Cartography M.Sc.

The usability of satirical maps as an educational aid in history class
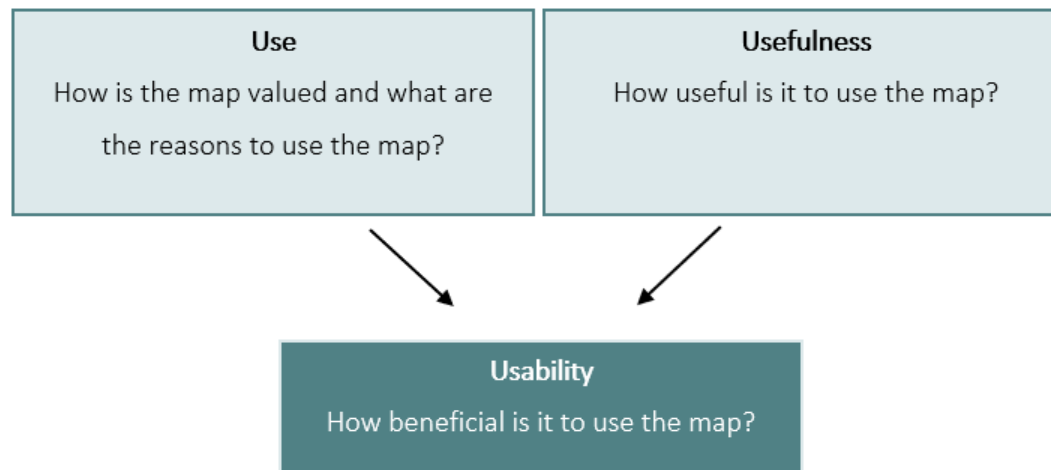
[1]

Wouter van der Meijden

25-09-2019

"one image says more than a thousand words"

Objective

*Discover the **use** and **usefulness** of satirical maps as an **educational aid** in **secondary school history class** and to give recommendations for its **potential use***

The usability of satirical maps as an educational aid in history class

Usability is the "extent to which a system, product or service can be used by specified users to achieve specified goals with effectiveness, efficiency and satisfaction in a specified context of use" (ISO, 2018, p. vi).

Use	Usefulness
How is the map valued and what are the reasons to use the map?	How useful is it to use the map?

Usability
How beneficial is it to use the map?

The usability of satirical maps as an educational aid in history class

Research Questions

1. Summarize what is known about satirical maps
   What is known about the usability of satirical maps?

2. Summarize what is known about learning objectives
   What is known about education objectives?

The usability of satirical maps as an educational aid in history class

Research Questions

3. Explore the **use** of both satirical and plain maps
   How do students and teachers value the use of a satirical map in contrast to a plain map?

4. Explore the **usefulness** of both satirical and plain maps
   How effective and efficient is working with a satirical map in contrast to a plain map?

5. Identify the **usability** of satirical maps as an educational aid
   What conclusion can be drawn concerning the usability of a satirical map in contrast to a plain map?

