MEDIA AND DIGITAL LITERACY REPORT TEMPLATE
MEDIA AND DIGITAL LITERACY COUNTRY REPORT

MeLDE:

Media Literacy in the Digitalised Era: supporting teachers through a whole-school approach

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MEDIA AND DIGITAL LITERACY COUNTRY REPORT

PROJECT INFORMATION

PROJECT ACRONYM:

MeLDE

PROJECT TITLE:

Media Literacy in the Digitalised Era: supporting teachers through a whole-school approach

PROJECT NUMBER:

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SUB-PROGRAMME OR KA:

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1. MEDIA AND DIGITAL LITERACY – NATIONAL CONTEXT

a) HISTORICAL BACKGROUND

Germany is a federation and consists of 16 *Bundesländer* (federal states); each having areas of responsibility of their own. Therefore, the German system of education is not centrally organized. The regional ministries of education and culture are responsible for schools, in which the range of subjects, curricula or certificates can be regulated in different ways depending on the state. Since many years the increasing importance of media education is highlighted and promoted within and by the curricula.

Twenty years ago a written document about media education – *Medienkonzept* – was penned. The goal of this concept is to systematically integrate learning with media into the learning process and it is a mandatory part of school work. Treated as as process, *Medienkonzept* has to take place on different school levels and must be coordinated together.

b) DIGITAL DIVIDE/ DIGITAL INCLUSION

Even though Germany is a leading economic and the second most populated country in Europe, the digital divide is present between citizens with and without computer or Internet access. There are still areas in the country that do not have access to high-speed internet; it is more available in bigger cities rather that rural areas.

There are almost 83 million inhabitants living in Germany and there were over 71 million Internet users in 2016. In the same year 92% of the share of households in Germany had Internet access (in 2007 it was 71%). In 2018, 90% of German households owned a personal computer.

There are still many schools in Germany without an Internet connection and/or modern technology. In 2002, an average of 14 German students had to share one computer in public schools. Also, some teachers are not so willing to use new teaching methods. The Federal Government and *Bundesländer* (federal states) aim to improve the standards of digital technology in German schools and implement various programs:

- **DigitalPakt#D –** equipping about 40.000 schools with broadband connection, Wi-Fi and equipment. The total amount of funds is € 5 billion,

- **School Cloud** – school's hardware and software are outsourced to a cloud network and run by external experts; the cloud also includes teaching materials. Schools need Internet connection and tablets for both teachers and pupils so that they can access the material they need at any time and any place,

- **Firewall Live Preventative Project** – courses about being more aware of cyberbullying and data security on the Internet for 6th and 8th grade students, parents and teachers,

- **Gute Schule 2020 –** a program launched in 2016 in North Rhine-Westphalia. Between 2017 and 2020, NRW municipalities, districts and regional associations can apply to receive funding to modernize schools including digital infrastructure. The total amount of funds is € 500 million.

A great majority of teachers and students have their own devices, e.g. smartphones, tablets or laptops, which are sometimes used during lessons at school. However, in many schools students are not allowed to use mobile phones, unless allowed by the teacher in explicit situations.

c) DIGITAL LITERACY EDUCATION

<u>STUDENTS</u>

Computer science as a school subject is taught at the age of 10/12 (it depends on the type of secondary school and the *Bundesländer* aka federal states) and is mandatory in only 9 of 16 federal states in Germany. Additionally, in those 9 *Bundesländer* (federal states) IT classes are not offered in all types of schools and quite often they are only part of a broader curriculum. In the remaining federal states such classes are up to the schools or teachers.

The students from Rehabilitation Studies of the Technical University Dortmund organize ALL DIGITAL Week campaign. It is about inhabitants of Germany acquiring new digital skills and competences and then supporting others in their learning process of digital media. Everyone is invited – senior citizens, refugees, educators and volunteers – to take part in various trainings for different target groups:

- Online to the Job – training to write a digital job application,
- GoTalkNow – training for teachers to use the app "GoTalkNow",
- Facebook- and then? – training for people with impairment,
- Cyber Bullying – training for pupils and parents.

<u>TEACHERS</u>

Teachers in Germany are required to participate in trainings to keep up to ongoing professional development. Teachers have a lot of authority to decide what professional development to participate in, though. The trainings are various and regulated by state law and located in the state where the teachers work. Professional development opportunities are offered at local, regional and central levels; their aim is to keep teachers updated in both their subjects and the teaching methods they use. Additionally, broader fields of psychology and sociology of education are available.

