**Editor's Note:** Allan and Marth Munro (faculty at Tshwane University of Technology in South Africa) have designed the following material to assist writers who wish to submit research articles to VASTA's *Voice and Speech Review* (VSR). We know many voice and speech trainers may be involved in important, even groundbreaking research, but lack formal training in research methods. To bridge this gap, Allan and Marth provide step-by-step guidelines for developing an article with specific instructions as to how to devise a research proposal. Though formal proposals are not required by the VSR, they are highly recommended. Not only do they force a writer to structure and focus ideas early in the process, but they allow an editor to more clearly understand a project and give pertinent advice. And of course, the more time spent organizing and planning an article, the better the chance of its success.

Also note, though these guidelines were written specifically with research articles in mind, Allan and Marth want to emphasize they are appropriate for use with theses, dissertations, book chapters, conference papers or any type of research project.

## ASPECTS OF RESEARCH METHODOLOGY
## SPECIFICALLY FOR DEVELOPING A RESEARCH ARTICLE

Developed by

Allan and Marth Munro

**INTRODUCTION:**

The purpose of this small guide is to direct you through the process of developing a RESEARCH PROPOSAL, which will lead to a RESEARCH ARTICLE. It is important to realise that the PROPOSAL (which incorporates the PLANNING of the research that is to be done) ideally should mirror the Article or Research Report that is to be written. As such, the Proposal is just a shortened form of the Article.

Any RESEARCH PROPOSAL (And Article) works most effectively if it contains a number of elements, and a logical development in thinking.

At the outset remember this very important point: A Research project (and article) needs to fulfil TWO requirements:

➤ The project needs to EXPLORE A PARTICULAR THING TO GET AN ANSWER (this is obvious), AND

➤ The project needs to demonstrate that YOU THE RESEARCHER KNOW HOW TO WORK THE SYSTEM! It is useful to reframe this carefully. We

tend to think that there are a whole lot of hoops we have to jump through to be successful researchers. But in essence all we have to do is to find ways that persuade the readers that our answers are right! The system doesn't instruct as to what to do. What the system does do is to offer us tried and tested strategies to use. The content or information is ours. The ways of proving the information correct is shared.

Okay, putting it less crudely, it is important to "reframe the purpose of the article." The purpose of the article is to present new knowledge in such a way that the reader believes that you haven't thumb-sucked the information.

Please note this does NOT exclude personal experience. We just have to frame the personal experience in effective ways. (That is actually the "how to do research" part). In other words we are looking to finding new CONTENT, but also demonstrating that we know WHAT FORM THAT CONTENT HAS TO TAKE to be at its most persuasive. Generally speaking, examiners (and peer-reviewers) of your project will be looking at BOTH aspects. So, bearing this in mind, let's start.

(We need to make a short diversion here to speak about the nature of the "personal experience." Using personal experience in your research is very important. However, in research, "personal experience" has three vital components. The first one is the experience – or sets of experiences. The second one is the "translation" of these experiences into words – the problem is that articles are presented in words, and so one has to move from the experience to the description of the experience. The third one is the difficult one, and that is attempting to find some way of checking whether the personal experience is in fact "shared," or "true under different circumstances," or even – and we dislike this word but it is in the nature of some research – "objectifiable." The researchers call this the process of verification. So please wrestle with all three these concepts before you claim the truth simply based on experience.)

We need to make a key point here. FINDING OUT INFORMATION THAT YOU DIDN'T KNOW ON A SUBJECT AND THEN PRESENTING WHAT YOU FOUND OUT is *not doing research*. This is called "reading up on a topic" or "doing a background study." Of course this is a crucial part of the process. However if you are doing research, this means you take the extra step to *solve a problem*, or perhaps more clearly framed, to come to some form of *conclusion*. Hold onto this point – it is very important.

**YOUR AUDIENCE**

Writers often find it useful to write for a specific audience. With research articles, you can imagine you are writing for the following two readers:

- *Assume one reader of your research is a **highly intelligent**, but **uninformed**, reader – one that doesn't know your field, but, through logical deduction, might be able to pick holes in your argument and the logic of your planning and procedure.*
- *Assume another reader is a specialist in your field, and has lots of experience both as a reviewer and as a published writer. You can bet your peer-reviewer will fit this profile.*

Thinking of the first reader forces you to write clearly and logically, never leaving a step out nor making too many bold expectations that your reader will be acquainted with information that is not in your article. It is useful to set up in your mind a specific GHOST READER to represent this first reader. It may be your advanced undergraduate student who is dying to learn from you — but you better not make any omissions, because the student will say: "this is great, but how did you get from here to here in your argument?"

