REVIEW AND RECOMMENDATION:VIVA AND ITS MIND MAP

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Viva voce is widely utilised to assess Ph.D. students. There is an alternative method such as concurrent publication, but it is implemented by a few Universities. All doctoral students who want to pass the viva at the first time are required to be familiar with the rules and rituals. There are no specific criteria for viva, even though some universities provide a guideline. Also, a few students believe that there are no target criteria and that the outcome relies on the external examiner. However, there are rules and regulations that should be followed. Therefore, viva is hot topics and requires more investigations. This paper provides a guideline for Ph.D. students where some students were anxious prior to viva voce. However, viva voce is an approach to improve a thesis and emphases the contribution of students, where a viva allows students to communicate with the examiners. This study found that viva is a brilliant approach to assess students, but, viva has some limitations such as the conflict between the assessors and viva may cause stress. This paper aims to provide foundations that help students to defend their thesis at the Viva Voce. This could be done by strengthening the work of a student from the beginning of research, where it required strong structure for the thesis. Not only does, but Ph.D. supervisors, examiners and viva chairs may find a useful preparation for their roles as well.

Keywords:Viva Voce, Mind Map, Thesis ,Assessor or Examiner.

INTRODUCTION

What is a viva? Viva is divided into two parts which are thesis and viva. The viva voce examination is the culmination of the research degree and the exam is a positive experience. The thesis demonstrates the skill at presenting research in writing way. In other words, the viva voce Examination is the ability to participate in an academic discussion with the research group. Viva voce is a very good way to test knowledge of students. Also, viva is very useful for students, where a Viva helps students by preparing them for the real industry work. The viva can improve the learning, application of theory to practice, and problem-solving skills. In other words, viva is similar a job interview. Viva voce is defined as an examination conducted by speech (Pearce and Lee, 2009). The various names of the viva voce approach of assessment can be oral Interview, oral test and oral examination. According to Pearce and Lee (2009), the educators are concerned that the evaluation may not be adequate conception. However, the assessment should be complementary between written and oral. Viva voce skills are a very important process as viva helps to improve the ability of students to deep thinking on the idea, which leads to enhancing future work opportunity and life chances (Lunsford, 1990; Crosling and Ward, 2000). In other words, viva is used to measure the ability of the students, where Viva focuses on the skills that students have learned, rather than what students have been taught (Pearce and Lee, 2009; Borin et al., 2008). Although the preparing for the viva is recommended to be considered from the beginning of registration, rather than being left to when the thesis has been submitted (Trafford and Leshem, 2008), however, perhaps the most serious disadvantage of this method of Trafford and Leshem (2008) is that it would be useful if the authors focus on research methodologies and specific detail for one university. In addition, viva voce provides the chance for the examiner to know the knowledge of the student and how students understanding the subject. Hence the assessment will be accurately accomplished (Joughin, 1998; Kehm, 2001). Furthermore, the viva vice may give students chance to show their strengths and provide the examiners with the clear and complete knowledge that students have as presented by Pearce and Lee (2009). Viva vice demonstrate that the material or thesis is a work of Ph.D. candidate student, where theassessor can test howstudentcriticisedotherasin the literature   reviews (Howard et al., 2016; Ponder et al., 2004; Trafford and Leshem,2008; Pearce and Lee, 2009).Therefore, viva voce is a brilliant assessment approach component of Doctor of Philosophy defence. In general, viva voce is assessment techniques such as exam assessment, poster assessment. However, the Viva Voce has considered the strongest measures of learning outcomes. Viva is used in the UK to refer to the oral examination of a doctoral thesis (Murray, 2009), while in other countries mean oral defence.

This paper provides guidance and prompts for students. The viva also illustrates the skills that students need to be familiar with during viva voce. This paper is organised as follows: the first section presents the mind map for viva voce, while the second section produces some guideline to assessors or examiners. The third section gives some recommendations and suggestions to the students prior viva. The structures of the thesis are highlighted before the final section, where the final section shows the finding, discussion, and summary of this paper.