Only 2% of all German teachers (13,000) are able to teach computer science.

d) NATIONAL LEGAL POLICY FRAMEWORK

Becoming a teacher in Germany has very strict rules and it takes around 5.5 to 6.5 years. Preparation for teachers can be divided into 2 stages:

1. Undergraduate course work: educational studies and study of minimum two subjects – 3 years – finishes with the First State Teaching Examination,

2. Preparatory Service: on-the-job training in schools/apprenticeship – 1-2 years – finishes with the First State Teaching Examination

2. METHODOLOGY

a) DATA COLLECTION

25 students and 50 students from Germany took part in the Digital Literacy Survey created for MeLDE project. The surveys were distributed in two ways: a paper version for younger students and an online version – a website link sent to teachers and older students. The paper surveys were collected during an event organized for children in the Bürgerhaus Bennohaus in Münster. The data collection of the surveys took place from late October 2018 till the beginning of December 2018.

b) DATA ANALYSIS

The first step was to translate the survey into German. Then, the German version was shared with teachers and students from Germany. The surveys were collected in 2 forms: a paper version and an online survey. The next step was to put collected data into rows and columns in a table format. Additionally, checking for any errors has been made, e.g. a particular question answered by 20 students (and not 25). Finally, proper data analysis has been conducted – understanding the messages contained in the collected data. A statistic software was not used.

c) ABOUT THE PARTICIPANTS

STUDENTS (%)