The second reader, the peer-reviewer who is checking to see whether you are trying to "baffle with bull," helps to keep you on your toes. You know this reader will look for accuracy and will check the way you tested your material and problem. You can select another GHOST READER, such as the specialist who is dying to have someone expand the field in which he/she is also working — another colleague — but wants you to do it "sensibly and responsibly." With a bit of luck, viewing the peer-reviewer in this way will dispel any chance of seeing him/her as an "ogre." We always hope — and in most cases we are right —that the peer-reviewer is acting as a "quality-controller" for the discipline, not as a "counter-arguer." As such the peer-reviewer "assesses" the argument and its effectiveness, but only engages with the argument if you have left gaping holes in your logic.

You must convince both readers of the necessity of the study you are undertaking, and that you know what you are doing.

**THINKING MODEL**

The central model we shall be using is that of *a funnel*. The top part of the funnel is very wide, but the aperture at the bottom is very small. The "stuff" that you put into the funnel moves from this top part, and is "guided" down to the small aperture at the bottom. This must be the thinking process and the reading process for the writing of the proposal.

**TITLE:**

As a general rule of thumb only finalise your title once you are sure of what you are setting out to do and what problem you are attempting to solve. Generally, the title should contain the buzzwords of the area in which you are working, and the things that you are investigating. One reason for this may not have occurred to you. Since databases often capture only the keywords from the title, you want "encourage" researchers to read your work by making sure the search engines find and present your article!

**THE BASICS**

The Process can best be described by using a neat little list of tasks for simplification purposes. The list goes like this:
- Contextualise
- Problematise
- Theorise (Hypothesise)
- Methodologise
- Strategise
- Summarise

These six elements form the backbone of the approach. We shall attempt to give you guidelines for each stage of the procedure.

- **CONTEXTUALISATION (the top part of the funnel):**

It is important to note at the outset that Research needs to be done not simply to document a procedure, but to SOLVE A PERCEIVED PROBLEM or ANSWER A SPECIFIC QUESTION. (Although this may be slightly more difficult if you are dealing with the biographies or histories of particular people or events, it is a worthwhile

concept to keep in mind). Metaphorically, think of the process as a funnel. Thus in the greater scheme of things you should attempt to:

➢ Define a *FIELD* in which you are going to work — THEATRE for example. Then within the FIELD of Theatre you

➢ Define a particular *AREA* of Theatre that you are going to consider --Voice, for example, or Movement. Within this AREA you now

➢ Define a particular **ASPECT** of your area — Accents, for example, or the Semiotics of Physical Theatre. Within this ASPECT you now have identified you

➢ Address a particular *PROBLEM* you wish to investigate, and for which you think that you can provide a solution. For example, "Using second language as a base for the acquisition of third language accents," or "Embodying and revealing Deep Structure in Wheel-chair bound Physical Theatre practitioners." (This last point on developing PROBLEMS will be dealt with below, so relax here for a minute).

**CONTEXTUALISATION** therefore means simply locating your area and aspect of research so that you *have ground in which to pose your problem*. It is, if you will, the background against which you are going to work. Generally speaking, a short paragraph (in the proposal) on each aspect will be enough. In the article it will expand into sections (in a thesis/dissertation or book it might expand into chapters). More below. Remember the funnel here, and remember you are working towards the aperture or mouth of the funnel, so don't put in stuff that **you** find really interesting, but might not have bearing on the direction in which you want to take the reader.

Part of this BACKGROUND will also be an indication of what other people have been thinking and doing in the related FIELD, AREA and ASPECT. This is known as doing a LITERATURE STUDY, but I prefer to call it a SURVEY OF EXISTING SCHOLARSHIP. The latter term means that you might also like to have a look at existing pieces of music, art works, buildings, performances, interviews with practitioners, and the like. Part of this SURVEY OF EXISTING SCHOLARSHIP may also need to be contextualised in terms of the history of the problem that you yourself have encountered, and so on.

The CONTEXTUALISATION section might contain things about:
▪ Other thinkers and theorists;
▪ Systems of thinking (known as methodologies – see below);

- History of the problem area;
- Materials, processes and developments under consideration;

And so on.

- **INVESTIGATIVE QUESTION or PROBLEM STATEMENT (Problematise)**:

THE KEY: You develop your CONTEXTUALISATION in such a way that it seems to lead, almost inevitably, to the PROBLEM that you are going to investigate and describe. (This is the FUNNEL thinking thing again)

Initially, you should attempt to pose the PROBLEM that you are going to investigate as a QUESTION. This short section normally reads something like this, (or words to this effect):

> *"Given this context (from the previous section) the following question can be asked: . . . . . ." (Then go ahead and ask the question)*

The posing of a decent, researchable question is really at times rather difficult, not because you don't know what you want to investigate, but simply because EACH WORD IN THE QUESTION is loaded. Thus a question that starts with "*what*" will give a totally different slant to your *entire project,* as opposed to a question that starts with "*why*" or "*how*," for example. Very often questions are reformulated over and over again, as you refine your project and as you refine your possible answer. This is particularly true when you consider what you are going to DO with your study — document, investigate, balance, theorise, provide strategies, develop regulations, describe, prove, argue and so on. These ACTION WORDS will control your study, and give it the thrust that you want to give it.