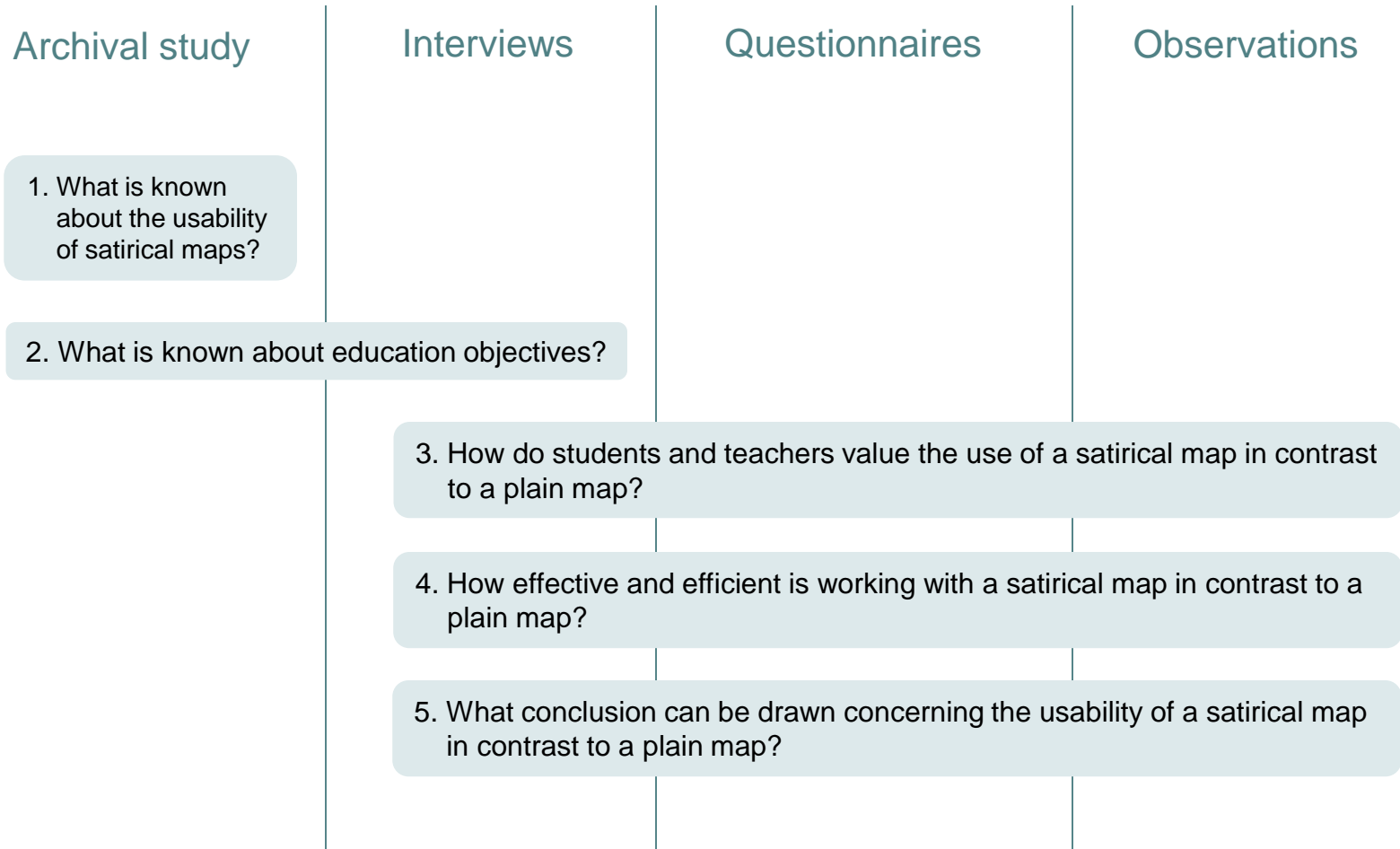The usability of satirical maps as an educational aid in history class

Hypothesis

Satirical maps possess characteristics that are contributory in reaching history class objectives, which makes the satirical map a beneficial medium in history class.