- younger than 12 years old
- 12-15 years old
- 16-18 years old
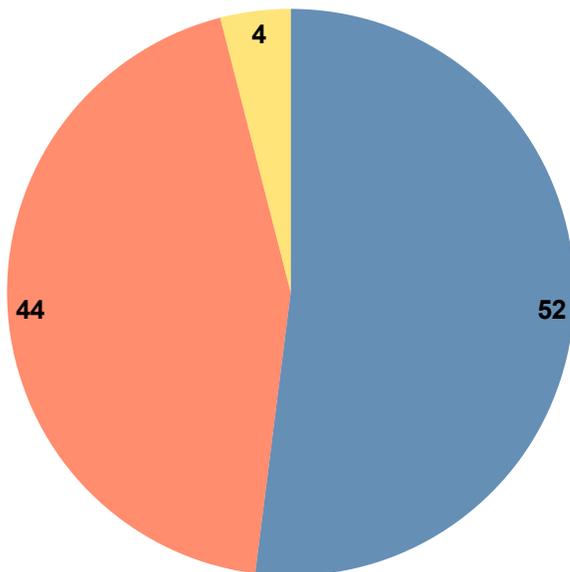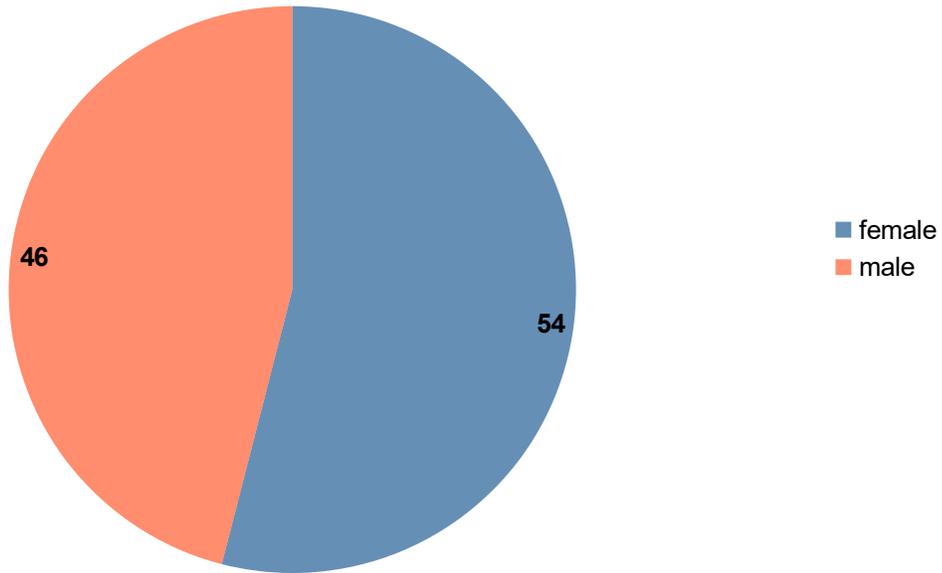
36
36
28
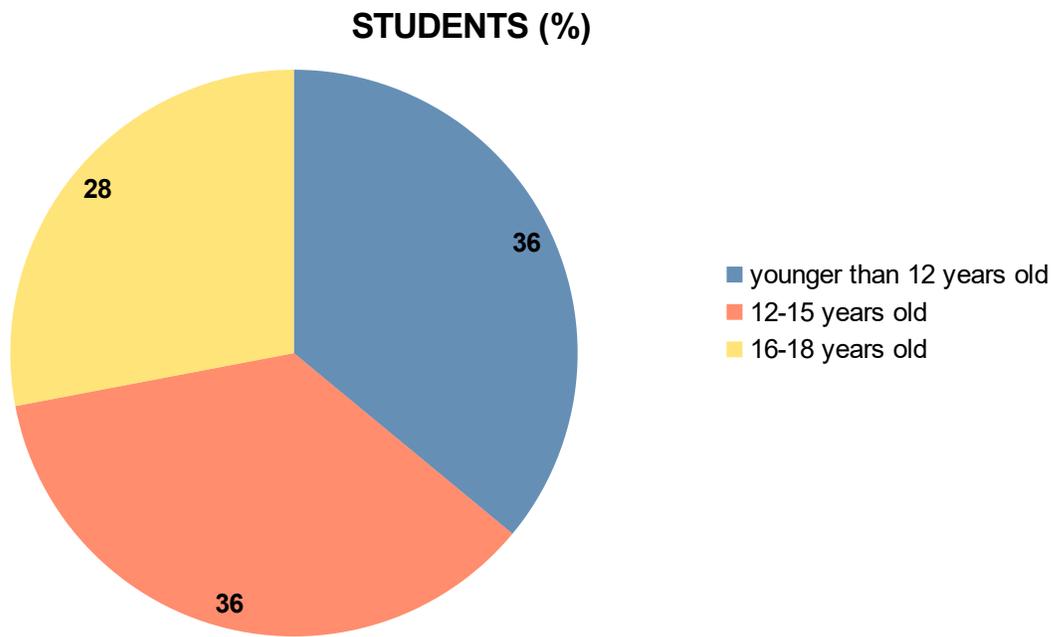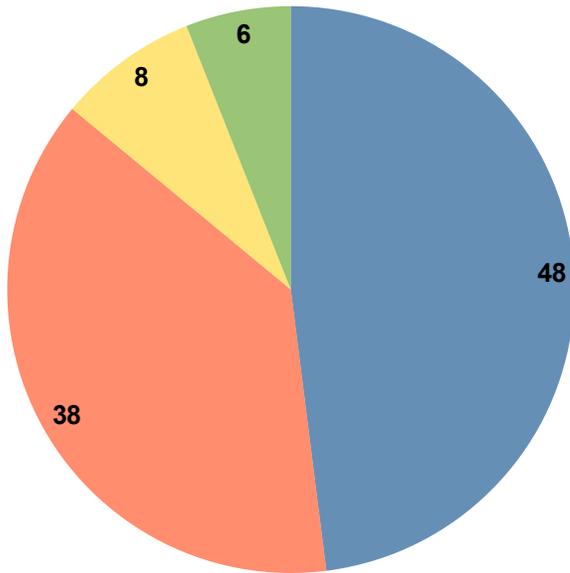
TEACHERS (%)

- 26-35 years old
- 36-45 years old
- 46-45 years old
- older than 55 years old

48
38
8
6

STUDENTS (%)