It is also at this point that you might want to work through your title again. Also remember in the preparing of your plan/proposal, the Problem might change shape again and again. Keep going back to it, as it shapes your entire study and argument. The Problem statement or Question is so important that we encourage our students to write the statement on a piece of paper, and every time they sit down to write or to research, they open the paper in front of them. Essentially, the ENTIRE ARTICLE IS GEARED TOWARDS ANSWERING JUST THAT QUESTION, and not any other. So every sentence must contribute to the argument.

- **HYPOTHESIS or CENTRAL THEORETICAL STATEMENT (Theorise or Hypothesize)**

[NOTE: We have put the term "Central Theoretical Statement" in here because it might be a better word than Hypothesis for our purposes. The reason for this is that hypothesis is very often connected to Quantitative research where you are working on a "Nil Hypothesis" or an "Alternative Hypothesis." Your statistician will explain the difference and the approach. It is actually extremely useful, so it is worth bending your mind around this at some time. For the time being let us use the term Hypothesis because of its dictionary meaning.]

In *your proposal* the HYPOTHESIS is simply a *proposed*, or *possible*, ANSWER to the PROBLEM/QUESTION that you have stated in the previous section. In *your article* it is the target that you want to DEMONSTRATE as being correct.

In your *proposal* it is useful to start the sentence that contains your HYPOTHESIS with an imaginary "I think that . . . " This allows you to assume the position that you may be wrong, but all indications are (following the contextualisation that you have done, and the reading, thinking, provisional experimentation, discussion, etc) that you may be right. In your *article* you would, for example, state it as "In this article I *will show* that. . ." (or demonstrate, or argue etc.)

KEY: This is the bottom part of the funnel. From here on everything you do or say (or write) will be in the "stream" of proving that your answer is correct or acceptable.

The important points in developing a HYPOTHESIS are:
- Always develop your HYPOTHESIS in conjunction with your INVESTIGATIVE QUESTION, and adapt BOTH as you go along,
- Always make sure that *every aspect* of the INVESTIGATIVE QUESTION is reflected in some way or other in *every aspect* of you HYPOTHESIS, and
- Make sure that the thing that the INVESTIGATIVE QUESTION asks you to **DO**, you actually **DO** in the HYPOTHESIS. (This is the VERB thing)

The Hypothesis is usually a very short section.

[NOTE: Sometimes, in your proposal, after a HYPOTHESIS, it might be useful to provide a reader with a short section on the RELEVANCE of the study. This is occasionally difficult, because you will probably have indicated in the CONTEXTUALISATION why this particular study is so necessary. The way to phrase it is along the lines of "if I'm right, then the spin-offs are going to be the following. . ." (Of course, don't write it quite so casually!) THIS IS PARTICULARLY USEFUL IF YOU ARE USING THE PROPOSAL AS A BASIS FOR THE APPLICATION OF FUNDING FOR YOUR PROJECT. It persuades the reader — or funder, in this case — of your "forward looking" as a researcher.]

- **METHODOLOGY (Methodologise)**

There is whole lot of stuff that still needs to be written about methodology for the arts, so we are all scrambling a little here! In most cases we "borrow" from other disciplines for this. Even "aesthetics" has been "borrowed" from philosophy!

[NOTE: This is the area that most researchers in the arts balk at. DON'T! We simply have to "frame" the question of methodology effectively, and it becomes easy. A METHODOLOGY is simply a PLAN OF ACTION to assist us in proving ourselves correct (which is nice!) and which at the same time helps us to persuade others that we are right (which is even better).]

A PLAN OF ACTION consists of two things: the ingredients, tools or materials that we need to get to our point and then prove it, and the STRATEGY for going about using those materials. (The latter is also often called a DESIGN).

It is necessary to be clear in your mind about the TOOLS that you are going to use in your project. The term TOOLS means two things: (1) the actual materials (students, acoustic apparatus, classrooms, theatres, whatever), and (2) the established Research Tools or instruments (that is, systems that have already been worked out). Obviously, if you are going to use measuring instruments these will be indicated here. These instruments might be psychology profiles, computer assistance programmes, questionnaires, dissection procedures, statistic procedures, and so on. Here is a list of possible TOOLS WORDS that might assist your thinking: description, comparison, analysis, Participatory Action Research, Qualitative Research, Quantitative Research, tabulation, documentation, and so on. All of these signify a specific approach, and some may be obvious and familiar to you. Others you might want to figure out by doing some

reading. Relax, this is a new field to most of us and will unfold in due time. What is important is that you consult someone who is steeped in Methodology to give you a leg up.

[NOTE: Definitions of Participatory Action Research, Qualitative Research and Quantitative Research are available in the RESEARCH METHODOLOGY SUPPLEMENT. See the link at the end of this document.]

This section of *your proposal* simply documents the tools that you are going to use in your research, and perhaps why these are the most effective tools. In *your article* you would spend a little time explaining what systems and tools you are going to use, and then in the rest of the article you would use them to make your argument.

