

# Extended Essay and VWA

Introductory Workshop

Part 2: Assessment Criteria

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# Assessment Overview

## Overview

Criterion A: focus and method	Criterion B: knowledge and understanding	Criterion C: critical thinking	Criterion D: presentation	Criterion E: engagement
<ul style="list-style-type: none"><li>• Topic</li><li>• Research question</li><li>• Methodology</li></ul>	<ul style="list-style-type: none"><li>• Context</li><li>• Subject-specific terminology and concepts</li></ul>	<ul style="list-style-type: none"><li>• Research</li><li>• Analysis</li><li>• Discussion and evaluation</li></ul>	<ul style="list-style-type: none"><li>• Structure</li><li>• Layout</li></ul>	<ul style="list-style-type: none"><li>• Process</li><li>• Research focus</li></ul>
Marks	Marks	Marks	Marks	Marks
6	6	12	4	6

Total marks available: 34

- ▶ These points are converted into a mark (A-E), which is then combined with TOK to produce 0-3 points for the Diploma.

# EE Assessment Criteria

## Criterion A Focus and Method

### ▶ Criterion A - Focus and Method (6 pts)

- ▶ The topic is communicated accurately and effectively. significance
- ▶ The research question is clearly stated and focused. of the essay
- ▶ Methodology of the research is complete.

### ▶ Criterion B - Knowledge and understanding (6 pts)

- ▶ Knowledge and understanding is excellent. materials
- ▶ Use of terminology and concepts is good.

### ▶ Criterion C - Critical thinking (12 pts)

- ▶ The research is excellent. experimental results, etc.
- ▶ Analysis is excellent.
- ▶ Discussion/evaluation is excellent. the RQ

### ▶ Criterion D: Presentation (4 pts)

### ▶ Criterion E: Engagement (6 pts)

- The context of the RQ,
- RQ must be connected to the rest
- What was done to answer the RQ?
- selection and use of source
- Subject-specific language
- Data, quotations, examples,
- Interpretation of the research
- Reasoned argument and answer to
- the RPPF form

# Bad EE Research Topics (real examples)

- ▶ **Biology: „Can I do my EE on Ebola?“**
  - ▶ Experiment on humans? Biology EE are not summaries but require data collection. It does not always have to be an experiment, but the data collection (eg. Database) is necessary.
  - ▶ Misunderstanding of subject-specific requirements.
- ▶ **Biology: „What is the difference between animals and humans?“**
  - ▶ This is philosophically interesting, also linguistically. But not for Biology.
- ▶ **Economics: „Can I write mine on the impact of the Economic crisis on my home country Nigeria?“**
  - ▶ My response: „Are you going to Nigeria to interview the finance minister there?“
  - ▶ RQ can not be answered. Method too difficult to realize, RQ too broad.
- ▶ **English B: „I would like to compare the role of women in Europe and Middle East. Is this OK?“**
  - ▶ My response: „Cultural topics in B languages must be linked to certain works. Are you going to compare this based on language in advertisement, in a certain book?“
  - ▶ RQ does not yet fall into one of the 3 categories required by language B.
- ▶ **Psychology: „I want to make a questionnaire to find out if the....“**
  - ▶ No. Questionnaires not allowed in Psychology. No primary source data collection.
  - ▶ Students have to do secondary source research and then come up with their own analysis. The EE is not simply a presentation of other people's ideas or statistics that they collected. Misunderstanding of subject-specific requirements.

# How to check EE RQ

- ▶ Appropriate to the subject? Important!
- ▶ Can materials/sources be found on it?
- ▶ Is there a method, systematic way to answer the RQ?
- ▶ Is the method even possible, or does it require specific equipment?
- ▶ Is the RQ relevant? Can it be made relevant?
- ▶ Safety issues (sciences)?
- ▶ Is the RQ too vague, broad, so that there is no clear answer?
- ▶ Is the RQ too specific, that it is difficult to write about it?
- ▶ Does the research process take up too much time? No points given for that!
  
- ▶ **„What role did the constructed language Esperanto play in the concentration camp Mauthausen?“**
  - ▶ Method problem: Are there any written records on it? Can you do interviews?
  - ▶ Vagueness problem: What does the word „role“ mean? If the language was used? Yes, it was. We know that already. How common it was? How/if it was taught in the concentration camp? What? What are you looking for specifically? How do you know if you have answered the question?

# Bad EE RQ/Topics (real examples)

- ▶ **Biology: „Can I do my EE on Ebola?“**
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# Criterion A: Focus and Method

- This criterion focuses on the topic, the research question and the methodology. It assesses the explanation of the focus of the research (this includes the topic and the research question), how the research will be undertaken, and how the focus is maintained throughout the essay.

5–6	<p><b>The topic is communicated accurately and effectively.</b> <b>VWA Thema</b></p> <ul style="list-style-type: none"> <li>• Identification and explanation of the research topic is effectively communicated; the <b>purpose and focus</b> of the research is clear and appropriate.</li> </ul> <p><b>The <b>research question</b> is clearly stated and focused.</b> <b>VWA Leitfrage(n)</b></p> <ul style="list-style-type: none"> <li>• The research question is clear and addresses an issue of research that is appropriately connected to the discussion in the essay.</li> </ul> <p><b>Methodology of the research is complete.</b> <b>VWA Quellen</b></p> <ul style="list-style-type: none"> <li>• An appropriate range of relevant source(s) and/or method(s) have been applied in relation to the topic and research question.</li> <li>• There is evidence of effective and informed selection of sources and/or methods.</li> </ul>
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# Criterion A - in plain language

The first section of the Essay should address these points:

- ▶ The Introduction is Criterion A.
- ▶ What is the Topics and RQ?
- ▶ How were the topic and RQ identified? How did you find them?
- ▶ What is the purpose of investigating this RQ? „Who cares“? „Why bother the work?“
- ▶ What did you do to answer the RQ?
- ▶ What sources did you use and why did you choose them?
- ▶ Is your method actually connected to the RQ and is it a meaningful method? In other words, does your method answer the RQ?



# The purpose of the RQ: real life dialog

This is a real dialog between me and my sister sometime in the 1990s.

- ▶ Oliver making fun of Alice's master thesis (Diplomarbeit): „You literature people really have strange research ideas. Why did you not just do a book comparison between Shakespeare's Hamlet and Donald Duck?“
- ▶ Alice: „Of course one could do that. But what's the point of this comparison? Why spend energy on it? Why bother? It's not relevant.“
- ▶ Oliver: Now you got me.
- ▶ Remember: The student must sell the RQ to the reader. The student must make the relevancy, and purpose clear. In many cases the student simply was glad to have found a RQ and there is no deeper purpose. In this case the student still has to invent a good idea. This is what they get points for.
- ▶ **Sell me your RQ!**

## Purpose: Here is an example of a non-personal justification

- ▶ *English A: In what ways do the authors of *Alas, Babylon* and *The Road* portray the characters of the children in their apocalyptic worlds?*
- ▶ The two novels chosen for this essay are amongst the more well-known and acclaimed within the post-apocalyptic dominion: Pat Frank's *Alas, Babylon* (1959) and Cormac McCarthy's *The Road* (2006). Both novels are written by American authors only 47 years apart, yet they vary diversely in terms of structure, conventions, settings, and many other aspects, including their stances on themes such as humanity, spirituality and morality. While *The Road* takes on a much more philosophical and spiritual nature, focusing solely on the journey between a father and his son, *Alas, Babylon* is much more pragmatic and technical; telling the tale of a family's survival in the wake of a nuclear attack. These differences, among others, make the two works ideal for comparison.
- ▶ **Comment:** There are many novels that are different. Is this the only reason why you want to compare them? Or is it unusual for post-apocalyptic novels to be different from each other? I hope that you explain post-apocalyptic somewhere.

