Move 1. Links between ideas are always explicit and achieved through a range of cohesive devices (e.g. determiners, conjunction phrases, synonyms, repetition, transitional words).	<p>Coherence – logical flow of writing</p> <ul style="list-style-type: none"> Section 2, 3, 4, 5 - Significance of cholera highlighted at the start, to create a sense of importance of trying to solve the issue. Section 6 - Shows the current limitations of trying to control a cholera outbreak and how using satellites can help to alleviate these issues <p>-> this should be evaluated under 'Context' not 'Reported Study'</p> <ul style="list-style-type: none"> Section 7, 8 - Presents how the satellite method actually worked to predict an actual outbreak. Section 11 - Discusses potential uses of the satellite method for future applications <p>Use of subheadings - "Testing the waters", "Disease in real time", "Helping the sick"</p> <p>Section 8: "based on data from Bengal Delta in southern Asia and parts of Africa... something we did not expect..."</p> <p>---> author should describe why and how the research team applied the data from southern Asia and parts of Africa in the algorithm to predict cholera outbreak in Yemen</p> <p>Cohesion – use of linking words or phrases</p> <p>-Transitional words</p> <ul style="list-style-type: none"> however For those reasons <p>-Pronouns or reference words</p> <ul style="list-style-type: none"> research team: "they", "the team" 			
6. The writing is fluent; the author shows good control of language use with few or no sporadic grammar/syntax errors occurring only as 'slips'.	<p>Writing is fluent.</p> <p>No grammar or syntax errors were identified.</p> <p>Required Reading Derouin, S. (January 3, 2018). Satellites Predicts a Cholera Outbreak Weeks in Advance, Scientific American. https://www.scientificamerican.com/article/satellites-predict-a-cholera-outbreak-weeks-in-advance/</p>			

READER ENGAGEMENT (25%)

GROUP 4 Names:

Criteria	Comments	Satisfactory	Competent	Advanced
Instructions: Use these criteria to evaluate the text.	Instructions: Input relevant sections from the text with your comments here. Use colour/highlight to annotate interesting parts.	Instructions: Input a sticker of your choice in the suitable band below.		
10. The writing style /tone/register (including citation) is always appropriate to the popular science news genre.	<p>All citations are embedded into the text in an appropriate format (weblinks that redirect you to other pages), and in a way that allows for a smooth flow of the article. e.g. Weeks later an epidemic occurred that <u>closely resembled</u> what the model had predicted</p> <p>More informal/interesting: Use of descriptive words to make reader visualise the growth of the disease e.g. "blossom, burst" (section 5), "swarm", "textbook case" vs More formal/academic: "endemically, epidemically" (section 4), "intestinal distress"</p>			
11. The author successfully employs appeals to entice the readers to read the article. appeals = deontological and teleological	<p>Teleological appeal: e.g. Advanced warning for impending epidemics could help health workers prepare for the onslaught—stockpiling rehydration supplies, medicines and vaccines—which can save lives and quell the disease's spread (section 2)</p> <p>The article focuses on being informative and providing all the facts necessary, rather than focusing on appealing to the reader.</p>			
12. The author consistently shows dialogic involvement and immediacy with readers through a wide range of language features such as use of questions, pronouns, unexpectedness, and asides.	<p>Lack of personal and inclusive pronouns makes the tone of the article seem very distant (very limited to Section 1)</p> <p>"taco joint" was a bit out of place; no link to cholera; can have more relevant appeals (section 1) "satellites can warn us of bad weather and help us to navigate to that new taco joint".</p>			

Required Reading

Derouin, S. (January 3, 2018). Satellites Predicts a Cholera Outbreak Weeks in Advance, Scientific American. <https://www.scientificamerican.com/article/satellites-predict-a-cholera-outbreak-weeks-in-advance/>

ACTIVITY II: GROUP 1 ANALYSIS

One method they used to create the group is called stacking. It's a process of inputting data into the first classification model, then the next, and the next until the last model gives us the outcome. Think of it as a sieve stack and the patients who are at risks are the smallest and finest rocks. The sieves have varying hole sizes, and each sieve represents a unique classification model. The first sieve, which has the largest hole size, filters out the bigger rocks and the rest of the smaller rocks goes through the holes to the next sieve with a smaller hole size. This process continues until the last sieve with the smallest hole size. Leaving the finest and smallest rocks at the bottom which in this case are the patients with risks of getting heart disease.