- ▪ **STRATEGY or DESIGN (Strategise):**

(This section is often called the DESIGN of the Research. We prefer the term STRATEGY because for us it emphasises the logical steps that will be necessary. But DESIGN also indicates the STRUCTURE of the argument, so this makes this idea good too. Take your pick.)

This is the most comprehensive of the sections. Here you indicate HOW YOU ARE GOING TO GO ABOUT PROVING THAT YOU ARE RIGHT. There are two aspects that you have to bear in mind here.

*Sequence of investigation*: The first aspect is describing the actual process you are going to go through in your research. Here you would argue, step by step, through the process of gathering and working with your information (data). This has to be very clear to you before you tackle the research and so it plays an enormously important part in *the proposal*. Do not hesitate in seeking guidance from an editor or expert at this point. In *the article* you use the same process, but now you will be able to provide and discuss the data and information that you have collected, so you can demonstrate your conclusions.

*Sequence of argument*: The second aspect in your design is where you provide a brief outline of the sequence of argument, as it will appear in your article. Normally this indicates your proposed SECTIONS.

The important thing here is to make sure that **every aspect of your PROBLEM and of your HYPOTHESIS is addressed in the STRATEGY**. It is worth asking your self continually "what is the *next logical step* to explain or prove what I want to prove to the reader?" Conversely, you need to ask yourself "how do I go about making sure that the reader (whoever he or she is, student or peer-reviewer) can't find any weak spots, or holes in my argument?" The key is:
- Logical development
- Grouping things together
- Progression


REMEMBER THE FUNNEL HERE. You want to take the reader to the place where you want him or her to be. So focus your argument so there is no escape!


Very often you get to this stage of the planning and you discover what you need to do to make the project successful is so huge (or small!) that you could only do justice to the project in 7 volumes (or in 20 sentences!). It also might mean the tools at your disposal (the METHODOLOGIES from the previous section) might not be able to cope adequately with the type of "objective analysis" that you want to make. This calls for a new round of thinking on the demarcation of your project, as you plan your project and write it up in your proposal. ***DON'T BE SCARED OF THE REWRITE***. It might simply be a change of focus that is needed, or a smaller demarcation. Don't throw the original idea away — you can always use another aspect of it for further work later. To return to the metaphor of the funnel, you may find that your hypothesis is such that the mouth of the funnel is huge, in which case all your information and argumentation is going to cascade out of your funnel uncontrollably, and you won't be able to put the information into the place you want it. Ever tried pouring water through a funnel where the mouth of the funnel is larger than the mouth of the bottle you are trying to fill! DON'T BE SCARED OF LIMITING THE SCOPE OF YOUR PROJECT.


The biggest problem encountered at this point in the process is the realisation that you don't have effective (methodological) tools at your disposal to prove what you want to prove. This obviously will call for a radical rethink and much consultation. However, in your planning, think very carefully of HOW you are going to make your argument.


**SUMMARY OF STRATEGY/DESIGN:**


You have basically two designs that you have to do (and they are interlinked)

- design your research — this goes into your proposal and deals with the step-by-step process that you are going to go through in your problem solving, and
- design the trajectory of your argument in your article.

A typical DESIGN for your article might look like this:

SECTION 1:   Introduction: Setting the Problem. In an article this would simply be the CONTEXTUALISATION that leads to the problem and the hypothesis. It would also include the posing of the problem and hypothesis. (In a thesis, dissertation or book this would basically be a greater development of the Research Proposal).

SECTION 2:   Literature study or Survey of Existing Scholarship: what others have said about the situation. This Section may also be seen as the development of a theoretical Framework that you are going to use in your description/analysis, etc. In essence, this section gives the reader all the information that the reader will need to proceed through your own particular argument. This would perhaps include the methodology that you propose to use.

SECTION 3:   Tackling the first aspect of the Hypothesis. Here you would apply your methodology to that first aspect.

SECTION 4:   Tackling the second aspect of the Hypothesis. (Add more sections as the aspects increase).

SECTION 5:   Comparing the results of Sections 3 and 4 (and others if there are more).

SECTION 6:   Conclusion

Always remember research demands you to continually rework and refine your project as you hit snags.


## SUMMARY (ALSO KNOWN AS THE CONCLUSION AND RECOMMENDATIONS) (Summarise)

[NOTE: This is very seldom used in *the proposal*, but is very important in *the article*.]

The final section very briefly encapsulates the entire project, summarising what you have done and what you have discovered. It also just hints at the impact that your study will

have, and what still needs to be done in this area — in other words, why your study is useful.

## OTHER STUFF IN GENERAL

**BIBLIOGRAPHY:**

Any proposal and article must contain a fair Bibliography. It is difficult to pin this down to quantity. An informed reader normally works on the principle that there are a number of books/articles or references to EVERY ASPECT of your proposal. The key is that the BIBLIOGRAPHY indicates that you have done enough reading/viewing, interviewing to know that the project that you are undertaking is NECESSARY, VIABLE and NEW(ish).
Of course, the Bibliography must be presented following the correct STYLE SHEET.