THE MIND MAP FOR VIVA VOCE

According to Pearce and Lee (2009), no one assessment method is ideal and viva voce has its critics. Also, there is no specific guidance so far that will guarantee that students will pass viva. Therefore, the viva is a hot topic nowadays. The students are required to understand what will happen at pre-viva, during the viva, post-viva. There is a software available online that can be used to draw Mind Maps (Anon, 2017). This software was used in this paper to draw the Mind Map of viva, which is expected to reduce the stress and will help students to demonstrate doctorates as shown in Figure 1.
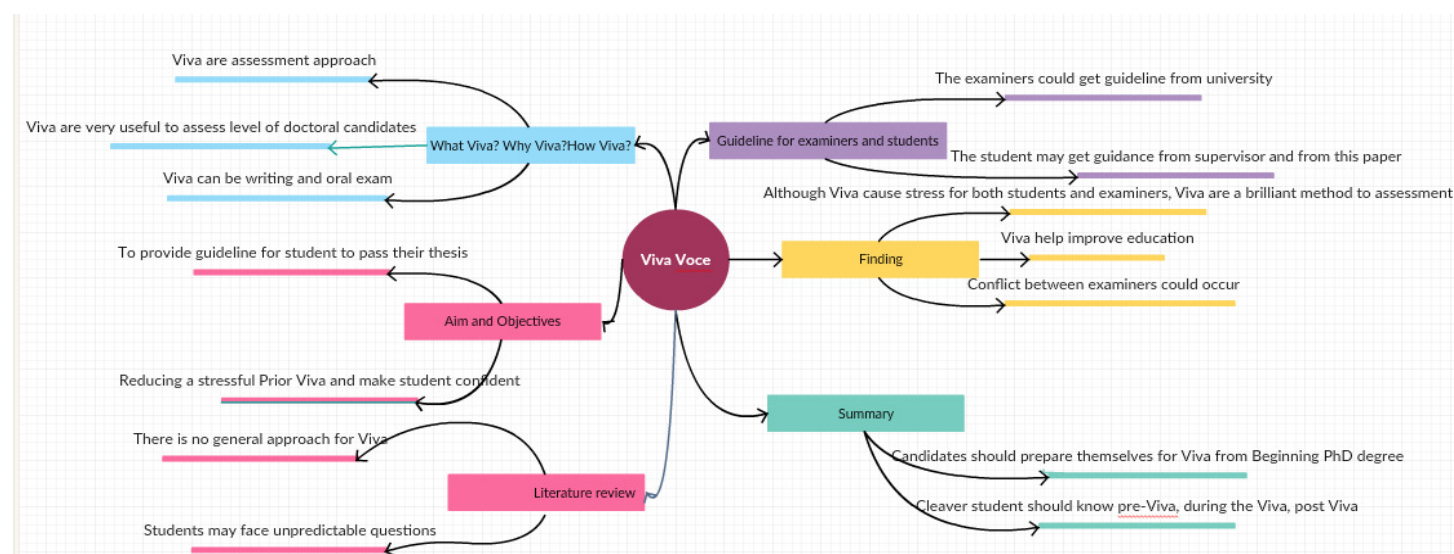

Figure 1: Mind map for viva created by online software to help students.

THE GUIDELINE TO ASSESSORS OR EXAMINERS

According to Joughin (1998), there are six elements such as objective, interaction, simulation, structure, examiners, and tasks. These elements help to assess student ability. University of Birmingham provides the examiners with the guideline for assessing the ability of the student, where ten points should be addressed in details. These ten points are written and independent report that is normally up to 500 words, which should address the following ten points (University of Birmingham, 2017). The contradiction could occur where examiners produce the different reports:

1. Were the nature and purpose of the research made clear? Was this substantially achieved?
2. To what extent does the thesis demonstrates that the candidate has an adequate understanding of the subject and knowledge of the literature?
3. Has the candidate chosen the appropriate methodology for the study? Is the methodology, used effectively? Are the findings interpreted in a valid way?
4. Is there coverage of recent and relevant literature in the field of study which shows critical appraisal and an original synthesis?
5. What evidence is there of independent critical and analytical skills, and the ability to evaluate evidence?
6. Is there an understanding of the theoretical field associated with the study? Is the linkage and balance between practical investigation and theory satisfies?
7. Is the thesis clearly written and presented? Are the style and structure of the thesis satisfactory? Are the arguments put forward in an appropriate and coherent form?
8. To what extent does the thesis show evidence of originality and contribute to knowledge? Does it contain matter suitable for publication in whole or in part in a learned journal or the equivalent?

9.   What is your view of the overall quality of the research described in the thesis?
10.   Is the synopsis an adequate summary of the work presented?

These ten points help to make a decision about the viva to be without correction, minor correction,major correction or re-submit a thesis and so further.

Table 1: These questions were required to address by examiners as presented by Trafford and Leshem (2008).

No	Question	Answer
1	Does the thesis represent a level of scholarship, which makes a contribution to knowledge?	YES/NO
2	Does the thesis show that the candidate has a sound understanding and appropriate working knowledge of research?	YES/NO
3	Does the thesis display a critical stance towards the sources that have been used and the concepts that have been developed?	YES/NO
4	Does the thesis contain a clearly expressed purpose and provide conclusions that relate to that purpose?	FULLY/PARTIALLY
5	Does the presentation of the thesis comply with the university regulations?	YES/NO

Table 1 may help the examiners on what to be taken into account during the viva exam. This will help to correctly assess the student and finally improve the education and innovation.

RULES FOR PERFORMING VIVA VOCE

It is usually two examiners and some Universities have three examiners. The two examiners are an internal examiner and an external examiner. The internal examiner is a member of academic staff of the University while the external examiner is a member of academic staff from another University. The students who are examined should know the examiners in order to be familiar with their work prior viva. Furthermore, the supervisor cannot be an internal examiner. Sometimes, the chairperson for the examination can be appointed by the Graduate team when the examining team has relatively little experience of examining UK research degree .An internal examiner is responsible for arranging the Viva exam venue, time, and date. The student should submit three copies of the thesis before the viva exam, where the viva exam may take up to three months or less. The examiners may ask to justify the arguments and also to justify the thing is not to exclude in thesis and also the thing includes in the thesis. They can ask about the future work, where they can argue with certain point and they can ask about the methodology. In addition, they may ask about the strengths and weaknesses of the thesis. The examiners may ask to find the wider implication of the thesis.

SOME RECOMMENDATIONS AND SUGGEST TO THE STUDENTS PRIOR VIVA
Purposes of viva voce

In Oral Examination (viva voce), all Ph.D. students are examined orally in English , except in some cases such as sickness, disability wherein the examination may be approved. According to De Montfort University, University of Leicester and University of Cambridge (2017), the oral examination or viva voce gives the following benefits:

•   It gives student chances to defend structure and conclusions of the thesis. The constructive criticisms are used to improve the writing thesis and structure.
•   It helps to test the student's personal eligibility for the award of the degree.
•   The examiners could wish to discuss the broader aspect of the research process and find the implications of the thesis.
•   The student is expected to bring a copy of the thesis during the viva voce.
•   The student is expected to demonstrate that an understanding of research approaches which are in the field of study.
•   The student is expected to demonstrate further research, independently without a supervisor.
•   The student is expected to constitute an independent and original contribution to knowledge.

The main purpose of thesis is to describe the work in a way that will allow the reader to judge its quality and significance of the work. The student should be familiar with the objectives of the oral examination. This section provides some objectives of viva. Most of the thesis should be devoted to the matters to which the students have contributed. Hereafter, the thesis's work should be presented in reasonable detail and with clarity as described on the web site of the University of Oxford (2017). The aim and objectives of the viva voce examination are (De Montfort University, 2017; University of

Leicester, 2016; Murray, 2011):

- To demonstrate the thesis is students' work.
- To confirm, that the thesis was written by candidate students for Viva, isunderstandable and it can be deferred.
- To establish the thesis is sufficient for the PhD degree.
- To demonstrate the originality of the work in the specific field.
- The thesis should demonstrate an original contribution to acknowledge and worthy of publication.
- The aim is to know the thesis very well and to be confident who will be the examiners.