The usability of satirical maps as an educational aid in history class

Methodology

- Experimental / Comparative Design

  - Archival study

  - Interviews

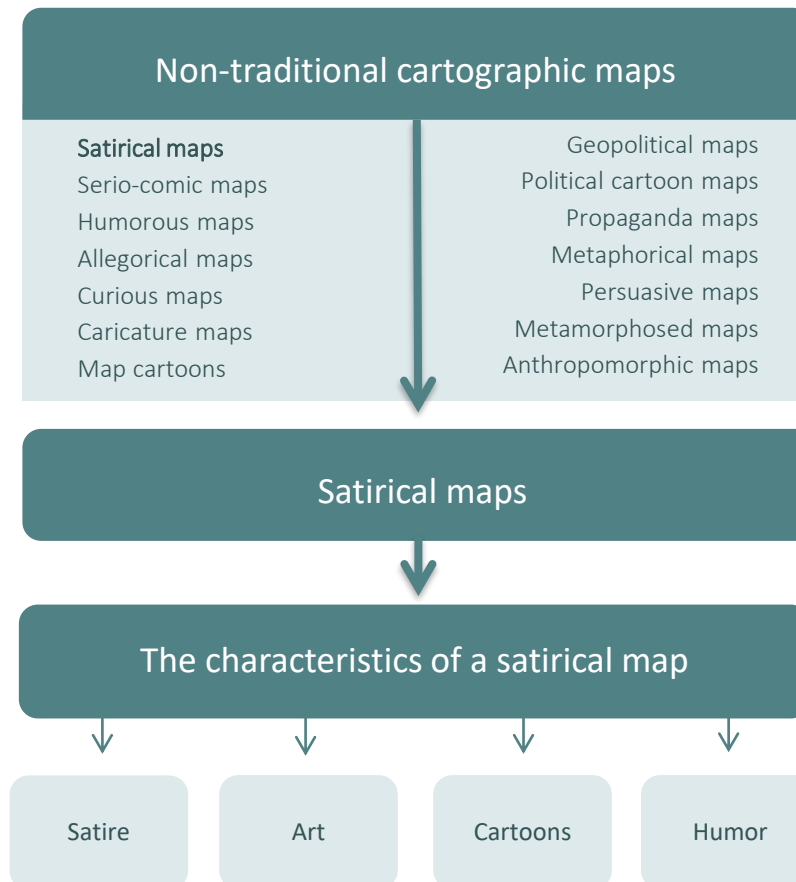 - Class Experiment (incl. Questionnaire)

  - Observations in class

The usability of satirical maps as an educational aid in history class

Archival study	Interviews	Questionnaires	Observations

1. What is known about the usability of satirical maps?

2. What is known about education objectives?

3. How do students and teachers value the use of a satirical map in contrast to a plain map?

4. How effective and efficient is working with a satirical map in contrast to a plain map?

5. What conclusion can be drawn concerning the usability of a satirical map in contrast to a plain map?

The usability of satirical maps as an educational aid in history class

1

What is known about the usability of satirical maps?

Non-traditional cartographic maps

Satirical maps
Serio-comic maps
Humorous maps
Allegorical maps
Curious maps
Caricature maps
Map cartoons

Geopolitical maps
Political cartoon maps
Propaganda maps
Metaphorical maps
Persuasive maps
Metamorphosed maps
Anthropomorphic maps

Satirical maps

The characteristics of a satirical map

| Satire | Art | Cartoons | Humor |

What is known about the usability of satirical maps?

EUROPEAN REVUE.
KILL THAT EAGLE.

EIN KLEINSTAAT BEDROH

What is known about the usability of satirical maps?

[2,3,4]

2

What is known about education objectives?

College voor Toetsen en Examens

2018

2019

2020

Ex...

hom...

Zoekterm   🔍 Zoek

bij g...

28 ju...
Norm...

28 ju...
Norm...

tijdv...

12 ju...
Norm...

vmb...

College voor Toetsen en Examens

GESCHIEDENIS VWO

SYLLABUS CENTRAAL EXAMEN 2019, NADER VASTGESTELD

Versie 3, juni 2018

Centrale examens VO

GESCHIEDENIS EN STAATSINRICHTING VMBO | Syllabus centraal examen 2019
Versie 2, juli 2017

3b. Specificatie van de globale eindtermen voor het CE

GS/K/3 Leervaardigheden in het vak geschiedenis en staatsinrichting

Omschrijvingen	Specificaties
De kandidaat beheerst een aantal strategische vaardigheden die bijdragen tot de ontwikkeling van het eigen leervermogen. De kandidaat kan	 In dat verband kan hij/zij
1. verschillende typen historische vragen herkennen en zo zelfstandig mogelijk formuleren	onderscheid maken in beschrijvende, verklarende en waarderende vragen
2. bij gegeven of zelf geformuleerde historische vragen informatie verwerven	– bepalen welke (soort) historische informatie nodig is – geschikte informatiebronnen inventariseren – bronnen en bronfragmenten selecteren, lettend op bruikbaarheid, betrouwbaarheid en representativiteit – gebruikmaken van verschillende typen historisch bronnenmateriaal, mondeling, schriftelijk, audiovisueel
3. verworven of aangereikte informatie verwerken	– gegevens ordenen en zo nodig bewerken – gegevens beoordelen op bruikbaarheid, betrouwbaarheid en representativiteit – gegevens analyseren en een eigen standpunt weergeven en toelichten

