Wiring the World – the Invention of Telegraphy. Eine bedeutende Erfindung in den Kontext des 19. Jahrhunderts einordnen und Gegenwartsbezüge herstellen (Klasse 8)

Florian Kaspar, Karlsruhe



The telegraph - an earlier version of the Internet?

Die Telegrafie gilt heute als eine der bahnbrechendsten Erfindungen des 19. Jahrhunderts. Was genau versteht man unter Telegrafie? Welche positiven und negativen Auswirkungen hatte diese Erfindung auf Politik, Wirtschaft und Gesellschaft der damaligen Zeit? Weshalb ist sie auch heute noch von großer Bedeutung? Und welche Parallelen lassen sich zwischen der Telegrafie und dem Internet ziehen?

In der vorliegenden Unterrichtseinheit setzen sich die Schülerinnen und Schüler mit diesen Fragestellungen auseinander. Im Rahmen eines Gruppenpuzzles beschäftigen sie sich anhand von Bild- und Textquellen mit der Entwicklung sowie den Auswirkungen der Telegrafie.

Klassenstufe: 8

Dauer: 3 Stunden

Bereich: Neuzeit,19. Jahrhundert,

Technikgeschichte,

Globalisierung, Imperialismus

## Kompetenzen:

- die Telegrafie als revolutionäre Erfindung des 19. Jahrhunderts erkennen
- Parallelen zwischen der Erfindung der Telegrafie und des Internets ziehen
- Bild- und Textquellen analysieren und in den geschichtlichen Kontext einordnen

## Materialübersicht

1. Stunde:		Development of the telegraph
M 1	(Bi)	New developments
M 2	(Ab)	Wiring the world – about telegraphy
2. Stunde:		Effects of the telegraph
M 3	(Tx/Bi)	Telegraphy and the empire – expert group A
M 4	(Tx/Bi)	The Fashoda Crisis – expert group B
M 5	(Tx/Bi)	Telegraphy and trade – expert group C
M 6	(Tx/Bi)	Telegraphy and diplomacy – expert group D
M 7	(Bi)	Effects of telegraphy – working in your home group
3. Stunde:		Now you! – Writing about telegraphy
M 8	(Bd)	Telegraph vs Internet?
M 9	(Ab)	Creative writing – an essay
M 10	(Ab)	Creative writing – a letter to the editor

## Lernerfolgskontrolle

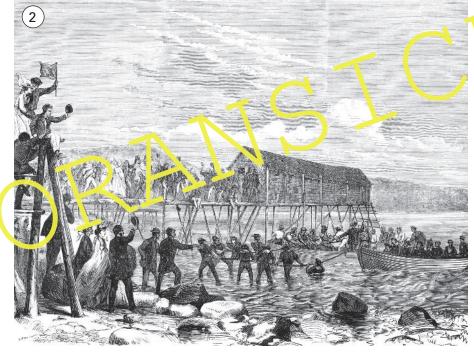
M 11 (LEK) Exam: Test your knowledge about telegraphy