VERY IMPORTANT: There is no excuse for not running a SPELLCHECK through your work, but we would also encourage you to have the language edited. This is absolutely imperative for the final draft.

**CONCLUSION**
We hope that this has given you some direction. We ask you to remember three related things:

- When you submit the article for consideration for publication by the *Voice and Speech Review*, it is evaluated by several peer reviewers. If it does not pass the review, you will receive comments from the peer-review panel. These comments are very important, as they guide you in rewriting or in rethinking your project. There is a chance that the article just doesn't fit into the specific brief of the VSR. In this case, find a more appropriate publication to submit to (check the ISI web site.) It may be that the VSR has been flooded by contributions, and yours was one of them. In this case, you may submit again or find another journal that may be interested. DON'T GIVE UP. We are always heartened by the story of a very prominent theatre theorist and historian whose book, so the story goes, was rejected by many publishers before being published, and then it won the prize as the best scholarly book in the Drama field that year!

- Other people are going to rely on the accuracy of your findings as they develop their own arguments — after all, you have plugged one of the holes in their argument, in the same way that others have plugged holes for you. So be scrupulous and honest in all that you do.

- Though you want to aim for a fair and objective style, there is always a fine balance between subjective commentary (often fueled by enthusiasm for your project) and dry "objective" writing. This balance is difficult to learn, except by noticing the strategies that others use. Accuracy and energy are the two watchwords.

That's about it.

GOOD LUCK!

For additional materials on this topic, including a summary of the research process, brief explanations of quantitative methodology and qualitative research, and some tips on writing, click below:
RESEARCH METHODOLOGY SUPPLEMENT

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# RESEARCH METHODOLOGY SUPPLEMENT

Developed by

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(In anticipation of a book on Research in the Arts, by Allan Munro)

This document should be read in tandem with the document on preparing a proposal and writing an article. In this document we would like to expand on some of the key concerns raised in the other document, such as the actual research process, quantitative and qualitative research, and some tips on the writing process.

## RESEARCH PROCESS:

1. ***Get the Problem***.  The problem may arise out of your experiences, your curiosity, or just some simple contradictions that might occur in your field of study, or some areas that you think need further explaining.  Normally the sources of these problems are your own experiences, or your survey of the field in which you are working.

2. ***Pose the problem with the solution in mind***.  It is very important that as you do your research and present the findings you have some sort of target to aim at. This does NOT mean that you are going to skew the results to fit the conclusion you hope to reach, but it does mean that you have a clear path to exclude the things that might be interesting, but have no relevance for the subject that you are investigating.  It is part of the "funnel metaphor" – envisioning the mouth of the funnel. You might do the envisioning by virtue of the following:

- ***Through Experience.*** The possible answer might come from your experience, which you now want to test for validity, or to persuade others of the accuracy of your observations.
- ***Through Reading etc.*** The possible answer might come from sudden insights that you have as you read through literature that is part of your field.

3.  ***Search your material.*** Once you have the "possible answer" you would want to gather further evidence. For this you might turn to the following:

- ***Mind.*** Here you would apply your mind, your thinking, your logical faculties and your understanding of the field. A good think never hurt anyone!
- ***Studio/laboratory***. Here you might turn to the practices in your studio. Remember that in this instance you will be moving into different methods and methodologies to test your possible answer, and so you will have to be very careful of what you are doing, what you are observing, and how you are documenting what is going on.
- ***Other sources*** (Library, Internet, Journals, interviews, correspondence, etc). This is also known as the "survey of scholarship." It means basically that you are trawling through as many possible places to gather information and opinions on the problem. The key to this is "***always document your sources carefully.***"

4.  ***Develop Process of Experimentation***. This has to do with the way you gather your information or data, how you set up your investigation and so on. The key here is: ***the better the planning, the easier the research***.

5.  ***Document your Process and Solution***. This simply means having a clear way of controlling all of your information. This basically means the step-by-step gathering of the information.

6.  ***Share the Discovery***. (By publishing articles, publications, books, presentations and the like)

We put this 6 STEP PLAN in, to make a motivating point.  Most of you as good teachers do points 1-4 in your own way all the time in your teaching.  You are continually looking for better ways of doing things.  Point 5 very often happens simply because you are preparing to present a class or workshop.

***The only stumbling block***, (and it only exists in the formal presentation style of the results of your investigation), ***therefore, is point 6***.  We need to put this into perspective.  This means that we complete 5/6 of the process (about 83%) of the process, and we don't publish because we leave a measly 1/6 (or 16 2/3%) of the process out.

# "The world according to F.A.A.P."

**THE FUNNEL IMAGE:**

Central to what follows is the metaphor of the funnel. Imagine if you would the funnel with its wide top and very narrow bottom. The function of a funnel is to take diverse, possibly scattered things, and channel them until they can be guided into the receptacle that you require the stuff to go into. The narrower the bottom end of the funnel, the better the control.