The purposes of Viva were given by Murray (2011) as listed in Table 2. As any invention in our life, where every invention has its own purpose, the viva has advantages that the assessment of student could be accurate. The student may be asked about the purpose of Viva, therefore in this section, the purpose of Viva are presented with full details to allow students to be familiar with Viva and come over the stress prior Viva.

Table 2: The purposes of viva as presented in my favourite book by Murray (2011).

Purpose of the Viva	
1	Did you do the work yourself?
2	Have you done the reading?
3	Do you have a good general knowledge of the field?
4	Did you write the thesis yourself?
5	Can you do research independently?
6	Can you communicate your subject to others?
7	Can you talk about it professionally?
8	Did you receive any training?
9	Did you learn anything?
10	Have you contributed new knowledge?

Recommendation for Students

Based on the recommendations that were presented by the authors (Trafford and Leshem, 2008; Murray,2009; Murray, 2011), the recommendations and advice for students preparing for viva are, doing Mini-Vivas, Mock Viva andtaking guidance from the supervisor. Students are advised to be frank with the examiner. I advise students to develop frameworks and time scales to be suitable for the project. I advise students to check the structure of the thesis and compare with previous theses. I advise students to read thesis back to forward. Since this paper helps to prepare for the viva examination, i advise students to weigh in the balance, both the advice that is given in this paper and supervisor's advice. I advise students to make sure a consistent conclusion of their final chapter in their thesis. Since viva is a hot topic and must be clarified and sometimes students encounter unpredictable questions, I advise students to use the sentence," I am not sure, but I think, It might…. etc. Finally, I advise students to focus on a Viva from the time of starting a Ph.D. degree.

Some Tips for Students According to the Author's Point of Views

In my opinion, there are some ideas, which may help the students, which are described as follows:
- Candidate must print a list of contents and leave space; hence they can write a brief summary for every section or subsection.
- Practice tells the story of their thesis in two minutes.
- Reread the thesis and write a summary on each page.
- Identify the contribution in the field of research.
- Justify the theoretical, experimental and compare them, and also, find the implication of the finding.
- Practice telling the story about every chapter.
- Justify the element of originality of the thesis.

The authors of this paper divide the questions in the viva into general question, research context, research methods, analysis and finding, discussion and final conclusions and implications. Some expecting questions may be asked by examiners to the candidate students. Students, hence, are advised to be frank, when they face predicted and unpredicted questions to extend their knowledge. It may be irrelevant questions. The students may face the following questions, such as the practice Viva question and general equation, which could be one of the following:

i.   What did the student do?
ii.   What does that matter?

iii.   What did student find?
iv.   Why did the student decide to take this topic, what have student found the most interesting aspect of the research?

The student maybe face the question in thesis such as summary this paragraph? What's the relevant reference ?What's the weakness of those references ?Also, students may be asked in research methodology as follow: The student will be asked about the approach and how they design the framework of the project? How the student collected the data or results? How to establish the limits of collecting the data? This section is easy for a student, where the students can describe their motivations and their contributions.Furthermore, the hypothesis of finding results is more challenges for students? The internal examiner and external examiner may have a different approach in analysing the data. However, the examiners may ask about describing the main finding in a few sentences which will be challenging for students?Finally, the decision and the conclusion are very important section. The student may be asked about the implication of the thesis in real life where we can use this research?