4. principes en procedures die kenmerkend zijn voor de benaderingswijzen van het vak geschiedenis en staatsinrichting toepassen	– ordening aanbrengen in historische gebeurtenissen, verschijnselen, ontwikkelingen en personen:
	  - historische gebeurtenissen, verschijnselen, ontwikkelingen en personen plaatsen in historische perioden en in maatschappijtypen
	  - verschijnselen uit verschillende perioden en samenlevingen vergelijken
	  - in historische processen aspecten van continuïteit en verandering herkennen
	  - veranderingen onderscheiden naar de snelheid waarmee deze plaatsvinden, van schoksgewijs tot geleidelijk
	– op basis van gegeven werkmateriaal verklaringen geven voor historische gebeurtenissen, verschijnselen en ontwikkelingen:
	  - de aanleiding herkennen als de meest directe oorzaak
	  - herkennen hoe oorzaken van verschillende aard historische processen beïnvloeden - directe en indirecte oorzaken onderscheiden
	  - onderscheid maken tussen oorzaken van meer en minder belang
	  - gevolgen die op korte termijn spelen, onderscheiden van gevolgen op lange termijn
	– zich op basis van historische gegevens een beeld vormen van historische gebeurtenissen, verschijnselen, ontwikkelingen en personen:
	  - rekening houdend met de standplaatsgebondenheid van de bronnen
	  - rekening houdend met de eigen standplaatsgebondenheid
	  - vaststellen waardoor de standplaatsgebondenheid bepaald werd/ wordt
	– een eigen standpunt over historische gebeurtenissen, verschijnselen en ontwikkelingen weergeven en toelichten:
	  - zich verplaatsen in opvattingen, waarden en motieven van mensen in het verleden, er rekening mee houdend dat zij niet over dezelfde kennis konden beschikken als wij nu
	  - opvattingen, waarden en motieven, waardoor mensen in het verleden werden geleid, vergelijken met die van zichzelf en tijdgenoten

Syllabus geschiedenis en staatsinrichting GL/TL   pagina 27

[5]

What is known about education objectives?

What is known about education objectives?

[6]

Assess data for usability, reliability and representativeness, and to process and use this information

Acknowledge context-specificity and multiperspectivity

Use different types of historical source material to form an opinion and/or to answer questions

What is known about education objectives?

3

How do **students and teachers** value the **use**
of a satirical map in contrast to a plain map?

4

How **effective and efficient** is working with
a satirical map in contrast to a plain map?

Findings

Students

Findings

PARTICIPANTS					
Class	N	Age	Male	Female	Other
VWO5 (1)	18	17	10	8	0
VWO5 (2)	23	17	12	11	0
BOS 11D	22	21	11	10	1
BOS 11C	16	21	6	10	0
BOS 11B	12	21	7	5	0
Total	91	20	46	44	1

Findings

Cartography M.Sc.

**Questionnaire about the studied maps
concerning the First World War (WW1)**

Consent to participate in a user study
Thank you for finding time for the user test, which is conducted by Wouter van der Meijden,
Master student of the Technical University of Munich. It is organized within my work on the master thesis
with the topic "The usability of satirical maps as educational aid in history class".
Short description of the test and how the data will be collected will be explained by the student.

Confidentiality and rights
This study is anonymous and is not aimed to retain any personal information. All the records and data
gained from the test will be anonymized and used only within the work on my master thesis research.
You may refuse to take part in the study at any time. You have the right to ask questions about this research
study and to have those questions answered by me before, during or after the research.