# Purpose: Stay formal, even if the justification is personal

- ▶ **Biology:** *If small groups of hungry bees are presented in a control chamber the choices of: Glucose, Fructose, Lactose, Sucrose, Maltose, which of the following sugars will be preferred by most bees?*
- ▶ My grandfather in Ukraine keeps bees and produces honey as a hobby. Even though he does not do it for a living, and never studied “bee keeping” in a school or instruction centre, over years he gained experience and multiplied bees and hives. Due to my grandfather being a beekeeper, and the recent problems often portrayed about bees dying out, my interests into bees and the way beekeepers treat them have been aroused. The focus of the essay was investigating which sugar will most bees of the genus *Apis*, subfamily *Apini* prefer to consume if energy (ATP) is needed fast.
- ▶ **Comment:** This text sounds informal, but this is not the problem. It reads authentic and is the voice of the student. This paragraph does not make it clear, however, the importance of investing sugar type. Why exactly sugar? There is no link between the interest in bees and the RQ.

# Purpose: Personal interest is OK, but justify it!

- ▶ **Theatre arts:** After being assigned one of the main roles in a professionally lead theater production at the BlackBox in the “Neues Musiktheater, Linz” I started working on devising a piece, merely from the theme *Radikal*, (engl. “radical”). Soon I realized that this theater company has not been the first to address socio-critical issues onstage, desiring change in the audiences’ way of thought. Hence, I decided to find out more about the world of “Radical Theater” and was also interested in finding its origin, framework and boundaries. Through my research it became clear that our production of *Radikal* incorporated many of its essential components, helping me formulate my research question: *What are the characteristics of modern radical theater and to what extent does the production “Radikal”, from the Landestheater Linz, fit into this theatrical genre?*
- ▶ **Comment:** The student wrote this paragraph in the abstract, which is the wrong place. This happens often, that the abstract is “abused” and made into an introduction.
- ▶ While the Purpose is mostly personal in nature, it is communiated convincingly.

# How well is the purpose communicated?

- ▶ *Visual Arts: Changes in the Illustrations of 'Hatschi Bratschi' between 1904 and 2011*
- ▶ My essay deals with the change of cover page illustrations of the famous Austrian children's book 'Hatschi Bratschis Luftballon', which was written by Franz Karl Ginzkey. Over the course of time starting in 1904 when the book was first published, its illustrations have kept changing due to social political criticism. Taking the frequent change of illustrators into account, after all, this being something quite uncommon, I decided to take a look as to how and also why this has been the case.
- ▶ **Comment:** Is there a personal connection? How did you get to the topic? Purpose of RQ could be communicated better. Is it really uncommon for book covers to change?

# Purpose: personal living situation

- ▶ *Geography: To what extent is electro mobility in public transport a solution for Linz, Austria and its surroundings?*
- ▶ For the past decade, Austria has been one of the leading countries in the areas of clean energy and sustainable lifestyles with the largest state (Lower Austria) producing 100% of their electricity from renewable sources.<sup>2</sup> Presently, the research for sustainable lifestyles has reached mobility and therefore, a lot of emphasis is being put on its development and expansion in Austria. For this investigation, I decided to focus on the Austrian city of Linz as I am currently a citizen here and therefore feel that my knowledge, understanding and awareness of the local transport and traffic situation is much broader than anywhere else.
- ▶ **Comment: Personal living situation (“citizen here”), Austria is a “leading country”. Both personal and economic/geographic justifications are present. But a deeper and more convincing justification would be better.**

# Purpose: Make it convincing!

- ▶ *History: To what extent was Romania involved in the Holocaust from 1941 to 1944?*
- ▶ Regarding the choice of the topic, being a Romanian myself had a major influence. Furthermore I have always been interested in finding out more about the Holocaust, hence I wanted to know if and to what extent my country was involved in it. [...] This topic is still a dark and mainly unexplored chapter of Romanian history being seldomly discussed in schools. During the time I lived in Romania, teachers never taught us about the atrocities committed by our government against Jews in the Second World War. I believe that this topic is still relevant today in order to learn from our nation's mistakes and prevent them from happening again in the future. "Those that fail to learn from history, are doomed to repeat it."
- ▶ **Comment: Seems to be very general. I am concerned that the student will simply write a summary of events (a narrative) without deeper analysis.**
- ▶ **Comment: Non-historical justification. Personal importance only. Is this OK?**

# Purpose: „Interesting“ is not enough

- ▶ *History: A comparison of Alexander the Great and Genghis Khan's military tactics in the early phase of the rapid expansion of their empires*
- ▶ Although these notorious leaders did not live during the same historical eras, they achieved similar enormous conquests in their lifetime. [...] Due to the unique achievements of the leader, it is interesting to determine whether there are parallels between their military tactics and their success in the early stages of the rapid territory expansions.



# Criterion A: Focus and Method

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# Method: also for the languages!

- ▶ *English B: Why did Roald Dahl include dark and scary characters and challenging situations in his books aimed at children? How autobiographical are these elements?*
- ▶ *To fulfil my investigation, I will analyse James and the Giant Peach (1961) and Matilda (1988), in view of the events that happened in Dahl's own life, that the author describes in his autobiographical book Boy: Tales of childhood (1984). James and the Giant Peach represents the first real book aimed at children that Dahl wrote, while Matilda is his penultimate story, written just a couple of years before death. In these two books, I will look for the dark characters and challenging situations they include and for the connection between the events narrated in it and the events that happened in the author's life, narrated in his autobiography.*
- ▶ **Summary:** The student wants to look for dark characters and challenging situations and find connections to the author's life as narrated in the autobiography. I think that this is OK.
- ▶ Other students write: "I will compare two books and find information on the Internet." as their method. This is not enough.

# Method: give good reasons!

- ▶ *History: A comparison of Alexander the Great and Genghis Khan's military tactics in the early phase of the rapid expansions of their empires.*
- ▶ *During the investigation several sources will be used to outline the military tactics of Genghis Khan and Alexander the Great. The books “Genghis Khan and the Mongol War Machine” and “Great Captains: Alexander” were chosen, based on good online reviews and both books deal with the exact topic of the essay. Additionally in the Austrian national library several books were selected, in order to complement the already chosen literature. In addition two internet sites were consulted during the research. These are reliable and written by historians. There are primary sources available about the two leaders, but these are complicated to obtain. This is the reason why the focus was set on the secondary sources.*
- ▶ **Summary: The student chose 2 books, selected several books from the National Library and consulted 2 internet sites. What exactly is he looking for in these sources? Very general and generic.**

# Method: how are sources selected?

- ▶ *Visual Arts: How did the annual themes of the Ars Electronica Festival change, considering the technological advancements in the media from 1979 to present-day?*
- ▶ *By summarizing and analyzing the yearly festival catalogues and by conducting interviews with the Ars Electronica co-founder Hannes Leopoldseder as well as the artistic director Gerfried Stocker, I want to find out how the topics covered by the festival relate to- and were influenced by technological advancements throughout the last 37 years. As sources, I primarily use the book "Die Ars Electronica - Kunst im Zeitsprung" [2], the book "Ars Electronica Facing the Future" [3] and the book "The network for art technology and society" [4]. They include documentations of Ars Electronica events from 1979 to 2009. Additionally, I also investigate the recent Ars Electronica catalogues between 2010 and 2016 [5-12], as well as the Ars Electronica on-line archive [13] and other related literature.*
- ▶ **Summary:** the student identified the sources. He wants to do interviews, look at catalogs and the online archive. The student essentially said: "I will do research." What exactly is he looking for? How are the sources selected? Why those and not others?
- ▶ **Why not like this:** „These catalogs contain photographs of digital art works and I will try to analyze how better computer graphics technology influenced the artistic themes over the years. Specifically I will look for the themes XYZ and ZYX of selected art works in these catalogs.“

# Method: move details to appendix

- ▶ *Biology: Can the growth rate of lactic acid bacteria in whole milk be influenced by different concentrations of glucose and lactose, and if yes, what is the optimum concentration for both sugars?*
- ▶ *The main part of experimental procedure revolved around monitoring and recording the viscosity of the fermenting yoghurt samples at different sugar concentrations over time. For this purpose, two pasteur pipettes of different tip lengths, both holding a rubber cap, were used in order to be able to measure both high and low levels of viscosity. Arbitrary values for the viscosity were determined by measuring the time taken for each pipette to soak up a full load of a certain yoghurt sample. The obtained values were summed up for each separate sample to obtain rough, yet comparable overall values. In order to correlate the viscosity of the yoghurt to the number of bacteria in it, lactic acid bacteria from different samples were cultivated on a self-made agar growth medium in petri-dishes to compare the number of colonies formed from each sample. I arrived at my final method of measuring viscosity as described below. The exact experimental procedure for preparing the yoghurt samples and measuring the viscosity can be found on pages 23-24.*
- ▶ **Comment:** For the sciences it might be a good idea to move the detailed method to the appendix (not assessed) and to only give a general overview method in the main essay, which can be more easily discussed.