The multiple sieve filtering process represents different groups of classification models to filter out the patients, providing a much more accurate way to obtain the classification as compared to using just a single sieve. Ultimately, achieving the 99.97% accuracy.

Instructions: Identify different explanatory strategies and code them in different colours. Evaluate their effectiveness.

Strategy	Effectiveness
Description	Our group finds that the description may perhaps be a little tad too long, this may lead to readers becoming distracted and disengaged with what the writer is trying to convey.
Analogy	Effective - readers presumably understand how sieves work and it's easy to make the connection between stacking and sieving .
Functional recontextualisation	Our groups finds the the highlighted attempts to remind readers of the sieve being applied to the description above. However it has shifted the focus beyond what is stacking.
Non-technical terms	Instead of 'stacking' effective as it helps reader recall the explanatory strategy (analogy) just before this



ACTIVITY II: GROUP 2 ANALYSIS

One method they used to create the group is called stacking. It's a process of inputting data into the first classification model, then the next, and the next until the last model gives us the outcome. Think of it as a sieve stack and the patients who are at risks are the smallest and finest rocks. The sieves have varying hole sizes, and each sieve represents a unique classification model. The first sieve, which has the largest hole size, filters out the bigger rocks and the rest of the smaller rocks goes through the holes to the next sieve with a smaller hole size. This process continues until the last sieve with the smallest hole size. Leaving the finest and smallest rocks at the bottom which in this case are the patients with risks of getting heart disease.

The multiple sieve filtering process represents different groups of classification models to filter out the patients, providing a much more accurate way to obtain the classification as compared to using just a single sieve. Ultimately, achieving the 99.97% accuracy.

Instructions: Identify different explanatory strategies and code them in different colours. Evaluate their effectiveness.

own words
own things
express
similarities
g a more
nge technical
icle
tion

Strategy	Effectiveness
Analogy	Effective. Good analogy which accurately illustrates the method of stacking
Description	Not effective --> Confusing inputting data into the first model, then the next... not sure exactly what goes into subsequent models after the first (input of first model or output of first model?) doesn't add much value



ACTIVITY II: GROUP 3 ANALYSIS

One method they used to create the group is called stacking. It's a process of inputting data into the first classification model, then the next, and the next until the last model gives us the outcome. Think of it as a sieve stack and the patients who are at risks are the smallest and finest rocks. The sieves have varying hole sizes, and each sieve represents a unique classification model. The first sieve, which has the largest hole size, filters out the bigger rocks and the rest of the smaller rocks goes through the holes to the next sieve with a smaller hole size. This process continues until the last sieve with the smallest hole size. Leaving the finest and smallest rocks at the bottom which in this case are the patients with risks of getting heart disease.

The multiple sieve filtering process represents different groups of classification models to filter out the patients, providing a much more accurate way to obtain the classification as compared to using just a single sieve. Ultimately, achieving the 99.97% accuracy.

Instructions: Identify different explanatory strategies and code them in different colours. Evaluate their effectiveness.

Strategy	Effectiveness
Description	Effective, described the <u>process</u> of stacking quite accurately
Analogy	Too long



ACTIVITY II: GROUP 4 ANALYSIS

One method they used to create the group is called stacking. It's a process of inputting data into the first classification model, then the next, and the next until the last model gives us the outcome. Think of it as a sieve stack and the patients who are at risks are the smallest and finest rocks. The sieves have varying hole sizes, and each sieve represents a unique classification model. The first sieve, which has the largest hole size, filters out the bigger rocks and the rest of the smaller rocks goes through the holes to the next sieve with a smaller hole size. This process continues until the last sieve with the smallest hole size. Leaving the finest and smallest rocks at the bottom which in this case are the patients with risks of getting heart disease.





The multiple sieve filtering process represents different groups of classification models to filter out the patients, providing a much more accurate way to obtain the classification as compared to using just a single sieve. Ultimately, achieving the 99.97% accuracy.

Instructions: Identify different explanatory strategies and code them in different colours. Evaluate their effectiveness.