Name: _____ (used only for linking questionnaires)

Sex: m / f / x

Age: _____

Nationality: _____

Nationality father: _____

Nationality mother: _____

On the following page you will find a number of questions about the maps that you just studied.
The first few questions are open questions, please write here as much as possible.
The most questions are closed questions, which means that you are asked to tick one of the circles.
You can choose from five options, ranging from fully disagree to fully agree.

...acts from **the text fields** belong to **t**hose elements?

...tral in this war **according to the map.**

...catched the attention?)

...onging to the 'eye-catchers', mentioned in question 3?

...**map** in learning history?

	fully disagree	disagree	neutral	agree	fully agree
...ap (1) (not considering the textfields)	○	○	○	○	○
...y more entertaining	○	○	○	○	○
	○	○	○	○	○
...d to understand the map	○	○	○	○	○
...er to learn history	○	○	○	○	○
...o more often	○	○	○	○	○
...er the historic facts	○	○	○	○	○
...o to remember the historic facts	○	○	○	○	○
...ring about WW1	○	○	○	○	○
	○	○	○	○	○
...e time to look at the map	○	○	○	○	○
...e explanations about the map	○	○	○	○	○
...nformation	○	○	○	○	○
...whole map	○	○	○	○	○
...learning about WW1 to look at this map	○	○	○	○	○
...p help me to remember the historic facts	○	○	○	○	○
...t which countries	○	○	○	○	○
...y/subjectivity of the map	○	○	○	○	○
	○	○	○	○	○
...nda	○	○	○	○	○
...s his own vision	○	○	○	○	○
...real events that took place in WW1	○	○	○	○	○
24. I see a map like this regularly in history class	○	○	○	○	○
25. I have already had class about WW1	○	○	○	○	○
26. I knew a lot of this historical information already (even before looking at the map)	○	○	○	○	○
27. I do generally understand maps	○	○	○	○	○

Statements about the map (not considering the textfields)

	fully disagree	disagree	neutral	agree	fully agree
1. The map is interesting	○	○	○	○	○
2. The map makes learning history more entertaining	○	○	○	○	○
3. I understand the map	○	○	○	○	○
4. The map is humorous	○	○	○	○	○
5. The added text fields are needed to understand the map	○	○	○	○	○
6. I often use a similar map in order to learn history	○	○	○	○	○

Findings

► 1. The map is interesting

► 2. The map makes learning history more entertaining

3. I would like to see a similar map more often

► 4. I find this map useful for studying about WW1

5. The map does not contain too much information

6. I would recommend students learning about WW1 to look at this map

► 7. I would like to see a similar map more often (than is now the case) in history class