# Method: justify the sources!

- ▶ *Economics: To what extent can the 2015/2016 tax reform in Austria be seen as effective in promoting the main macroeconomic objectives?*
- ▶ *An interview was with Mag. Sandra Müllbacher, who is working at the Austrian Federal Ministry of Finance, in the department for tax revenue estimation. Additionally, the academic expert Dr. Friedrich Schneider, who is professor of economics at the Johannes Kepler University Linz, was interviewed to gain a scientific viewpoint. The final interview endeavored to capture the practical opinion and experiences from a tax consultancy company on the application of these reforms to meet macroeconomic objectives. Furthermore, a wide range of secondary resources has been taken into account, some of these include official statistics and reports, surveys, articles and text books.*
- ▶ **Comment: Why exactly those people? What did you ask them? What did you look for in the secondary resources?**

# Method example: Relevant method?

- ▶ *German A: Inwiefern wirkt sich die in den Romanen „Der Mann, der Hunde liebte“ von Leonardo Padura und „Herztier“ von Herta Müller thematisierte Zensur auf das Verhalten der Protagonisten aus?*
- ▶ *Ziel dieser Arbeit ist es, die beiden Werke Der Mann, der Hunde liebte von Leonardo Padura und Herztier von Herta Müller im Hinblick auf die in beiden thematisierte Zensur zu vergleichen. Hierzu werden beide Romane einzeln behandelt, wobei der Inhalt kurz umrissen wird und die Protagonisten charakterisiert werden. Schlussendlich folgt ein Vergleich der beiden Werke, bestehend aus einer Beschreibung und Gegenüberstellung der Zensur und den Reaktionen darauf.*
- ▶ **Kommentar:** Die Werke im Bezug zur Zensur nicht getrennt voneinander behandeln, sondern wesentlich Punkte direkt miteinander verglichen! In wie weit ist eine allgemeine Inhaltsangabe („*Inhalt kurz umrissen*“) für die Beantwortung der Frage relevant? Diese soll zumindestens kurz gehalten werden, damit es nicht von der Themenstellung ablenkt. Es besteht ein Risiko einer Themenverfehlung falls kein expliziter Bezug zur Zensur hergestellt wird.



# Method example: Cross-curricular danger

- ▶ **Geography:** *What are the Economic Advantages and Environmental Implications of Steel Production in Linz, Austria?*
- ▶ *In order to further explore my research question, I will investigate the ways in which the steel manufacturing in the Voestalpine is beneficial to the economy by looking into statistical data of revenue and production and compare how these go hand in hand. Furthermore, I will examine if and how the Voestalpine is directly aiding the economy through the number of workers employed. In addition, I will investigate the environmental hazards caused by the emissions from steel production further referring to a case study specific to Linz. I will touch on the finite resource (coal) that is used in the production process of steel and how this in part affects the environment.*
- ▶ **Comment:** Be careful with cross-curricular EE (Geography, Economics). They have to be assigned to one specific subject.



# Method - suggestion

- ▶ Explain what method of data collection you are going to use: experiment? Survey? Literature work? Database search? Interview?
- ▶ Explain how you select these sources: Why these and not others? Why an experiment and not an interview?
- ▶ Explain what you will be looking for in these sources: Which evidence, data, quotations, etc, are you going to look for?
- ▶ Explain possible limitations of your method: Which aspects of the research question will your method not be able to answer well? What do you have to take care of, so that the RQ is answered properly?
- ▶ Explain how you intend to analyze the gathered data. For the sciences, what calculations are you going to do on the data? „I am just going to compare A and B“ is not enough.
- ▶ How do you know if your method was successful in answering the RQ or not?

# Common Problems

- ▶ EE does not follow the Assessment Criteria
- ▶ Relevancy of RQ not explained
- ▶ Methods not justified (sciences), methods not mentioned (non-sciences)
- ▶ Data, research is presented but not analyzed.
- ▶ The presented research is not relevant for the RQ
- ▶ Students think that a verbal description of the data is analysis.
- ▶ Irrelevant background information (they are not directly connected to the RQ)
- ▶ No direct comparisons, but a separate treatment of ideas.

# Criterion C: Critical thinking

## Criterion C Critical Thinking

- This criterion assesses the extent to which critical-thinking skills have been used to analyse and evaluate the research undertaken.

10–12	<p><b>The research is excellent.</b> <b>VWA Inhaltliche Kompetenz</b></p> <ul style="list-style-type: none"><li>• The research is appropriate to the research question and its application is consistently relevant.</li></ul> <p><b>Analysis is excellent.</b> <b>VWA Informationskompetenz</b></p> <ul style="list-style-type: none"><li>• The research is analysed effectively and clearly focused on the research question; the inclusion of less relevant research does not significantly detract from the quality of the overall analysis.</li><li>• Conclusions to individual points of analysis are effectively supported by the evidence.</li></ul> <p><b>Discussion/evaluation is excellent.</b></p> <ul style="list-style-type: none"><li>• An effective and focused reasoned argument is developed from the research with a conclusion reflective of the evidence presented.</li><li>• This reasoned argument is well structured and coherent; any minor inconsistencies do not hinder the strength of the overall argument or the final or summative conclusion.</li><li>• The research has been critically evaluated.</li></ul>
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# Is the research appropriate to the RQ?

- ▶ **Psychology: How Does Meditation Affect the Human Brain and Behaviour?**
- ▶ *1.2 Meditation's origin: Meditation is a practice that has been around for thousands of years. It is difficult to pinpoint when or who started it since it has existed for such a long time and many different religions and civilizations have practiced it. Buddhism and Hinduism are most often connected to yoga (a mixture of physical, mental, and spiritual practices) and meditation since it plays a relevant part in their history and philosophies. However, one does not have to be religious in any way to practice meditation or yoga.*
- ▶ **Comment: Section 1.2 above is irrelevant for the RQ. Just by looking at the Table of Contents, one can see that the student uses many pages for talking about general issues, that are not related to the RQ.**
- ▶ **Students should write an outline (table of contents) first, before writing the essay.**
- ▶ **Having small irrelevant sections is OK, as long as it does not distract (so say the Criteria!). General information might help contextualize the RQ, but here it is overdone.**

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Not relevant for answering the RQ, unless she talks about brain and behavior in these sections. She did not.

After 9 pages, she finally talks about the RQ!

# Does the research distract from the argument?

- ▶ **English B: How is Chicago's unique correlation between gun laws and crime rates reflected in rap songs by Kanye West, the BBC documentary "The Lost Streets of Chicago" and works of art from the exhibition "The Heat"?**
- ▶ **Explanation: The gun laws are strict but crime is high. Rap songs can help us understand this paradox.**

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**IRRELEVANT!**  
Rap songs  
etc. are not  
even  
mentioned  
in these  
chapters!

