

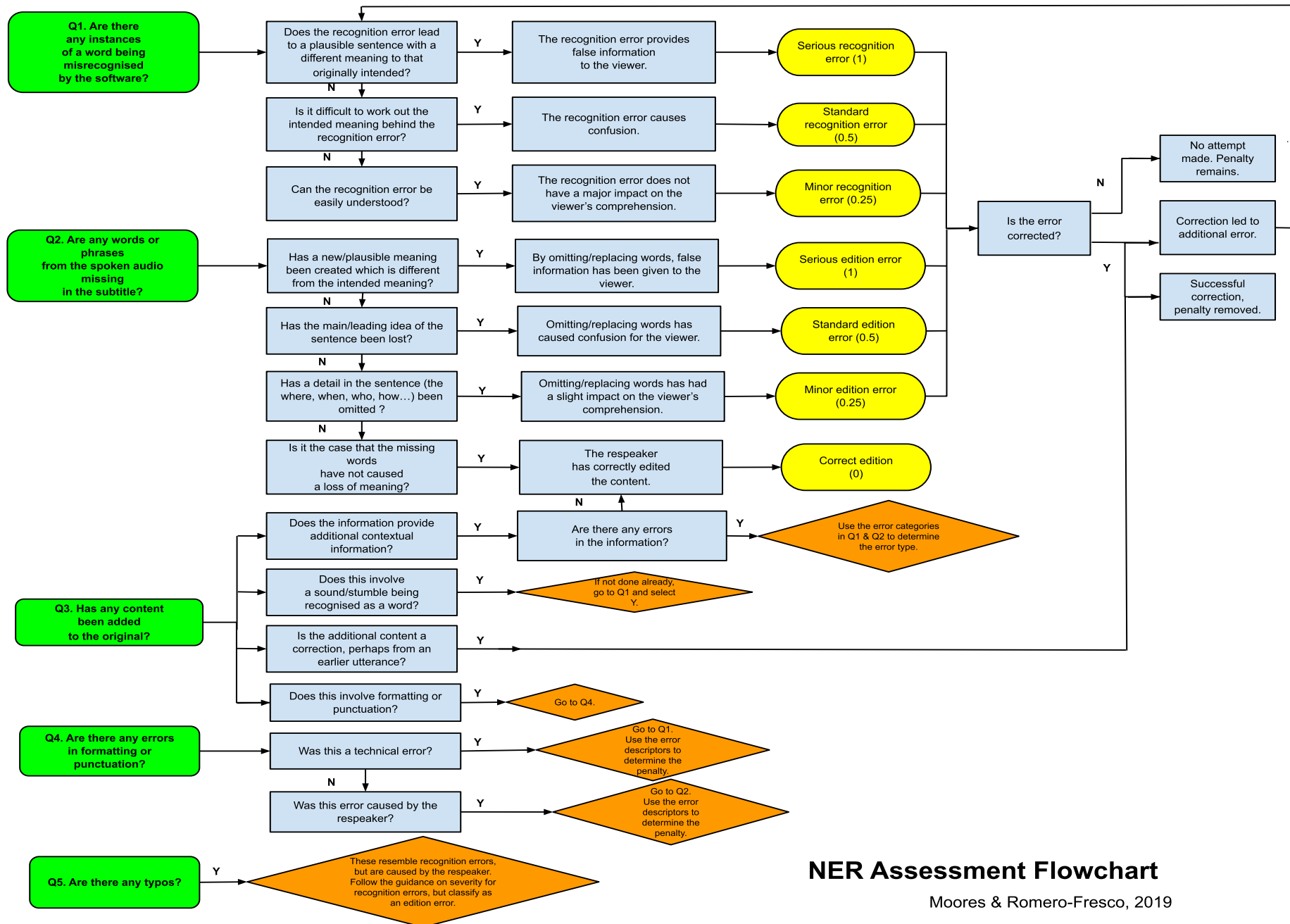
Measuring the quality of intralingual respeaking at live events

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1. NER Assessment Flowchart



NER Assessment Flowchart

Moores & Romero-Fresco, 2019

NER Assessment Flowchart, Moores and Romero-Fresco, 2019

Explanation:

This flowchart has five main questions, each with a series of sub-questions that either lead to different penalties being deducted, or a correct edition being recorded. Whenever an error is logged, the scorer must ask whether the error is corrected. If no attempt is made to correct the error, the penalty remains. If an attempt is made to correct the error, there are two possible outcomes. If the correction leads to an additional error being made, the person scoring must return to the start and assess the impact of this additional error. However, if the correction is successful, the penalty can be removed.