8. I would like to see the map again

9. The map did not contain too much information

Satisfaction

Findings
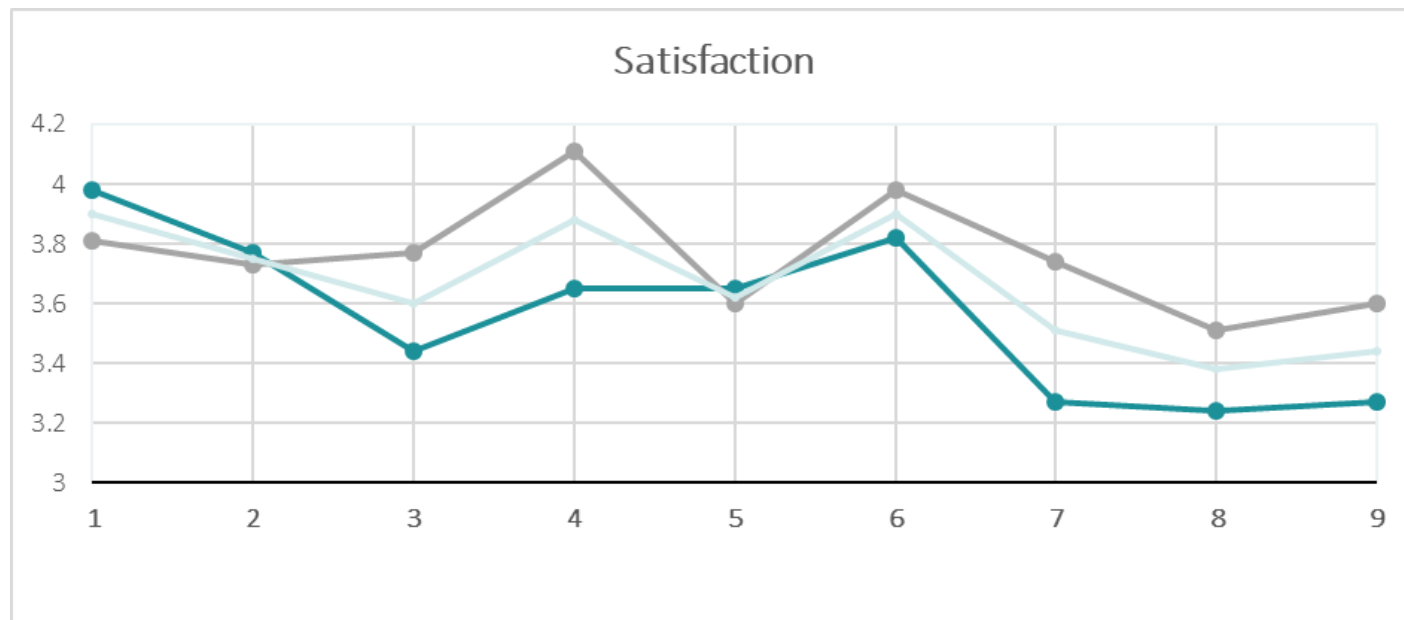
► 1. I understand the map

► 2. The map helps me to remember the historical facts

3. The colours of the map help me to remember the historical facts

► 4. I still remember how the map looked like

► 5. The map has helped me to remember the historical facts

6. The colours of the map have helped me to remember the historical facts

7. I know more about the WW1 now than I did before working with the map

Effectiveness