**RELEVANT!**  
Finally the  
EE starts.  
On page 9

# Irrelevant Parts!

- ▶ RQ: How is Chicago's unique correlation between gun laws and crime rates reflected in rap songs by Kanye West, the BBC documentary "The Lost Streets of Chicago" and works of art from the exhibition "The Heat"?

*"It's senseless violence at the end of the day. But it's like, what do you do when you're caught in that moment? You rather be caught with protection than without protection." - Duwop*

## Evidence

### Evidence in own words

Duwop points out that even if the people do not want to wear arms, they still have to protect themselves and therefore buy guns. This lack of security is also indicated in Kanye's lyrics *"It's a war going on outside we ain't safe from"* and therefore denotes that the rapper does not regard the city as being safe. As mentioned before, the need for protection is a reason why there are so many guns in Chicago. Kanye West's quote *"No shop class but half the school got a tool"* also implies that the number of guns present is very high. Therefore, it is suggested that the more guns are circulating in the city, the more shootings appear.

## Analysis

Important key definitions which first need to be clarified are the following:

**Firearm:** a weapon, as a rifle or pistol, from which a projectile is fired by gunpowder.<sup>3</sup>

**Long Guns:** any type of firearm, which has a long barrel and is designed to be fired when braced against the shoulder.<sup>4</sup>

**Assault Weapons:** any of various automatic or semiautomatic firearms.<sup>5</sup>

**FOID Card:** to legally possess firearms or ammunition, Illinois residents must have a Firearm Owners Identification (FOID) card, which is issued by the Illinois State Police to any qualified applicant.<sup>6</sup>

**Concealed Carry:** the practice of carrying a concealed firearm on one's person in public.<sup>7</sup>

- ▶ Both excerpts are from the same EE. Which one is relevant?
- ▶ Which one directly answers the RQ?
- ▶ Underlines parts on the left is analysis!!



# Criterion C: Critical thinking

## Criterion C Critical Thinking

- This criterion assesses the extent to which critical-thinking skills have been used to analyse and evaluate the research undertaken.

10–12	<p><b>The research is excellent.</b> <b>VWA Inhaltliche Kompetenz</b></p> <ul style="list-style-type: none"><li>• The research is appropriate to the research question and its application is consistently relevant.</li></ul> <p><b>Analysis is excellent.</b> <b>VWA Informationskompetenz</b></p> <ul style="list-style-type: none"><li>• The research is analysed effectively and clearly focused on the research question; the inclusion of less relevant research does not significantly detract from the quality of the overall analysis.</li><li>• <b>Conclusions</b> to individual points of analysis are <b>effectively supported</b> by the evidence.</li></ul> <p><b>Discussion/evaluation is excellent.</b></p> <ul style="list-style-type: none"><li>• An effective and focused reasoned argument is developed from the research with a conclusion reflective of the evidence presented.</li><li>• This reasoned argument is well structured and coherent; any minor inconsistencies do not hinder the strength of the overall argument or the final or summative conclusion.</li><li>• The research has been critically evaluated.</li></ul>
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# Suggestion (for students that do not know where to start)

- ▶ Step 1: Make a claim that answers the RQ. Do this at the beginning, do not leave the reader guessing.
- ▶ Step 2: Provide researched evidence (data, quotations etc).
- ▶ Step 3: Explain the evidence using your own words. This is not yet analysis.
- ▶ Step 4: Analysis, Evaluate how well the evidence answers the RQ.

*"It's senseless violence at the end of the day. But it's like, what do you do when you're caught in that moment? You rather be caught with protection than without protection." - Duwop*

**Evidence**

**Evidence in own words**

Duwop points out that even if the people do not want to wear arms, they still have to protect themselves and therefore buy guns. This lack of security is also indicated in Kanye's lyrics *"It's a war going on outside we ain't safe from"* and therefore denotes that the rapper does not regard the city as being safe. As mentioned before, the need for protection is a reason why there are so many guns in Chicago. Kanye West's quote *"No shop class but half the school got a tool"* also implies that the number of guns present is very high. Therefore, it is suggested that the more guns are circulating in the city, the more shootings appear.

**Analysis**



# Problem: Researched data not analyzed.

- ▶ Humanities, languages etc: Some students think that researched and summarized facts are „their ideas“. They spent much time researching, so they think that this is what they get points for.
  - ▶ They list many quotations that support their ideas
- ▶ Sciences: They think that because they spent much time doing an experiment, presenting the results of the experiment is enough. They think that this is what they get points for.
  - ▶ They present their findings in graphs and tables.
- ▶ While research is necessary, they must understand that only a small number of points (of 12) is awarded for research. The majority is for analysis.
- ▶ Sometimes students do not know what analysis is.

# Why is it so difficult to analyze data?

- ▶ Teachers and students sometimes may feel uncomfortable with analysis, because it does not have this „objective“ feel to it.
- ▶ For years, we have given assignments like these:
  - ▶ Make a presentation of the human heart.
  - ▶ Write a report on Anorexia.
  - ▶ Write a book summary of XYZ
  - ▶ What happened in Austria between 1945 and 1955?
  - ▶ What are the different types of volcanos?
  - ▶ Explain harmonic motion (Physics)
  - ▶ What is the rule of thirds (Visual Arts)?

# Students now have to address

- ▶ How relevant is the data?
- ▶ Is it statistically significant?
- ▶ What does it mean under a different context?
- ▶ Does the data even answer the RQ?
- ▶ Where is the data good?
- ▶ Where is it bad?
- ▶ What possible problems are there with the research process?
- ▶ Which one of the two pieces of data should be given a higher importance?
- ▶ **Students were not trained for these type of questions. Now they are supposed to both collect their own data and reflect upon it.**
- ▶ **Weak students: can't do this well. They summarize facts, get a „D“. Also OK.**
- ▶ **Strong students: sometimes do not know what analysis is, but could do it, if told.**

# „Research“ is not Data Analysis

- *Geography: What are the Economic Advantages and Environmental Implications of Steel Production in Linz, Austria?*

**Table 3: Number of employees employed by the Voestalpine in the given years**  
(“Arbeitsmarkt Service”, 2015)

Year	Number of Employees
2008	7,380
2009	7,110
2012	6,820
2015	7,040

Data from the table is described in the text. This is important, but it is not analysis.

Students often forget about this important verbal description of quantitative data. Some think, however, that a verbal description is data analysis, which it is not!

In language: summarizing a quote is not analysis.

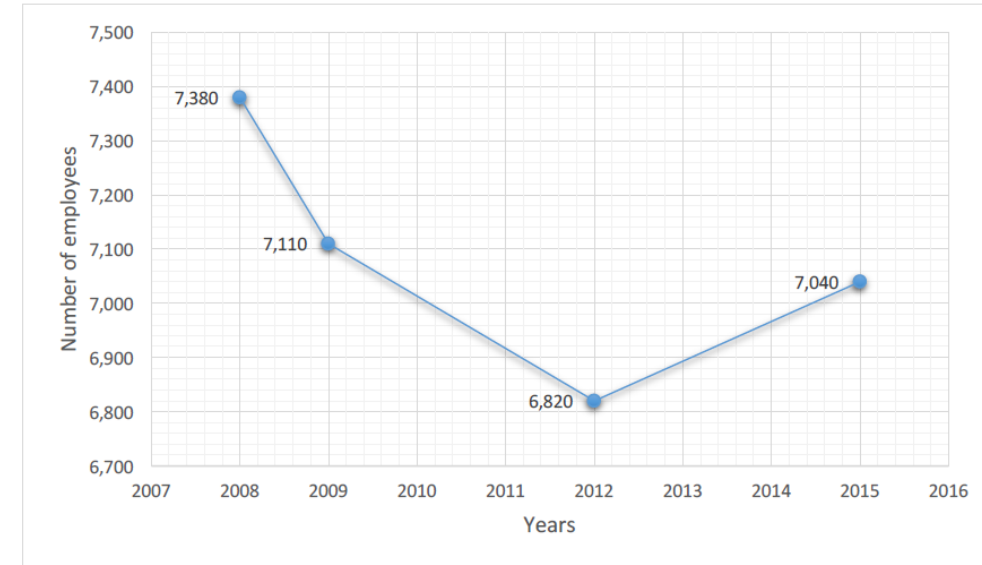
The data, although not consistent throughout the years, indicates a drastic incline in the number of employees between 2008-2009 with as many as 270, this inclination continued until 2012, however began to progressively increase in 2015. This is further illustrated in Graph 3.