Questions and scoring pathways:

Question 1: Are there any instances of the word being misrecognised by the software? If the answer is yes, there are three possible sub-questions. A) Does the recognition error lead to a plausible sentence with a different meaning to that originally intended? If so, this means the recognition error provides false information to the viewer and a serious recognition error is recorded. One point is deducted. If the answer is no, move on. B) Is it difficult to work out the intended meaning behind the recognition error? If so, this means the recognition error causes confusion and a standard recognition error is recorded. 0.5 is deducted. If the answer is no, move on. C) Can the recognition error be easily understood? If so, the recognition error does not have a major impact on the viewer's comprehension and a minor recognition error is recorded. 0.25 is deducted.

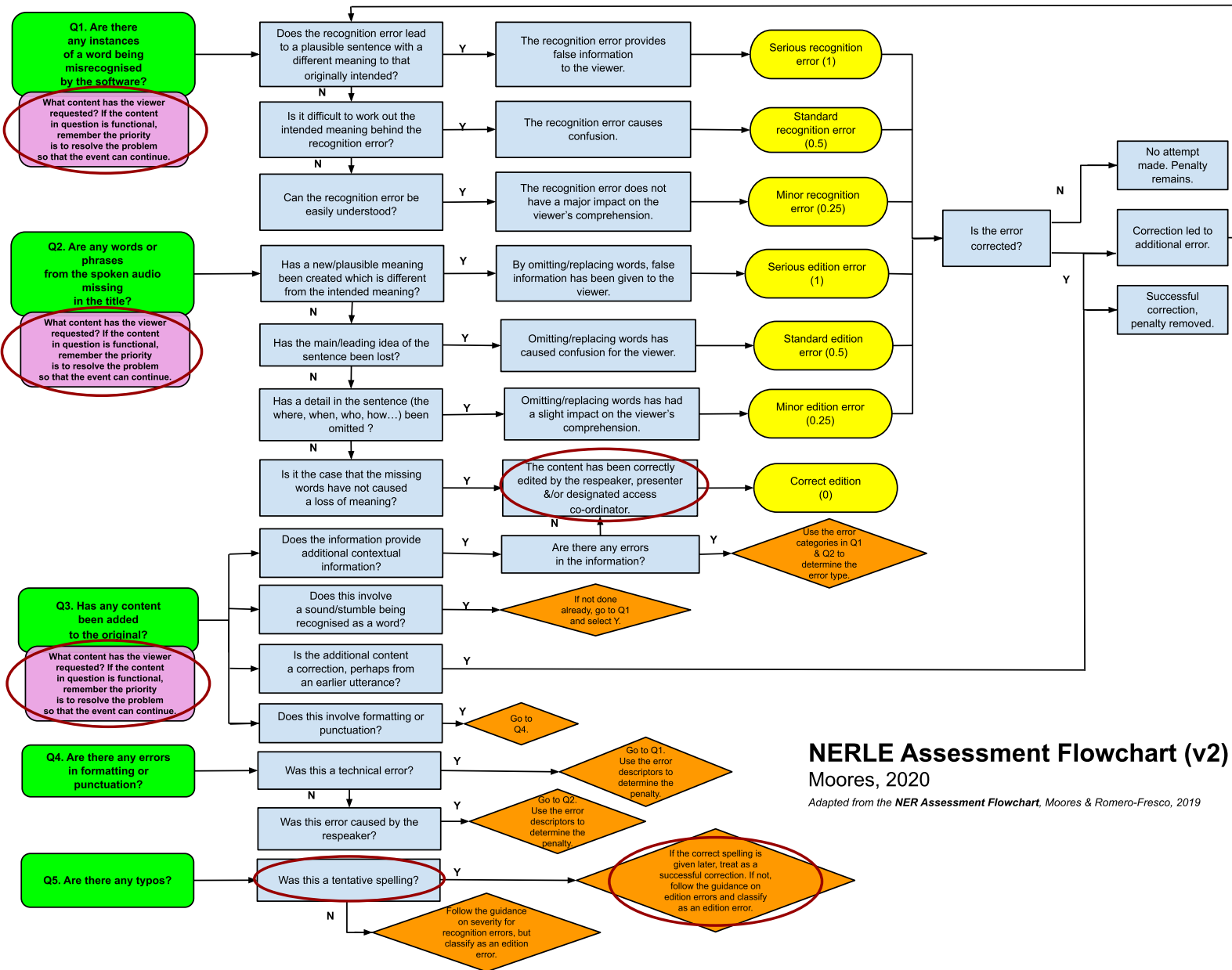
Question 2: Are any words or phrases from the spoken audio missing in the subtitle? If the answer is yes, there are four possible sub-questions. A) Has a new/plausible meaning been created which is different from the intended meaning? If so, by omitting/replacing words, false information has been given to the viewer and a serious edition error is recorded. One point is deducted. If the answer is no, move on. B) Has the main/leading idea of the sentence been lost? If so, omitting/replacing the words has caused confusion for the viewer and a standard edition error is recorded. 0.5 is deducted. If the answer is no, move on. C) Has a detail in the sentence (the where, when, who, how...) been omitted? If so, omitting/replacing words has had a slight impact on the viewer's comprehension and a minor edition error is recorded. 0.25 is deducted. If the answer is no, move on. D) Is it the case that the missing words have not caused a loss of meaning? If so, the respeaker has correctly edited the content and a correct edition is recorded. There is no penalty for a correct edition.