Legend: Satirical, Plain, Overall

Findings
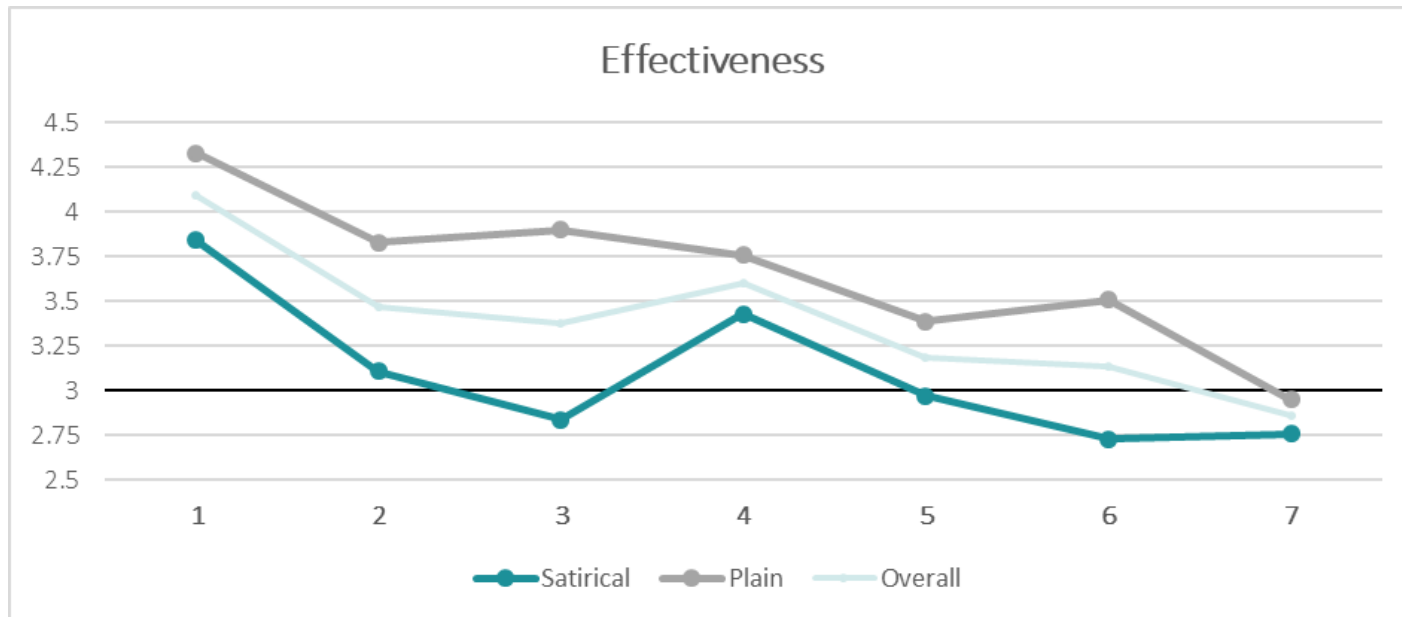
van de kaart
geleerd

▶ 1. The added text fields are needed to understand the map

2. I would have liked to get more time to look at the map

3. I would have liked to get more explanations about the map

▶ 4. I have not been able to study the whole map

5. I would have liked to get more explanations about the map

6. Without the text fields this map would have been useless

▶ 7. I would have liked to get more time to look at the map

Efficiency
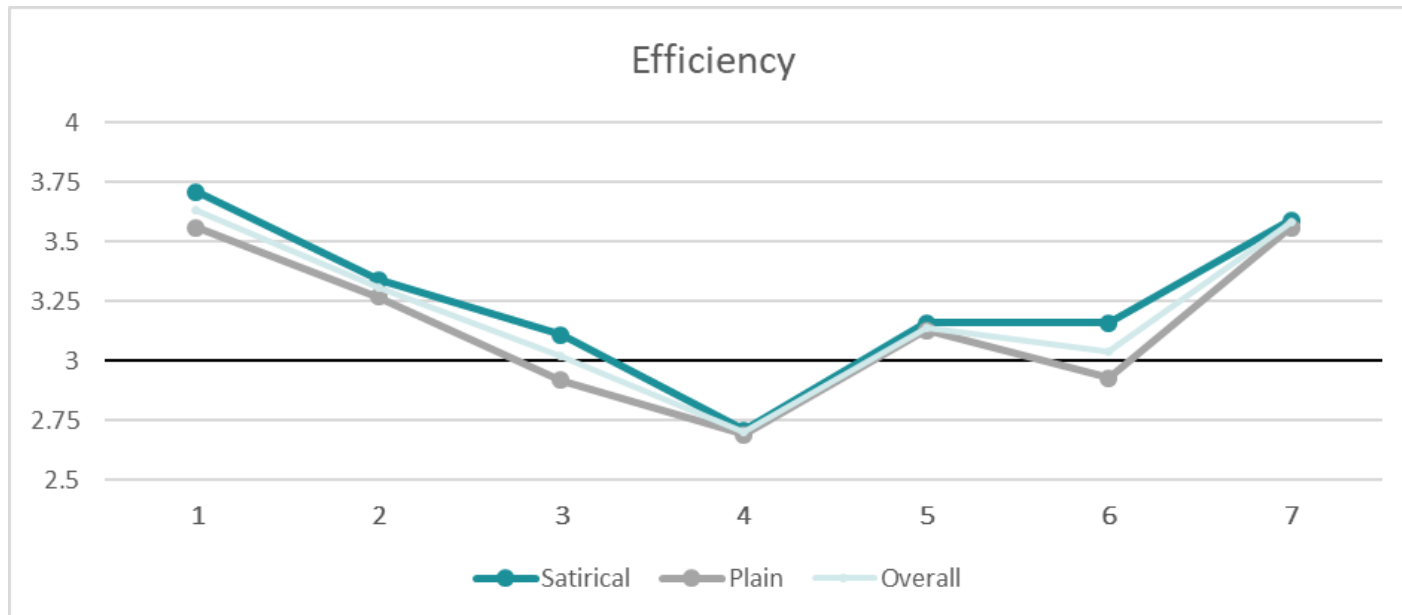
"It is a map to learn from"