# Analysis Example

- *Geography: What are the Economic Advantages and Environmental Implications of Steel Production in Linz, Austria?*

Though the data throughout the years is not consistent, the graph roughly indicates the trends where the most number of employees was in 2008 and least in 2012. Upon observation, the data obtained for output, revenue and number of employees hold a key similarity. In 2012 the output, revenue and number of employees drops and I believe this drop in all aspects is due to the global economic downturn and fall in global demand of steel. Decreasing revenue would have forced the Voestalpine to reduce the number of employees, in order to cope with the drop in demand and sales. However, despite the drop in numbers employed, the company remained as a major employer for the city and surrounding areas.

Graph 3: A line graph representing the number of employees employed by the Voestalpine in 2008, 2009, 2012 and 2015



The population of Linz in 2015 was approximately 197,400 ("Population City", 2015) and the number of employees the Voestalpine employed in 2015 was 7,040. In 2015, 3.6% of the total population of Linz, worked in the Voestalpine. These numbers, however, cannot be taken at face value as they do not reflect the place of residence of the employees, it is naïve to assume that all employees are residents of Linz.

# Much data description, little analysis

- ▶ *Music: How is Longa differentiated so that it fits the old Turkish and modern Arabic culture?*
- ▶ *While in Longa Riad the key was clear, as the composer used sequential musical notes for a long time where he showed eight consecutive notes in the third bar of the last section, but in the fourth bar, he converted the C to C sharp and in the fifth section, he converted the F to F sharp also. He changed the time signature to 3/4 in this section with a slow tempo.*
- ▶ **Comment:** Does it now fit the old Turkish and modern Arabic culture or not? Where is the answer to the RQ?
- ▶ The student did not analyze it later either.

Analysis (underlined part). It is the opinion of the student, that „the key was clear“

Description of the music score (the rest)



**Figure 4:** the last section of Longa Ethem Efendi.



# About two pages of pure analysis.

- ▶ *Visual Arts: How did the political development influence the work of Adolf Ziegler and Otto Dix?*
- ▶ *The audience clearly receives the message that Adolf Ziegler is most likely trying to convey, that being primarily the strength of the Nazi belief. [...]*
- ▶ *The composition is separated by margins, there is an s-shape flowing through (as represented to the right).*
- ▶ *This embraces the synchrony and unity that the regime is preaching but is also characteristic to the renaissance period. This yet again reminds the viewer what is the ideal image of society.*

Claim

Description  
of the  
painting:  
support for  
the claim

Link to the RQ: How  
the painting style is  
connected to society.

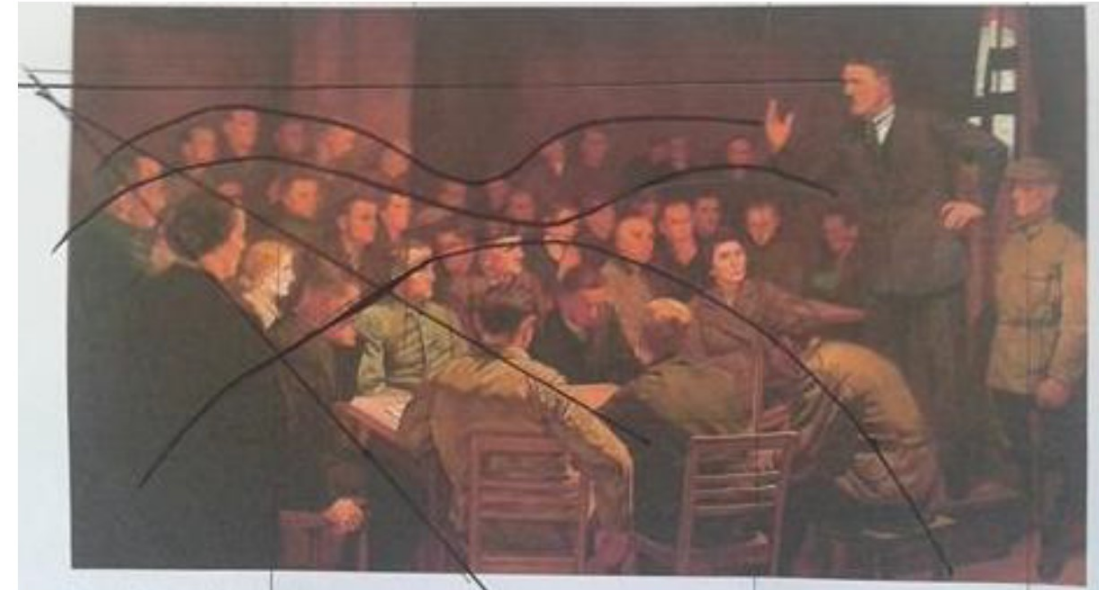
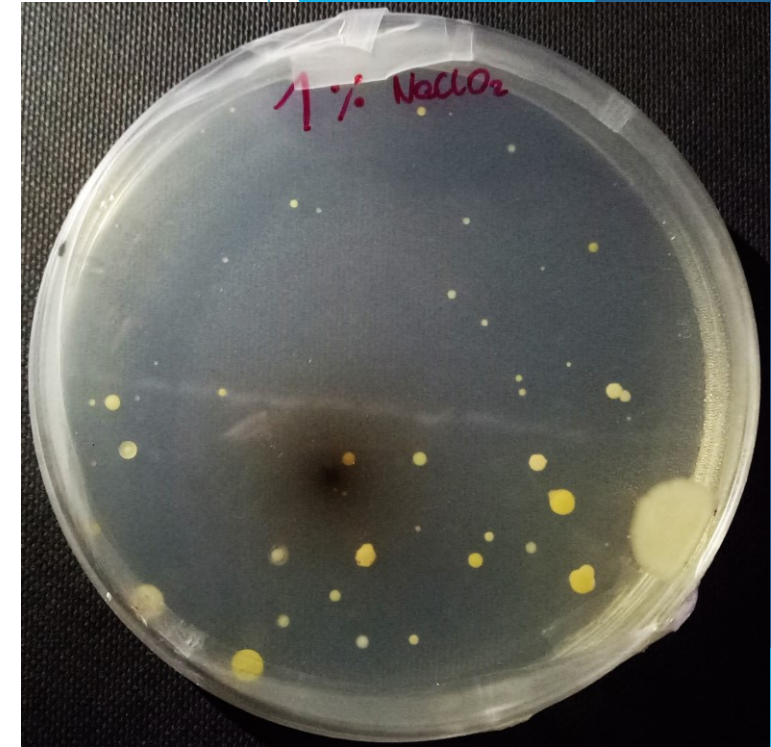


Figure 4 where the s-curves are present, and also how the compositional lines surround the woman's face. (Lines are drawn by me)

- ▶ **Comment:** She not only analyzed the painting based on artistic factors, but tried to answer the research question by addressing the intention of the painter.