Strategy	Effectiveness
Description (highlighted in yellow)	
Analogy (highlighted in blue)	
non-technical words (red)	effective, carries the idea of filtering

**SIGNIFICANCE OF THE KEY FINDING
(25%)**

GROUP 3 Names:

Criteria	Comments	Satisfactory	Competent	Advanced
Instructions: Use these criteria to evaluate the text.	Instructions: Input relevant sections from the text with your comments here. Use colour/highlight to annotate interesting parts.	Instructions: Input a sticker of your choice in the suitable band below.		
7. The implication of the key finding and/or how the reported study advances the field is highly specific and clearly links to the context of the study. Readers clearly understand why this study is 'significant' to the field and multiple stakeholders.	<p>(section 2) Context of study Cholera infects millions of people each year, leading to thousands of deaths. Often communities do not realize an epidemic is underway until infected individuals swarm hospitals...advanced warning could help to prepare...</p> <p>(section 9) Implication of key finding ... says their model for cholera is highly predictive."This is a mechanism that will help preparation with medical supplies and vaccinations."</p> <p>(section 10) Wimberly agrees. "That's the value of disease forecasting: to be able to anticipate the right place, a little bit ahead of time, so we can get those tools out there."</p>			<p>The writer showed how dangerous cholera is and how the innovation could prevent a future outbreak, or at least minimise the victims</p> 
8. The author evaluates the finding effectively by providing sufficient evidence and logical explanation.	<p>(section 7) Evaluating the effectiveness/accuracy of the model Weeks later an epidemic occurred that closely resembled what the model had predicted</p> <p>(section 8) The successful prediction did give the team confidence that their model, built on a variety of data types, is on the right track.</p> <p>(section 9) (objective voice) borrowed an expert voice... "well grounded in hydrology and epidemiology".</p>			<p>only considered the effectiveness of the model, not the satellite data used for the model</p> 
9. The significance of the finding is appropriately appraised with balanced views and effective use of evaluative language for the context of evaluation.	<p>Section 10 fast-moving disease...advanced warnings matter, especially in remote places. They offer a major advantage... preparation with medical supplies and vaccinations.</p> <p>Section 11 'The team is cautious about broadcasting disease forecasts, not wanting to create public panic. They are working with several international agencies on the best way to communicate future predictions. They are also developing a platform that uses hydrologic and societal conditions to determine the probability of cholera outbreaks globally—with a goal of providing warnings that offer four weeks of lead time.'</p>			<p>balanced views as the writer showed restraint when presenting the innovation. However, he could've further elaborated on what some limitations were. need to show that this is innovative</p>  <p>SLAYED IT</p>

Required Reading

Derouin, S. (January 3, 2018). Satellites Predicts a Cholera Outbreak Weeks in Advance. Scientific American. <https://www.scientificamerican.com/article/satellites-predict-a-cholera-outbreak-weeks-in-advance/>

OVERVIEW: RUBRIC/CRITERIA
(refer to p.22 -26 of the Course
Information document)

CLARITY

COLOUR

Hi

Context of the study (20%)

**Appropriate explanation
of context**

**Explanatory
strategies**

**Appropriate
word choice**

**Suitable &
sufficient
information**

Move 3:
General
background

Move 4:
Rationale

Move 5:
Source

**Language use
(fluency)**

**Coherence &
Cohesion**

The reported study (30%)

**Appropriate explanation
of reported study**

**Explanatory
strategies**

**Appropriate
word choice**

**Suitable &
sufficient
information**

Move 1:
Introduce the
key finding

Move 6:
Methods and
findings

Move 5:
Source

Move 7:
Explain the
results

**Language use
(fluency)**

**Coherence &
Cohesion**

**Significance of the finding
(25%)**

**Implication
(to the field and
society)**

**Link between
Implication and
context**

**Evaluative
language**

**Appraisal
(balanced
views)**

**Evaluation
(sufficient evidence
and/or logical
explanation)**

Move 2:
Describe the
significance

Move 8:
Evaluate the
results

Move 5:
Source

Reader engagement (25%)

**Tone &
Register**

Appeals

**Language features
(e.g. pronouns/
rhetorical questions)**

Instructions: Click and drag the elements below into the categories above.
***Note:** red elements receive the highest priority within each category