In the beginning phases of the research it is worth your while to see your project coming out of a reasonably diverse (perhaps even slightly chaotic) "mess" of different things and pressures. I find it useful to work backwards and forwards (or to use the processes of "exclusion – inclusion") through the following as you try to define the bottom of the funnel

**"The world according to F.A.A.P." (Field, Area, Aspect, Problem)**

1. ***Define a FIELD (or DISCIPLINE***) This is the top part of the funnel. In your case this might be the field of "performance for communication purposes" for example. Note at this point we would have two words that we would have to define and control – "performance" and "communication." Both these terms have far wider implications than your specific vocation might entail. Having identified these two terms, one can then explore them independently, so that you can use some of the arguments if you wanted to. But there are a whole bunch of things that you might want to reject as well, so you move to the next level.

2. ***Define an AREA*** (in the FIELD) Out of the FIELD of "performance for communication purposes" we might isolate an area that is "closer to home" and this might be, for example, the area of "vocal theatrical practice." "Vocal" flows out of "performance" and out of "Communication." So does "Theatrical." "Practice" flows from "purpose." Furthermore immediately these three terms exclude recorded sound, opera, guitars and so on, and start to confine the study. We now have three terms with implications and theories etc, namely "vocal/voice" "theatrical" (as

opposed, perhaps to "everyday" or film or radio,) and "practice" which excludes perceptions or listening, and includes vocal production, for example.

3. ***Define an ASPECT*** (in the FIELD) Within the AREA of "vocal art practice," for example, one might find an aspect called "vowel projection."  Immediately this excludes consonants, but might include diphthongs.  It also deals with the problem of what "projection" is, in theatre terms – would this be a projection of emotion, sound, meaning, etc? It also offers the rejection of the ordinary speaking voice, as opposed to the "theatrical voice."

4. ***Define a PROBLEM*** (in the ASPECT) Within this ASPECT of "vowel projection" we might have a whole bunch of problems – the teaching of projection, the vowel perception by native speakers vs. second language speakers, changes in vowels according to accent, or the realism vs. Shakespeare debate, and so on.

The first point is that this approach allows you to narrow the funnel down so that you include only that which you wish to investigate, but you are also able to demonstrate that you know what is going on, by rejecting what you do not want to investigate.
And the second point is that there has been much work done on all of the different categories of "the world according to F.A.A.P." here are some ideas:

## CONTEXTUALISATION

1.      What have others said (about each part of F.A.A.P)?
             (CONTENT INFORMATION)

2.      What have others thought or argued (about each part of F.A.A.P)?
             (THEORY)

3.      How have they gone about solving problems (in each part of F.A.A.P)?
(METHODOLOGIES, STRATEGIES, DESIGNS ETC)

And so we can develop a checklist to see whether we have accessed some of the thinking, and doing in each part of F.A.A.P.

## CONTEXTUALISATION CHECKLIST.

|                       | FIELD | AREA | ASPECT | PROBLEM |
|-----------------------|-------|------|--------|---------|
| People                |       |      |        |         |
| Theories              |       |      |        |         |
| History               |       |      |        |         |
| Methods/ Procedures   |       |      |        |         |
| Materials             |       |      |        |         |

# QUANTITATIVE METHODOLOGY

The following are only the absolute bare bones of the work in this area.  We offer this simply as way of thinking about the research that you might do. A
"macro view" if you like.

## KEY IDEAS

### Attributes converted to numbers

In essence this means that we take normally non-numerical things and assign acceptable numbers to them.  *We do this already, anyway* – we can describe things in ways that allow us to "measure" them:  loudness, pitch, height, volume, time, etc.  We have even measured excellence and allocated numbers (or "grades!") to this. We even express confidence in numbers – we vote! So it is not a new idea.  The beauty is that you can do things with numbers that you can't do with attributes.

### Numbers manipulated to produce implications

What numbers give us is the ability to determine trends, clusters, and so on, so that we can make implications or predictions from them, in a reasonably accurate and objective way.

### Assigning numbers to values:

We can also use numbers to grade the values we place on things. We have all filled in forms where we have had to "rate" things, like service, or quality, and so on.  Normally it is done on a clearly defined scale, where 1 is terrible, for example, and 5 (or whatever your top of the scale is) is truly remarkable. This use of a scale is great. However, if you use a scale you need to be as sure as possible *how you would describe the value at any particular point in the scale.*  The trick here is to try and provide as *impartial a description* as you can for each key point on the scale.  "Terrible – wonderful" doesn't really help much, because they are extremely subjective positions. These types of ratings can also be manipulated (in the nicest possible way) by a statistician.