# Insufficient analysis and data not relevant

- ▶ **Biology:** How do different concentrations of sodium chlorite influence microbial growth?
- ▶ Numerous colonies appeared. There are many punctiform colonies and some bigger colonies. The majority is in vivid yellow, with some colonies in brighter shades of yellow, orange or white. The vast majority is circular, with a few colonies appearing irregular in this magnification. Almost all colonies are opaque, with a few translucent or transparent colonies. There is one larger colony on the side of the plate. It is white and opaque, with undulate margins. It can be clearly seen that there are fewer colonies than on the previous plate with higher  $\text{NaClO}_2$  concentration. There are estimated 50 colonies. There is uncertainty regarding a small number ( $\approx 5$ ) of points which not necessarily have to be colonies but possibly stains on the lid.
- ▶ **Comment:** there is not much data analysis present, but rather a description of the results. This is also important, but not sufficient for a good mark. In this particular case, the description of the result, unfortunately, is mostly also not relevant for answering the RQ. This is a second problem.



The only relevant  
description of data.  
No analysis.



# Sciences: do not forget to results!

- It is not enough only to present the result

III. Results: Viscosity Measurements At

IV. Analysis: Viscosity Measurements At

V. Results: Focused Viscosity Measure

VI. Analysis: Focused Viscosity Measure

VII. Results: Viscosity Measurements At

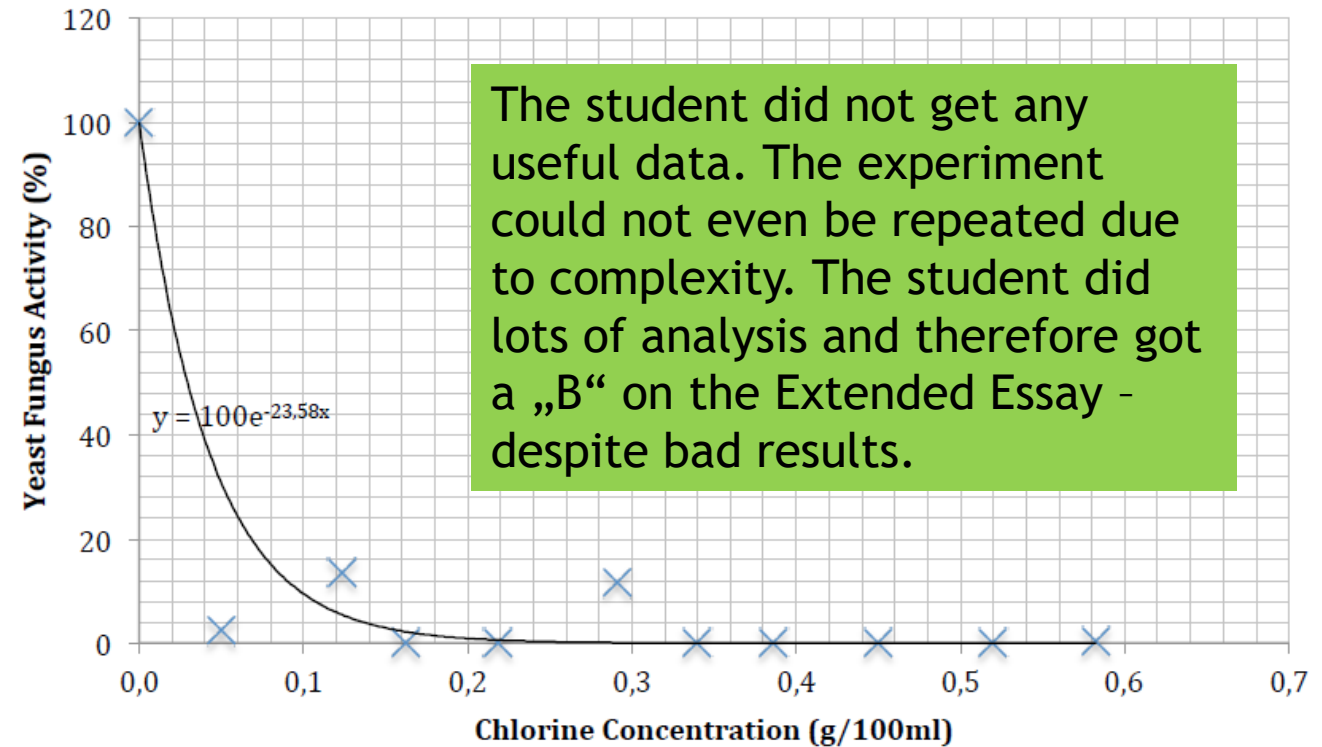
VIII. Analysis: Focused Viscosity Measure

IX. Results: Focused Viscosity Measure

X. Analysis: Focused Viscosity Measure

Here, results and analysis are combined well.

## Yeast Fungus Activity in correlation with Chlorine Concentration



(The model graph of  $y = 100e^{-23,58x}$  depicts the drastic decrease in yeast activity from 0,00g to 0,10g of chlorine per 100ml, a decrease of ~97%. The graph merges with the x-axis at ~0,25g of chlorine per 100ml. This was the best approximation possible with the application Microsoft Excel. The analytical balance error was not included in this illustration, as it was too small to be depicted on this scale.)

# Insufficient direct comparisons, irrelevant chapters

- ▶ *History: A comparison of Alexander the Great and Genghis Khan's military tactics in the early phase of the rapid expansions of their empires.*
- ▶ *One aspect is clearly visible in both military tactics. The flexibility, loyalty and discipline of the army. The Macedonians and the Mongols both had armies which followed the commander without thinking twice. This is a key to success, because if the soldiers do as they are told more complicated maneuvers are possible.*
- ▶ **Comment:** this is the first time that the student directly compared both military leaders - on page 15 of the essay. This is too late. Flexibility, loyalty and discipline have not been mentioned before in the essay.
- ▶ **Are flexibility, loyalty, discipline military tactics?**  
Explanation?
- ▶ There is practically no analysis and discussion in Chapters 1-3, just a summary of facts from the books. This EE got a „D“ and a „sehr gut“ for the VWA. The student was very competent concerning the facts justifying the high VWA grade.

## Table of Contents

1.	Introduction	
2.	Alexander the Great	
2.1	Short Biography	IRRELEVANT!
2.2	Military Aspects	
2.2.1	Units in the Army	
2.2.2	Equipment	= tactics?
2.3	Battle Tactics and decisive battle	
3.	Genghis Khan	
3.1	Short Biography	IRRELEVANT!
3.2	Military Aspects	
3.2.1	Units in the Army	
3.2.2	Equipment	= tactics?
3.3	Battle Tactics and decisive battle	
4.	Comparison of the two tactics	RQ answer
5.	Conclusion	

# Suggestion: compare the points directly!

## ▶ Loyalty

- ▶ How Alexander the Great and Genghis Khan's made sure that their troops were loyal, +evidence
- ▶ How the loyalty of their troops was different.
- ▶ Answering the RQ to what extent loyalty was relevant for their success.

## ▶ Flexibility

- ▶ How Alexander the Great and Genghis Khan's were able to respond flexibly, +evidence
- ▶ How their military flexibility differed.
- ▶ Answering the RQ to what extent flexibility was relevant for their success.

## ▶ Discipline

- ▶ How Alexander the Great and Genghis Khan's were able to improve discipline +evidence
- ▶ How their troop discipline differed.
- ▶ Answering the RQ to what extent discipline was relevant for their success.

# Good direct comparison example

- ▶ *English B: How do the characters Holden Caulfield from The Catcher in the Rye by J.D. Salinger and Rowan Clark from Broken Soup by Jenny Valentine compare in how they cope with difficult situations?*
- ▶ *For both protagonists their little sister plays an important role in their lives.*
- ▶ *For Holden, Phoebe is comparable to a safe place where he can be who he is, and she understands and challenges him.*
- ▶ *For Rowan, Stroma represents the innocence of both of them, at the same time reminding her of their family's fate.*
- ▶ *Yet, both characters feel closest to their little sister, since Phoebe and Stroma are the only family members they can count on, and most importantly: They understand what their elder siblings are going through.*
- ▶ **Comment:** This is how it should be done. RQ is answered and the two characters of the books are directly compared. Many students do not compare, but treat the characters or themes separately in different chapters (not good).
- ▶ This direct comparison is something “new”, which was born in the mind of the student. New knowledge was added to the world. This is how the EE is different from a conventional VWA, where students can also only summarize existing information.