Question 3: Has any content been added to the original? If the answer is yes, there are four sub-questions. A) Does the information provide any additional contextual information? If so, are there any errors in the information? If no, and there are no errors, the respeaker has correctly edited the content and a correct edition error applies. If the answer is yes and there are errors in the information, use the error categories in questions one and two to determine the error type. B) Does this involve a sound/stumble being recognised as a word? If the answer is yes, the instruction given is to go to question one (if this has not already been done) and select yes. C) Is the additional content a correction, perhaps from an earlier utterance? If the answer is yes, evaluate whether the correction was successful. If the correction led to an additional error, return to question one and assess the impact of that error. If the correction was successful, the penalty can be removed. D) Does this involve formatting or punctuation? If the answer is yes, the instruction is to move on to question four.

Question 4: Are there any errors in formatting or punctuation? There are two sub-questions. A) Was this a technical error? If the answer is yes, the instruction is to go to question one and use the error descriptors to determine the penalty. If the answer is no, move on. B) Was this error caused by the respeaker? If the answer is yes, the instruction is to go to question two and use the error descriptors to determine the penalty.

Question 5: Are there any typos? If the answer is yes, the instruction is that these resemble recognition errors, but are caused by the respeaker. Follow the guidance on severity for recognition errors but classify as an edition error.

2. NERLE Assessment Flowchart (v.2), Moores, 2020 – with adaptations circled



NERLE Assessment Flowchart (v2)
 Moores, 2020

Adapted from the NER Assessment Flowchart, Moores & Romero-Fresco, 2019

NERLE Assessment Flowchart (v.1), Moores, 2020 (adapted from the NER Assessment Flowchart, Moores & Romero-Fresco, 2019).

This version of the flowchart highlights the differences between the NER and NERLE.

Explanation:

This flowchart has five main questions, each with a series of sub-questions that either lead to different penalties being deducted, or a correct edition being recorded. Whenever an error is logged, the scorer must ask whether the error is corrected. If no attempt is made to correct the error, the penalty remains. If an attempt is made to correct the error, there are two possible outcomes. If the correction leads to an additional error being made, the person scoring must return to the start and assess the impact of this additional error. However, if the correction is successful, the penalty can be removed.