### (So we need a Statistician)

Most people get thrown by two things when working with Statisticians.  The first one is that this approach will drive your research into a Positivist mode.  Well, yes and no, but this is not important – what is important is that your contribution is meaningful, and is seen to be meaningful, and not simply or only based on personal experience and "gut feeling."  Stats will help you stabilise your "gut feeling"! (Is a Statistician the Peptobismol of Research!)  The second way is those incredible formulas, and Greek letters, and tables and things that they use! *But you don't have to know them*. The statistician will assist you in turning your attributes into the numbers that he or she can crunch! A good statistician is a wonderful friend! Besides guiding you in manipulating the numbers in the most efficient way (and we mean "manipulation" in the best possible sense), the stats person can assist you in developing a way of ensuring the trustworthiness and reliability of your data, and determining the margin of error in your predictions.  A good person to have on your Christmas list!

**KEY TERMS**

The following are some very rough and ready definitions of things that you will have to consider when doing quantitative research.

**Sampling**

Basically this has to do with how you go about finding a fair section of the people or items to research. The number and group you select has to be a fair and representative reflection of the population you are investigating, and must also be of sufficient size so that the statistician can get reliable calculations out of them.  Using specific techniques to get what is called a "sample population" is very important, otherwise you can get a bunch of your friends over and create the results that you want.  There are a whole lot of ways of going about getting a fair sampling. Speak to the new person on your Christmas list!

*Quantified Attributes*

We have already spoken about this, above.  Basically we are talking about clearly defined attributes that have numbers allocated to them so that we can work with the numbers and quantify the numbers.

*Statistically Significant*

Basically this means a number of things. First, is my research going to deliver the *type* of data that has a high probability of producing the same results in any part of the selected population? Second, is my research going to deliver the *amount* of data that has a high probability of producing the same results in any part of the selected population? And third, is the change between the moments *before* I started the "experiment" and *after* the "experiment," significant enough to allow the statistics to demonstrate the size and type of change that occurred?

*Statistician*

The new addition to your Christmas list!

*Variables*

This is a tricky one. Very basically, what you want to do is to have a reasonably stable situation, and then introduce one thing into the mix and see what happens. This thing that you introduce is called a *variable.* Put another way: you want to control the situation, so you try to make a whole lot of things in the mix *invariable* (that is, if the variable were not introduced, nothing would change), and then introduce the variable. You *control the invariables*, and see the effect on them by the *workings of the variable.* If you know what the situation was like *before* the introduction of the variable, and you can figure out what the situation was like *after* the introduction of the variable, you can claim that that there is a strong possibility that the changes that came about were because of the workings of the variable.

*Pre- and Post Testing*

This ties in with the variables. Pre-Testing will see what the situation is like before you start your "experiment." In other words you are determining the things that you wish to remain constant until they react with the variable. Post-Testing is when you measure the changes that came about, which by now you hope were caused by the workings of the variable! In statistical terms, the change should be statistically significant for you to claim that the

changes were brought about by the variable. (And at this point you need to speak to that new friend in your life, to see how this is done, or could be done!)

*Control and Test groups*

Another way of checking on the reliability of your "experiment" is to use two groups. Very basically, what you do is to divide your population (from sampling!) into two groups who are as homogenous as you can get them, relative to each other. Then you administer the test that you are going to use to check on any change that might occur. This gives you a "base-line" for both groups (and they should be the same for both groups, if this is possible). With one group you introduce the variable (this is your test group) and with the other you do nothing out of the ordinary (this is your control group). After a certain period of time (when your variable is established, or your experiment is completed) you administer the test to both groups again. Then you compare the results, and you can argue that any changes that came about in the test group was because of the variable.

A short, very simplistic example. You want to test the effectiveness of a new teaching method. You establish a research population through sampling. You divide the sample into two groups. You establish the base line. With your test group you introduce the new method (this is now the variable). With the control group you carry on with your usual teaching system (no variable, or all are invariables). At the end of the teaching you administer the same test to both groups. You establish the changes, which you attribute to the variable/new method. You publish.

**Surveys:**

Most quantitative research done is either through the experimental research method (outlined above) or through the conducting of surveys to establish trends and the like. Basically there are two components that you have to control very carefully in surveys. The one is the system of sampling that you employ and the other is the way that you frame your questions and the type of questions that you use. In both cases the statistician will be able to help you, so we are not going to go into any detail here.

# QUANTITATIVE PROCESS

1. Establish Ground Zero or Base line

2. Divide groups into Test and Control Groups
   (Making sure of a Statistically Significant Sample)

3. Check the Invariables
   (Through pre-testing)

4. Introduce the variable

5. Go through the development phase
   (Control According to your methodology)

6. Post-Testing

7. Compare the sets of outcomes
   (Statistical Comparisons, leading to the Interpretation of Data and the converting of numbers back to attributes)

# QUALITATIVE RESEARCH

Qualitative Research comes out of the research paradigm called "interpretive Research." This simply means that instead of working with variables and the like (see the previous section) we are working with words, and opinions expressed in words (and of course in other forms of communication), and observations that are inevitably biased or subjective because of the perspectives of the interviewee and the unstable nature of language. The key tension in research in this area is:

The *subjectivity* of the *information*,

vs.

the attempted *objectivity* of the *conclusions*.