Claim

Supporting argument book 1

Supporting argument book 2

Supporting argument for both books

# Criterion C: Critical thinking

- This criterion assesses the extent to which critical-thinking skills have been used to analyse and evaluate the research undertaken.

10–12	<p><b>The research is excellent.</b> <b>VWA Inhaltliche Kompetenz</b></p> <ul style="list-style-type: none"> <li>• The research is appropriate to the research question and its application is consistently relevant.</li> </ul> <p><b>Analysis is excellent.</b> <b>VWA Informationskompetenz</b></p> <ul style="list-style-type: none"> <li>• The research is analysed effectively and clearly focused on the research question; the inclusion of less relevant research does not significantly detract from the quality of the overall analysis.</li> <li>• Conclusions to individual points of analysis are effectively supported by the evidence.</li> </ul> <p><b>Discussion/evaluation is excellent.</b></p> <ul style="list-style-type: none"> <li>• An effective and focused <b>reasoned argument</b> is developed from the research with a conclusion reflective of the evidence presented.</li> <li>• This reasoned argument is well structured and coherent; any minor inconsistencies do not hinder the strength of the overall argument or the final or summative <b>conclusion.</b></li> <li>• The research has been critically evaluated.</li> </ul>
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# Problem: no coherent argument

- ▶ Irrelevant parts that do not explicitly relate to the RQ.
  - ▶ Theoretical background info without relevancy.
- ▶ A method that does not lead to the answer of the RQ.
- ▶ Research is presented, but it is not mentioned how these results answer the RQ.
- ▶ There is no answer to the RQ visible anywhere
- ▶ The conclusion does not answer the RQ:
  - ▶ „Generally the experiment worked quite well.“ What did the experiment show?
  - ▶ „In this essay I wanted to analyze if more electric cars reduce oil prices.“ Did they reduce the oil prices now or not?

# Coherent argument

- ▶ **English B:** *How does the depiction of the female characters in Stephen King's novels *Dolores Claiborne* and *Rose Madder* disprove the author's alleged sexism and limited perspective of female characters?*
- ▶ Introduction: Ever since the age of eight, when I was lucky enough to get my first novel written by Stephen King into my hands, I fell in love with his literature. The talent he possesses for creating a scenery in one's head and painting complex and many-layered characters by writing a few simple lines, have always been fascinating me.
- ▶ However, considering myself a feminist, I was pretty shocked and confused when I heard many people calling him anti-feminist and sexist. The book "Moral Voyages of Stephen King" for example states: [... long quote claiming that he is sexist ...]
- ▶ After reading these allegations there was only one thing to do: finding out if these statements are true or to prove that they are not, by analyzing the roles of the women in two of my favorite books written by him. I will do this by answering the following question: How does the depiction of the female characters in Stephen King's novels *Dolores Claiborne* and *Rose Madder* disprove the author's alleged sexism and limited perspective of female characters?
- ▶ **Comment:** The motivation, significance of the RQ is communicated convincingly.

The question:  
Is Stephen King sexist?

Personal significance

Identification of a problem

Strategy to answer the RQ.  
(she wrote more details in  
the following paragraphs,  
not shown here)



# Coherent argument

- **English B: How does the depiction of the female characters in Stephen King's novels [...]**

## Table of Content

Abstract .....
Research question .....
Introduction.....
Dolores Claiborne .....
Contents .....
Her story .....
Her character traits at the beginning of the story.....
Her personal growth and her personality now .....
Her role as a mother.....
Other female characters.....
The image of women.....
The author's motif.....

**She talks about the female characters! She maintains focus on the RQ!**

Rose Madder .....
Contents .....
Her story .....
Her character traits at the beginning of the story....
Her personal growth and her personality now .....
Other female characters.....
The image of women.....
The author's motif .....
Comparison .....
The main characters .....
The image of women.....
Stephen King's message .....
Conclusion .....
Bibliography.....

Direct comparison only in the last part, which is OK, because the previous sections also answer the RQ. The intention was not to compare the 2 novels.

The RQ was not: „How are female characters portrayed differently in the 2 novels?“

The RQ could be more clear, however, as it does not refer to King's alleged sexism.

- **Good: She did not write a general biography of Stephen King. Some other students would have done that saying „But you need to know this background information to understand if he is sexist or not.“**



# She maintains focus also in the body of the EE

## The image of women

In the time the story plays in, women were expected by society to stay at home and take care of the household and the children. Suppression, abuse and getting beaten up by their husbands was completely normal in most families: *“Later I put up with it because I thought a man hitting his wife from time to time was only another part of bein married”*<sup>11</sup>. Basically, women were treated as if they were less valuable than men and it took a lot of hard work for a woman to receive a little bit of respect from men. *“‘ Sometimes,’ she told me, ‘being a bitch is all a woman has to hold onto.’”*<sup>12</sup>. Even if she would not have realized how unfair this is, she did not have a choice but to turn into a real feminist who is not ashamed of fighting for her rights. She managed to make her world a little bit fairer and equitable by building a hard shell of confidence and stability and fighting against the sexism she had to face.

**Research (the direct citations) and analysis are interwoven. The paragraph shows that Stephen King criticized the sexism of society. RQ answered. „Red string“ present.**

# Conclusion answers RQ

The answer to  
Is Stephen King sexist?

Criterion C  
Critical Thinking

Claim

Summary of findings:  
The female characters  
are strong, not weak!

Possible explanations,  
Justifications, why some  
think that King is sexist.

Counter-examples:  
Men characters are  
also portrayed  
shallowly.

- ▶ Conclusion: These two novels, definitely disprove the allegations of Stephen King's sexism. He depicts the women in many different ways, proving that his female characterizations are not shallow nor that he has a limited view of them. The two main characters, Rosie McClendon and Dolores Claiborne, both go on a journey, that leads them away from their shyness and obedience and towards becoming strong and powerful women who are not afraid to fight for their rights and who managed to learn that men do not deserve more respect than women.
- ▶ Stephen King might have published a few novels that seem sexist or that include stereotypical women. However, stereotypes are necessary sometimes to simplify the story for the reader, as they are known in our society and people can easily imagine something concerning them. Additionally, King has written over 50 novels, some of them in very short a period of time, so it is not surprising that the way he describes some of his characters lack some depth, especially when these characters are not essential for the story or message he has in mind. Furthermore, if the allegations of sexism were correct, the male characters would not lack depth, but, as mentioned above, especially in Rose Madder the male characters are painted black and white and definitely do lack depth.
- ▶ Comment: The conclusion answers the RQ. You might agree with the claims of the student or not. This is not the point. But there is a clear line from the intro, to the analysis of the novels (not shown) and the conclusion.

# Do not allow a subject EE to be written using German. Only German A can do this.

- ▶ Should we allow students to write the EE in German (Eg. a Biology EE in German)? This could allow other teachers who do not speak English to supervise the EE. Answer: NO. This creates many more problems than it solves. Teachers still have to apply the EE criteria!
- ▶ This is risky. How good is the level of German to write an EE? This is intended for schools who teach the whole IB in German. They do not know the terminologies of the subject in German.
- ▶ Students get a lot of practice in writing in English. Allowing them to write in German will reduce their practice for the IB exams etc.
- ▶ An additional choice will cause decision stress. Students then consider language and not only subject and topic for their choice. This detracts from the real factors that are important (Assessment Criteria).
- ▶ There is no guarantee that the results will be better. Most likely even worse, as not the level of the language determines the points, but the Assessment Criteria. It is better to write it in the non mother tongue (eg. English) and stick to the Assessment Criteria, than to rely on writing it in German and not stick to the assessment criteria.
- ▶ Less overlap with IAs which are written in English, unless you also change the language here. Students can transfer knowledge in some subjects from the IA to the EE.
- ▶ Students might be forced to write EE in German or English not based on their preference, but on the language ability of the supervisor (unfair). Eg. Theatre Arts EE can only be written in English, but Biology in German or English.
- ▶ This is a softening of the school profile and increases the complexity of the system and not much is gained.