Questions and scoring pathways:

Question 1: Are there any instances of the word being misrecognised by the software? When answering, there is a reminder to the person scoring which reads, “What content has the viewer requested? If the content in question is functional, remember the priority is to resolve the problem so that the event can continue.” [Difference one: this reminder is not present in the NER.] If the answer is yes, there are three possible sub-questions. A) Does the recognition error lead to a plausible sentence with a different meaning to that originally intended? If so, this means the recognition error provides false information to the viewer and a serious recognition error is recorded. One point is deducted. If the answer is no, move on. B) Is it difficult to work out the intended meaning behind the recognition error? If so, this means the recognition error causes confusion and a standard recognition error is recorded. 0.5 is deducted. If the answer is no, move on. C) Can the recognition error be easily understood? If so, the recognition error does not have a major impact on the viewer’s comprehension and a minor recognition error is recorded. 0.25 is deducted.

Question 2: Are any words or phrases from the spoken audio missing in the subtitle? When answering, there is a reminder to the person scoring which reads, “What content has the viewer requested? If the content in question is functional, remember the priority is to resolve the problem so that the event can continue.” [Difference two: this reminder is not present in the NER.] If the answer is yes, there are four possible sub-questions. A) Has a new/plausible meaning been created which is different from the intended meaning? If so, by omitting/replacing words, false information has been given

to the viewer and a serious edition error is recorded. One point is deducted. If the answer is no, move on. B) Has the main/leading idea of the sentence been lost? If so, omitting/replacing the words has caused confusion for the viewer and a standard edition error is recorded. 0.5 is deducted. If the answer is no, move on. C) Has a detail in the sentence (the where, when, who, how...) been omitted? If so, omitting/replacing words has had a slight impact on the viewer's comprehension and a minor edition error is recorded. 0.25 is deducted. If the answer is no, move on. D) Is it the case that the missing words have not caused a loss of meaning? If so, the respeaker has correctly edited the content and a correct edition is recorded. **If so, the content has been correctly edited by the respeaker, presenter &/or designated access co-ordinator and a correct edition is recorded. [Difference three: in the NER model, this statement reads, "The respeaker has correctly edited the content." No mention is made of the presenter or designated access co-ordinator.]** There is no penalty for a correct edition.

Question 3: Has any content been added to the original? **When answering, there is a reminder to the person scoring which reads, "What content has the viewer requested? If the content in question is functional, remember the priority is to resolve the problem so that the event can continue."** [Difference four: this reminder is not present in the NER.] If the answer is yes, there are four sub-questions. A) Does the information provide any additional contextual information? If so, are there any errors in the information? If no, and there are no errors, the respeaker has correctly edited the content and a correct edition error applies. If the answer is yes and there are errors in the information, use the error categories in questions one and two to determine the error type. B) Does this involve a sound/stumble being recognised as a word? If the answer is yes, the instruction given is to go to question one (if this has not already been done) and select yes. C) Is the additional content a correction, perhaps from an earlier utterance? If the answer is yes, evaluate whether the correction was successful. If the correction led to an additional error, return to question one and assess the impact of that error. If the correction was successful, the penalty can be removed. D) Does this involve formatting or punctuation? If the answer is yes, the instruction is to move on to question four.

Question 4: Are there any errors in formatting or punctuation? There are two sub-questions. A) Was this a technical error? If the answer is yes, the instruction is to go to question one and use the error descriptors to determine the penalty. If the answer is no, move on. B) Was this error caused by the respeaker? If the answer is yes, the instruction is to go to question two and use the error descriptors to determine the penalty.

Question 5: Are there any typos? **There is one sub-question. A) Was this a tentative spelling? If the answer is yes, the instruction is that if the correct spelling is given later, treat it as a successful correction. If the answer is no, the instruction**

is to follow the guidance on severity for recognition errors, but to classify the error as an edition error. [The sub-question and 'if yes' guidance are differences five and six. In the NER, the question 'Are there any typos?' leads straight to the instruction to follow the guidance on severity for recognition errors.]

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For more information about the live events where this model was tested:

Moore, Z. (2020) 'Fostering access for all through respeaking at live events', *JoSTrans*, 33, 176-211.

Please do get in touch with any questions or comments.

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