Tips to Defend Thesis

There are some sentences that may help students to defend their thesis. The student may use the following sentences (Murray, 2011; Anon, 2016):

1   I know the whole of my thesis.
2   I have identified areas that have challenges in my thesis.
3   I have a marked thesis to help me to revise it in the Viva.
4   I know what the implications of my thesis in theory and practice.
5   I know how the outcomes of my research why there is passing without minor or major correction. The rest of the outcome is known and I do not like to mention.
6   The student during the Viva must take notice and analyse the examiners' report carefully and they finally will do proofreading.

STRUCTURE OF THESIS

The structure of the thesis is a crucial factor that helps to pass viva. In general, a thesis is like a journal paper. The reader can notice that the structure of this division is similar to the structure of the paper. Therefore, if the student publishes a paper with solid analysis and extensive reading, the student will pass the Viva easily. I recommended students to read chapter 10 in a book written by Murray (2011), before the viva. It is very useful as shown in Appendix section on Table A-1.The authors would mention here to the good point that De Montfort University can offer for a student, who publishes a number of papers by submitting their thesis by concurrent publications. This will help to avoid the plagiarism issue. In my opinion, a good structure of the thesis should include the following items:

Title page
Abstract
Acknowledgements
Table of Contents
List of the Figures

List of Tables
[1]   Introduction
[2]   Literature Review
[3]   Materials/Sources and Methods
[4]   Themed Topic Chapters
[5]   Results
[6]   Discussion or Findings
[7]   Conclusions
List of Publications
References
Appendices

Please notice that the numbers in the list above should be in chapters. For example, Literature Review should be in chapter two. While the other elements or items should be in thesis without given in the chapter. The style of the thesis is

different from institution to another institution. For instance, at Simon Fraser University, the thesis template is provided by Chokroun (2017), while at Heriot-Watt University, the abstract is required in a specific form and must be printed and submitted to the Library of Heriot-Watt University (2016)

FINDING, DISCUSSION AND SUMMARY

The authors have reviewed most websites about the preparation for viva examination and hope this paper will be useful for the students and examiners. A viva voce is very important procedures to assess Ph.D. students. Viva could take place between 9:00AM to 5:00PM. In this paper, Mind Map for Viva is presented with extensive literature reviews. Also, an example of a recent assessment procedure for one university in UK was given to help students and assessors. In point of views, some recommendations and suggestions are highlighted along with the structure of the thesis. This study was found that viva causes stress for some students while other students were excited to demonstrate their work. The purpose of viva is to assess student according to the criteria established by the University for a thesis. The viva helps assessors to know whether students work independently or not. From the extensive study, we found that viva is a very good way to test knowledge of students. Viva is very useful for students,viva helps students by preparing them for the real industry work. Viva can improve the learning, and increase the ability of students to problem-solving skills. In other words, viva is similar to a job interview. Also, the authors found that the understanding of assessment process helps to develop good writing and overcome writer's block. Not only does it provide a step and rich advice to pass viva easily by building confidence and effective way to accomplish a good writing. It is recommended that further research is undertaken in the following areas: there should be an alternative way of assessing Ph.D. students.

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APPENDIX

Table A-1: Structure of the thesis as appeared by Murray (2011).

Outline your thesis structure in 30 minutes
Background/Context/Review of Literature/introduction
• The subject of the research is important because………..
• Those who have worked on this subject include………..
• What has not yet been done is…………………………..
• The research project aimed to…………………………..
Theory/Method/Approach/Materials/subjects
• This study was based on the approach of……………….
• This approach was chosen because………………………
• It was likely to achieve the project aims by……………...
• Others have used this method to……………………….....
Results/Analysis
• The steps in the research involved………………………
• Analyses were conducted by…………………………….
• Data/information/observations were gathered as…..……..
• These were organised into…………………………..……
Discussion/Interpretation
• Analyses suggested that………………………………...
• This interpretation was based on………………………..
• Taken together the analyses show………………………
• Research aims were achieved to the extent that…………
Recommendations/Implications/conclusions
• Further research is needed in order to…………….……..
• More information is needed to………………………….
• The practice could be improved by…………………….………..
• Proposed changes would be feasible if…………………..