"Provides deeper information"

"Good for learning the basic knowledge"

"Expresses an opinion"

"Accurate map"

"It really shows war"

"It is clear that the plain map is more familiar, and when you have learned with plain maps for all your life, it is hard to switch to satirical maps"

"It shows who took part in a funny way"

"Country names, borders, and colors"

Teachers

Findings

INTERVIEWEES			
Interviewee	Gender	Age	Occupation
1	M	67	Retiree (former teacher on Dutch secondary school)
2	M	61	Teacher on Dutch secondary school
3	F	29	Teacher on Dutch secondary school
4	M	45	Teacher on Dutch secondary school
5	M	43	Teacher on Dutch university
6	M	39	Teacher on German BOS
7	F	37	Teacher on German BOS

- Useful are..

- Usefulness of a map depends on..

- Efficient?

- Discussion and engagement?

- When to use?

- Reaching learning objectives?

Map 1

Map 2

Map 3

Map 4

Map 5

Map 6

[7]

5

What conclusion can be drawn concerning the **usability** of a satirical map in contrast to a plain map?

Findings

1. Acknowledge different points of view

2. Critical thinking

3. Analytical thinking

4. Understand historical facts / relationships

5. Assessing what data is reliable

6. Know the difference between facts and opinions

7. Consider the multicausality of phenomena and events

8 .Use knowledge gained by the analysis of visual sources (e.g. images, photographs, graphs, statistics and election posters) to understand manipulation attempts and to address them argumentatively

Findings

Conclusion

"Discussion and engagement not higher with the use of satirical maps, but satisfaction.."

"Lower effectiveness due to a low capability of teaching historical facts, but for deep learning.."

"Satirical maps are seen to have a particularly low efficiency in contrast to plain maps"

"Students should grow up as critical citizens who are curious about the world"

The usability of satirical maps as an educational aid in history class

Conclusion

Satirical maps **do** possess characteristics that are contributory in reaching history class objectives, which makes the satirical map a beneficial medium in history class.

Limitations

- Internal validity

- External validity

- Comparative design
  Mismatch concerning effectiveness

The usability of satirical maps as an educational aid in history class

Future Research

- Specific groups
  age, academic level

- Focus on effectiveness
  test 'deep knowledge'

The usability of satirical maps as an educational aid in history class

Thank you for your attention!

[1]

References

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Source: Soucacos, P., Satirical Maps. Historical and Satirical Accounts of Europe (19th-20th century), 2015, p. 199.

2. *A Small State Threatens Germany, from Survey Graphic, Oct. 1941.*
Source: Quam, L., The Use of Maps in Propaganda, 1943, p. 27.

3. *Rudolf Heinisch's map "Drei Imperien – Ein Meer" (Three Empires – One Sea).*
Source: W. Pahl, Das politische Antlitz der Erde. Ein weltpolitischer Atlas, Leipzig: Wilhelm Goldmann Verlag 1939, p. 82.

4. *European Revue. Kill that eagle.*
Source: "European Revue (Kill That Eagle) 1914.jpg", 2008; by Paul K is licensed under CC BY 2.0,
https://commons.wikimedia.org/wiki/File:European_Revue_(Kill_That_Eagle)_1914.jpg

5. College voor Toetsen en Examens. https://www.examenblad.nl/vak/geschiedenis/2019

6. ISB. https://www.lehrplanplus.bayern.de/fachlehrplan/bos/12/geschichte-sozialkunde-bo

7. *Maps from the exercise for the interviewees*
Sources: "European Revue (Kill That Eagle) 1914.jpg" by Paul K is licensed under CC BY 2.0, 2008;
Soucacos, 2015, p. 185, 221, 199, 207, 189

Clipped satirical figures
Source: "European Revue (Kill That Eagle) 1914.jpg", 2008; by Paul K is licensed under CC BY 2.0,
https://commons.wikimedia.org/wiki/File:European_Revue_(Kill_That_Eagle)_1914.jpg

The usability of satirical maps as an educational aid in history class