I. Title:

II. Purpose

<table>
<thead>
<tr>
<th>Research Question</th>
<th>What are you trying to find out?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Background</td>
<td>(previous assumptions and hypotheses in the literature),</td>
</tr>
<tr>
<td></td>
<td>What is known about the problem/assumption/hypothesis?</td>
</tr>
<tr>
<td></td>
<td>What other sort of experimental/instrumental work has been done?</td>
</tr>
<tr>
<td>Importance</td>
<td>Why is this topic of interest?</td>
</tr>
<tr>
<td></td>
<td>What importance to theory is there / what empirical gap does it fill?</td>
</tr>
<tr>
<td>Justification</td>
<td>How will your study decrease confusion/increase knowledge?</td>
</tr>
</tbody>
</table>

III. Hypothesis (for experimental work)

Should be short tractable test of some aspect of theory (if experimental) with one of the two structures:

1. **H1-H0**: Given assumptions (A, B, C) a speaker/hearer should behave in the following way. (single hypothesis). That is, in terms of this experiment there should be this specific quantifiable outcome: ...

2. **H1-H2-H0**: There are two competing hypotheses in the field: An outcome of the sort A can be interpreted as supporting hypothesis A, an outcome of the sort B can be interpreted as supporting hypothesis B. In terms of this experiment, the specific quantifiable outcome A supports Hypothesis A, and the specific quantifiable outcome B supports Hypothesis B.

Note that in all cases there is always a NULL hypothesis which means that you can’t interpret your results (ie nothing happened). It is very important to state your hypotheses in positive terms and be sure that you are not predicting a null result. An example of a misuse of the null is something like: “If [measure X] is greater for [variable A] than for [variable B], then Hypothesis A is supported, if not then Hypothesis B is supported.” The second half of the statement is the null.
### IV. Procedure

**Exact description of the methods you will use:**
1. Number of speakers/hearers of a language
2. Recording methods
3. Sampling and bit rate
4. Details about the type of analysis (ex: 512 point FFT with overlaid 12 coefficient LPC)
5. Details about how exactly the measurement was taken (ex: at which points in the vowel were the measurements taken?)

### V. Data/calculations/results

**A basic description of the outcome without reference to the hypothesis being tested** (short but dry), numbers and graphs to illustrate the numbers: figures should be illustrations or summaries of what has already been said in the text. Numbers don’t speak for themselves, you should talk the reader through them. Every graph should have a title that clearly describes the general idea, labels on each axis, and only one or two things going on. Every figure should have a clear caption below it that should completely describe what the figure is about (a figure should be able to stand in its own).
VI. Conclusions

Discuss the results
To what degree was there a clear outcome?
If a single hypothesis study, was the hypothesis borne out?
If a competing hypothesis study, which hypothesis was borne out?
Remember that a Null result means that you don’t know what happened.
It can’t be interpreted, but you can try to figure out why you didn’t get a result (hypothesis too vague?, uncontrolled variables? measure too crude? apriori assumptions invalid? too small or too noisy a sample? competing force at work?).

Conclusion
How do the results bear on the field?
Does theory need to change / is theory strengthened?
What further study needs to be done: follow up experiments?

If your data was too noisy to make any clear conclusions, don’t panic, don’t fudge the results! Take stock of how the experiment was designed and run and make suggestions for a future plan that will end up with cleaner results. Remember you can’t really conclude anything from null results and post-hoc data massaging is a dangerous tool. Better to try to think of different ways of tackling the problem.

VII. References

Don’t plagiarize, give credit where credit is due!

Any time you can back up a claim about an assumption in the field, a current theory, a history of experiments, some fact about a language, you will sound much more believable if you can back it up with a published work. Put your reference where your mouth is.

Don’t just sprinkle this section with your favorite references, if you cited it it goes here, if not leave your reading list for your next textbook.