There are two basic approaches to qualitative research:

## 1. *Information through interviews*

Qualitative research works extensively in small samples, but in-depth information. Normally, therefore, information is to be found in in-depth interviews (Structured, semi-structured and unstructured).

The way information is "extracted" from the material is through the use of strands of similarities of opinions, called themes, or clusters. So if you were listening to five different interviews by five different people on the same topic, you might begin to identify words that repeat themselves, or opinions that cluster around particular issues, or connections that were regularly made. The fact that these things emerge allows for a semblance of objectivity in the reporting on the findings.

## 2. *Objectivity through observation and triangulation.*

This type of research works through the observation of (and often the participation in) a particular situation by diverse groups. These diverse groups record their observations on the situation from within their own perspectives (through journals or diaries, for example), and the observations are then "triangulated" by sharing the common characteristics and

observations.  For example, if you were trying out a new teaching method, you might want to have (1) the students keep a diary of their experiences, you yourself would (2) document what you set out to do and what you observed happening, and then you might want to get (3) another source (director, vocologist, educationalist, acoustic analyst, whatever – in fact you could use all four!) to be the third part of the "triangle"  -- of course if you use more than three it still remains the "system of triangulation!"  You could then figure out what worked and what didn't by "comparing notes" so to speak.  Triangulation provides a measure of objectivity.

*Action Research*

There is a third new development in this area and that is known as "Action Research" or "Participatory Action Research."  This is a relatively new type of methodology to assist in the documentation and logic of recording EXPERIENTIAL research (as opposed to EXPERIMENTAL Research which is what the natural scientists might do.)  It is useful having an image of an upwardly developing spiral in your mind here, just to guide you.  There are basically six sequential areas of consideration.  Some of them will be familiar, some not, but here goes:

1.  FINDING A PROBLEM. In this sense the problem might be of any nature whatsoever, but usually it is of a pedagogical, managerial or social nature.

2.  BUILDING A STRATEGY that you think will solve the problem, or at least open the various aspects of the problem up for consideration.  Included in this strategy would be determining what you think would be the way to determine whether you have an effective or correct answer. -- a measuring instrument, if you will.

3.  IMPLEMENTING THE STRATEGY.  This is where you TRY OUT your planning and see what happens.

4.  EVALUATING THE RESULTS.  Here you would try and figure out what worked and what didn't USING THE MEASURING INSTRUMENT THAT YOU DEVELOPED.  This

measuring instrument allows you to a double focus -- problem and effectiveness.  DON'T FORGET THIS.

5.  This is one of the major contributing factors to new research methodology and that is the process of REFLECTION.  What happens in the REFLECTION STAGE is that the research team reflects on what worked and what didn't, and what worked in the evaluation and what didn't and why.  In essence, this gives their initial problem A NEW AND REFINED TWIST. Then they think about what to do next, and so we enter the spiral again.

NEW AND REVISED PROBLEM,
NEW STRATEGY AND EVALUATION INSTRUMENT
NEW IMPLEMENTATION
NEW EVALUATION
NEW REFLECTION

and so on.

Finally, two important things: (1) Action Research is developing as a research methodology and so you will find many definitions, as well as many detractors who suggest that it is not "focused" or "definite" or too experiential and therefore not rigorous. In some cases they are right and we need to guard against this.  (2) Action research lends itself ideally to "group research"" as well as having the researchers and the "participants" all part of the research process ESPECIALLY AT THE REFLECTIVE PROCESS stage (but also at the other stages).  But BE WARNED -- too much "democracy" often makes the research process seem interminable!

# PARAGRAPH DEVELOPMENT

What follows is a very elementary guide to the actual writing process. Although we have called it "paragraph development," it can just as well be used for sections and even chapter development. Our one real warning is that one must be careful to insert some *form of variation* in the process. As you get more comfortable with the thinking behind the process, you can of course swap the order around.

## 1. *Make a statement*

This can take the form of a quote, an assertion, a Topic Sentence or whatever.

## 2. *Place the statement in context*

Address **when, where, under what circumstances and wh**y the statement was made. In essence you are trying to locate your own argument in the broader stream of argumentation. Thus ask your self why this statement is important here.

## 3. *Unpack the statement*

This means that you need to **explain the key terms** in the statement and show how these terms assist in your argument. In essence you are developing equivalencies to the terms in the statement that will suit you.

## 4. *Draw conclusions*

The conclusions come from the statement and the unpacking. Your conclusions should assist you by contributing to your argument.

## 5. *Prepare for the next paragraph, section or chapter.*

In essence this is a linking moment, as you drive your argument to the next point. The key is to create a moment that encourages your reader to move on. This might be simply by suggesting alternatives, by posing the "obvious" questions that follow from your discussion, or whatever.