# How much EE supervision time?

- ▶ I got this email from the IB:
- ▶ *Dear coordinator*
- ▶ *The subject manager for extended essays has asked me to contact you regarding May 2017 EE submissions. It appears that in the essay submitted for candidate XYZ there was a problem with information contained on the coversheet with regards the following:*
- ▶ *The number of hours spent with the candidate being in excess of the recommended hours: Amount of time spent with candidate (hours unless stated) = 10*
- ▶ *Please be reminded that as stated in the EE guide, the recommendation should be that the supervisor should spend 3 to 5 hours with each candidate. I would be grateful if you would ensure that all supervisors are reminded of the requirements for future submission. There is no need to respond to this email. Kind regards,*  
\_\_\_\_\_
- ▶ **Comment:** The EE supervision time, of course also counts to the VWA supervision time. But teachers can not deny VWA supervision if the 3-5 hours are used up for the EE. Maybe the VWA requires more time. This can be done after the EE was handed in.

# The problem of good students

- ▶ They work independently on their own and therefore the teachers let them work on their own. If they now misunderstand the criteria, then they write an EE which is not suitable.
  - ▶ Weak students have to be spoon-fed and therefore are sometimes under closer supervision.
- ▶ Good students often have a fixed idea on what they want to research and how they want to present it. They have a procedure in place (which made them successful), but the problem is that this procedure might not be suitable for an EE.
- ▶ They work completely on their own and the supervisors can not authenticate the EE.

# Citing and Referencing

- ▶ The IB does not prescribe a certain style.
- ▶ In the sciences the APA style is commonly used, in the humanities, MLA.
- ▶ It does not matter which style is used. If it makes life simpler, use MLA for the sciences as well, so that there is a school standard.
- ▶ Many people are worried about the which style to use, but students lose points because they do not know how to properly cite and reference in the first place.
- ▶ Students who do not know how to cite and reference sometimes overdo it and write a „summary-EE“ and forget about the analysis.
- ▶ Some assume that language teachers should be responsible for teaching citing and referencing. But why? This is not a subject where generally a lot of secondary research is done! To do a character analysis of the protagonist of a novel, you only have 1 source book.

# Science EE best practice advice

- ▶ Use IA criteria as a starter for the EE: students write 2 completely separate IA. One of them is then expanded into an EE.
- ▶ Students must collect data, but this does not have to be an experiment.
  - ▶ Eg. Phone app to test hearing is OK, data from databases etc.
- ▶ If existing data is used, then students must describe in the method, how this data was selected, processed etc. Assessment Criteria must be met.
- ▶ If experiments are done, then be aware that complex experiments do not automatically give points.
  - ▶ Simple experiments that provide much data that can be talked about are good.
- ▶ Experiments should give students the possibility to talk about.
  - ▶ A complex experiment which students can not justify is not appropriate.
  - ▶ Eg. Student goes to a lab at the University to do DNA Analysis. Where is the personal input concerning method development here? The procedure is given, and does not allow for much personal planning involvement.

# Use of the pronoun „I“

- ▶ Student should (!) use the words „I“ and „me“ it as it forces them to get personally involved into critical reflection. The advantages outweigh the disadvantages.
  - ▶ Later the sentences can always be changed to passive voice to remove the „I“ but this is not necessary. It might make the essay more difficult to read. But different subjects/students/teachers have different traditions. Just make sure that critical reflection is included and that it is possible to follow the ideas of the student .
  - ▶ The „I“ forces students to shift the focus away from only summarizing someone else’s ideas.
  - ▶ The EE Criteria do not mention writing style, it is irrelevant.
- ▶ An EE must use „Subject-specific language“ (Criterion B), but the pronouns „I“ and „me“ do not contradict Criterion B.
- ▶ Of course there are some parts of the essay, where the word „I“ is more relevant than in other parts. Don’t overdo it, but also do not desperately try to avoid „I“.
- ▶ However, there are also certain traditions concerning the use of „I“ in the different subjects and I recommend that you check sample EE from the IB.

My first thought was to investigate yoghurt fermentation at different temperatures, but after having realized that there were already yoghurt incubators available on the market, which kept the yoghurt just at the right temperature, I no longer saw a sense in investigating this aspect of the biological process. I rather went on to focus on ingredients, which could be added to the formula, which lead me to my final research question **“Can the growth rate of lactic acid bacteria in whole milk be influenced by different concentrations of glucose and lactose, and if yes, what is the optimum concentration for both sugars?”**.

*Comment: Here the student explains how he found the RQ. Critical reflection is included and also changes to the thought process.*



# Should there be Chapters?

- ▶ Yes, do include them, even for languages and humanities. The advantages outweigh the disadvantages.
  - ▶ Helps student to structure the EE
  - ▶ Helps identifying irrelevant chapters
  - ▶ Gives the Examiner evidence for Criterion E („Engagement“) and also for Criterion D („Structure and Layout“)
  - ▶ Gives the supervisor a quick overview if the student is on the right direction.
  - ▶ Needed for the VWA?
- ▶ Shorter essays (TOK Essay, Written Assignments) etc. can be done without chapters. The EE, however, is in my opinion too long for that.
- ▶ The argument for not using chapters is that Chapters disrupts the reading flow. Reading flow is not an EE Criterion, however.

The IB seems to expect Chapters. Examiner:  
„The page of contents suggest a rather basic  
structure to the essay.“

How the US Media Reported on Vietnam War Events out of Context,  
and how the Media influenced the American Public

## Table of Contents

Cover Page.....	1
Table of Contents.....	2
Introduction .....	4
Body Paragraphs.....	4
Conclusion.....	15
Bibliography.....	16

The page of contents suggests a rather basic structure to the essay.

# Citing and Referencing

- ▶ The IB does not prescribe a certain style. Within an EE the style must be consistent.
- ▶ In the sciences the APA style is commonly used, in the humanities, MLA.
- ▶ It does not matter which style is used. If it makes life simpler, use MLA for the sciences as well, even though this is not common, so that there is a school standard.
- ▶ Many people are worried about the which style to use, but students lose points because they do not know how to properly cite and reference in the first place (see example below).
- ▶ Students who do know how to cite and reference sometimes overdo it and write a „summary-EE“ and forget about the analysis.
- ▶ Some assume that language teachers should be responsible for teaching citing and referencing. But why? There are other subjects that rely more on sources.

NO

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<sup>16</sup><http://www.pnas.org/content/111/12/4375.abstract>, last accessed 31.10.2016

<sup>17</sup>Peers, Chris. Genghis Khan and the Mongol War Machine. N.p.: Pen & Sword, 2015. Print. p.3

YES

# The reality

- ▶ Students want to write a general VWA because they can not think of a RQ and then „shorten it down“ to an EE.
- ▶ Students do not get an overview of what an EE is.
- ▶ The TOK teacher (etc) uses his lessons to explain the EE for other subjects
- ▶ Teachers and students are confused about the Assessment criteria
- ▶ Teachers award a „sehr gut“ on the VWA but the student gets a „D“ on the EE, even though it is the same piece of work.
  - ▶ There is often a good reason for the „D“, misunderstanding of what the EE is, wrong subject, not enough analysis, etc.
- ▶ Some IB examiners do not understand the EE and award low points (very rare, but this also happened), points were changed after a remark (not in our school). The intro of the EE should provide relevant background information.