Ark eitsblatt - Bi: Pild - LEK: Lemerfolgskontrolle - Tx: Text

# M 1 New developments







# © Thinkstock/iStock

## **Helpful words**

to put up a pole: einen Mast aufstellen – sea shore : Küste, Ufer

## M 2 Wiring the world – about telegraphy

	What is telegraphy? How does it work? And why was it so important? Let's ge	t some basic facts.			
	In 1850, there was no such thing as a telephone. You couldn't send	around the			
	world with a mobile phone or chat with someone on another continent				
	The electric telegraph by the American Samuel Morse cha	nged everything!			
	Before electric telegraphy, most messages that travelled long	were given			
5	5 to a messenger <sup>1</sup> who memorized them <sup>2</sup> or transported them in written form. The	9			
	be delivered <sup>3</sup> no faster than the fastest, ship or the	rain. For example,			
	before 1870, the transportation of a message from Sydney	anda			
	to took sixty days – that s two	6			
	! The telegraph reduced the time   1 2	7			
10	10 to only four days.	8			
	How was this possible? Telegraph messages (telegrams, $\tau$ • • • • • • • • • • • • • • • • • • •	•• 0			
	also known as " ") were sent by				
	tapping out <sup>4</sup> a special code for each letter with a telegraph				
	key <sup>5</sup> . The telegraph changed the dots <sup>6</sup> (short) and dashes <sup>7</sup> $x = -x$				
15	15 (long) of this code into electrical impulses and trans-				
	mitted <sup>8</sup> them over telegraph A				
	telegraph receiver <sup>9</sup> on the other end of the wire "translated" the electrical impulses to	does and dashes on			
	a paper tape and then into full Later, this code became known	own as Morse code.			
	Unlike the telephone or the Internet, sending telegrams was	So if you wanted			
20	20 to send a cable you had to go to the closest telegraph office and pay the telegraph c				
	People often used short sentences and to reduce the cost.	_			
	sound a bit like twe vts, the messages you can send on				
	At firs, many reople including politicians – were sceptical because they didn't	understand Morse's			
	in rention. Once, the wife of a German soldier even asked a telegraph clerk to use the				
25		<b>O</b> 1			
	while, telegraphy became a booming industry which wired the whole world. In 1908 there were 226,232				
	of telegraph cables, many of them running on the bottom <sup>11</sup> of the sea				
	cables) or parallel to railway lines <sup>12</sup> .				
	, <b>,</b>				
	Task				

1. Read the gap text carefully and fill in the gaps with the words in the box.

```
abbreviations¹³ • cables • distances • expensive • horse • inventor • kilometres • months London • sauerkraut • submarine • text messages¹⁴ • Twitter • wires¹⁵ • words
```

2. Now find a partner at the "bus stop". Try to send messages to each other with the Morse code.

## **Annotations**

1 messenger: Bote, Kurier – 2 to memorize sth.: etw. auswendig lernen, sich etw. merken – 3 to deliver sth.: etw. zustellen – 4 to tap out: abklopfen – 5 telegraph key: Morsetaste – 6 dot: Punkt – 7 dash: Strich – 8 to transmit sth.: to deliver sth. – 9 receiver: Empfänger – 10 clerk: a person who works in an office – 11 bottom: Grund – 12 railway line: Eisenbahnstrecke – 13 abbreviation: Abkürzung – 14 text message: Nachricht, SMS – 15 wire: cable

## M 4 The Fashoda Crisis

**Expert group B** 

Find out how Great Britain used telegraphy against its rival France during the Fashoda Crisis:

1 <u>e</u>	In 1898 most parts of Africa had been conquered <sup>1</sup>	because they had used telegraphy to deceive² the French.	а
2	The two leading colonial powers in Africa	he had access³ to a telegraph line to London.	b
3	Both of them wanted to have control over today's	so they agreed to contact their governments in London and Paris.	С
4	A French military expedition was led by Major Marchand	Sudan, which lies in the centre of the African continent.	d
5	Both armies arrived at Fashoda on 7 September	by European nations ("scramble for Africa" <sup>4</sup> ).	е
6	However, neither of them wanted to start a battle	army as weaker than the British – which wasn't true!	f
7	General Kitchener had an advantage because	and another expedition by the British army was led by General Kitchener.	g
8	He sent a cable <sup>5</sup> on 24 September in which he portrayed the French	government in Paris had to believe what they heard from London.	h
9_	Marchand didn't have telegraphy so the French	. but to order Marchand back to France.	i
10	The French government felt it had no choice	and claimed <sup>6</sup> the area for their respective countries.	j
11	In the end, Great Brita n won the confror tation	were France and Great Britain.	k

## **Tasks**

- 1. Read the sentences and match the beginning of each sentence (1–11) with the correct ending (a–k) by writing the letters on the lines on the left.
- Look at the cartoon and interpret it with the help of the new information. Tip: Khartoum is the capital of Sudan and Fashoda is a city in South Sudan (today Kodok).
- 3. Prepare a short presentation on your topic for your home group. Take notes. Don't talk about your cartoon in your presentation!

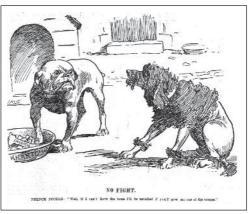


Bild: JM Staniforth

### No fight.

French poodle: "Well, if I can't have the bone I'll be satisfied if you'll give me one of the scraps"."

#### **Annotations**

1 to conquer sth.: etw. erobern – 2 to deceive so.: jmdn. täuschen – 3 access: Zugang – 4 "scramble for Africa": "Wettlauf um Afrika" – 5 to send a cable: einTelegramm senden – 6 to claim sth.: etw. verlangen, beanspruchen – 7 scraps: Speisereste

## M 8 Telegraph vs Internet?



This picture shows ...

On the left/right, there is ...

In the picture, you can see ...

At the top/ bottom, there is ...



In the foreground/ background, there is ...

## **Tasks**

- 1. Describe the pictures.
- 2. Find out what both pictures have in common.

## **Helpful words**

to tap out: abklopfen - Morse code: Morseschrift - keyboard: Tastatur

## M 9 Creative writing – an essay

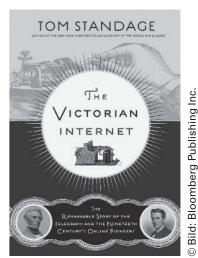
In 1998, the historian Tom Standage wrote a book about telegraphs and their impact on Victorian Britain and the world. The book is called "The Victorian Internet".

#### Task

Write an essay and concentrate on the following points. The info box and the phrases in the box below will help you.

- Find similarities and differences between the Internet and telegraphy.
- Discuss if Standage choose an appropriate<sup>1</sup> title for his book.

**Option 1** 



Cover of "The Victorian Internet" by Tom Standage

Info box: Here's how you structure a typical essay:

#### 1. Introduction:

- Introduce the topic. → Give some background information, tell something about the current situation, ...
- Explain the main aim of the essay. → What's your central question? State your thesis!
- Outline your essay.

#### 2. Body:

- It consists of a number of paragraphs.
- Answer your essay question on the basis of facts, evidence, examples, your knowledge and so on. Develop a discussion on your topic!
- There has to be a golden thread<sup>2</sup>!

## 3. Conclusion:

- Summarize the essay's key points.
- Answer your essay question.
- Give a final statement, for example about your own opinion or future prospects.<sup>3</sup>

The following expressions will help you:

Firstly, ...; secondly, ...; thirdly, ...

Besides, ...

However, ...

It's different from ...

It's neither ... nor ...

It's similar to ...

They have ... in common

Unlike ...

whereas ...

To sum up, ...



### **Annotations**

1 appropriate: angemessen - 2 golden thread: roter Faden - 3 prospect: (Zukunfts-)Aussicht

## M 10 Creative writing – a letter to the editor

**Option 2** 

Imagine you lived in Germany in the late 19<sup>th</sup> century. On 22 March 1889, you read the article "Telegraphs take over" in a British newspaper. It's an article about Great Britain, the world's dominant nation at that time, offering<sup>1</sup> Germany the chance to establish a telegraph connection between the two countries.

## **Tasks**

- 1. Read the info box on how to write a letter to the editor.
- 2. Should Germany establish a telegraph connection with Britain? Write a letter to the editor.



Info box: That's how a typical letter to editor is structured:

your name your address place and date

name of the editor name of the newspaper name of the article

Dear Sir,

Introductory ohrase: Lefer to your article "..."

## Body of the letter

- $\leftarrow$  use formal language  $\rightarrow$  avoid colloquial expressions
- come up with interesting and new aspects → don't repeat well-known facts
- concentrate on one major point → make it short (about 200 words)
- letters to the editor are always about personal opinions → use phrases to express your opinion ( In my opinion ..., To my mind ..., In my eyes ... etc.)

## Concluding sentence<sup>2</sup>

Your name (signature)

### **Annotations**

1 to offer: anbieten – 2 concluding sentence: Schlusssatz