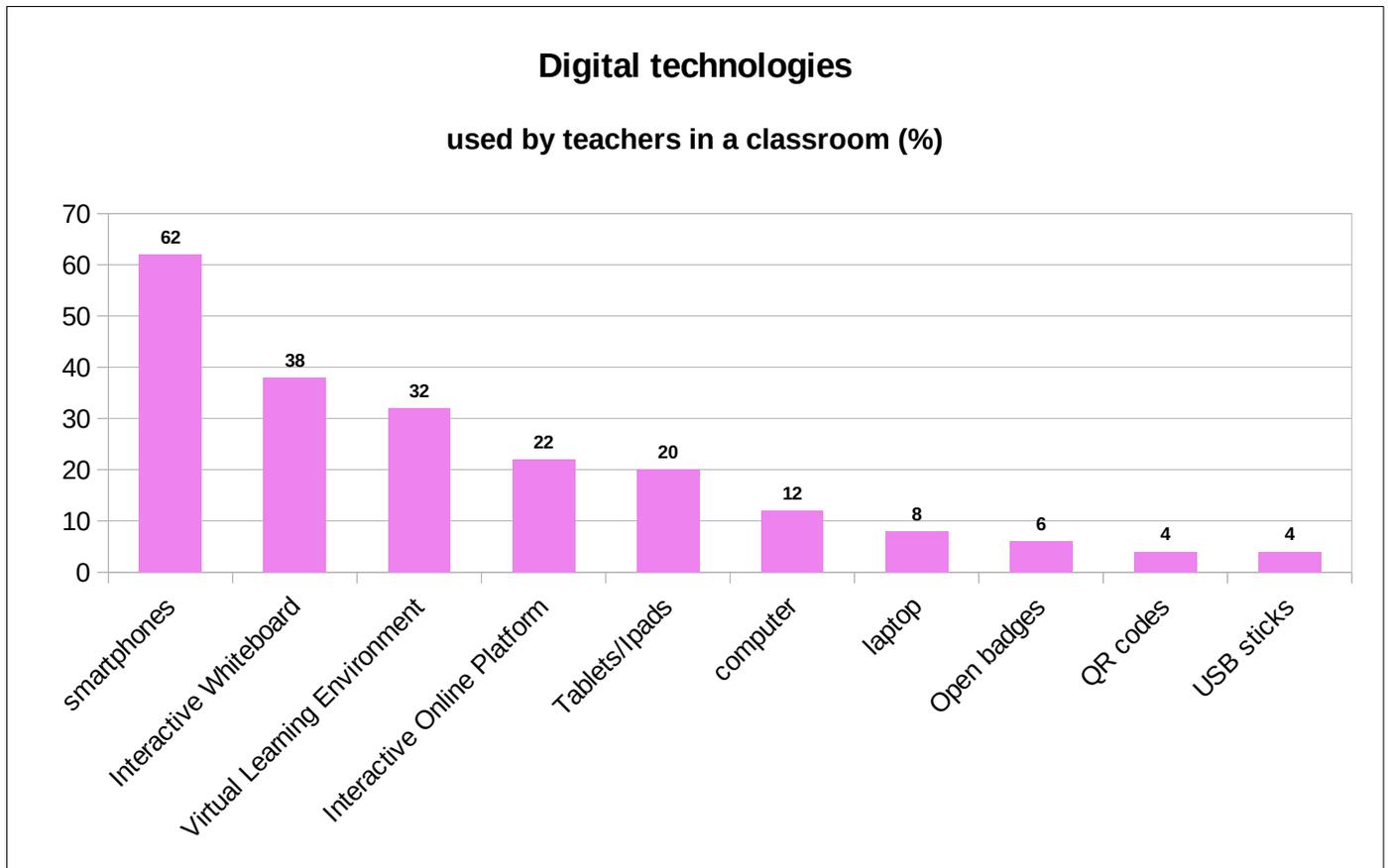- female
- male
- gender not specified

52
44
4

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ΔΗΜΟΚΡΙΤΟΣ DEMOKRITOS

ANT1

BÜRGERHAUS BENNOHAUS

TEACHERS (%)

- female
- male

46

54

3. KEY FINDINGS: COUNTRY LEVEL ANALYSIS

a) DIGITAL TECHNOLOGIES USAGE

	TEACHERS	STUDENTS
computer usage	98% use a computer for longer than 10 years	- 60% have been using computers not longer than 5 years - 32% between 6 and 10 years - 8% for longer than 10 years
computer training	75% took part in a computer training	32% took part in a computer training
being online	- 43% spend online not more than 5 hours a day - 39% between 6 and 10 hours - 6% more than 10 hours - 12% is always or almost always online	- 36% spend online not more than 5 hours a week - 32% between 6 and 10 hours - 16% more than 10 hours - 16% are always or almost always online
Internet access	- 62% usually have access to the Internet at home - 12% access the Internet at school - 6% both at their working place and at home - 6% almost everywhere	- 84% usually have access to the Internet at home - 28% access the Internet at school
social networking sites (e.g. Facebook)	- 44% have been using social networking sites for more than 10 years - 26% between 6 and 8 years - 12% between 3 and 5 years - 16% of teachers do not use social networking sites	- 46% use social networking sites for no longer than 2 years - 25% from 3 to 5 years - 21% do not use social networking sites
new technologies	5 main sources of finding out about new technologies among: 82% - friends, 62 % - work colleagues, 52 % - social media 48% - family, 24% - radio/television.	3 main sources of finding out about new technologies are: 64% - friends, 64% - family, 28% - social media

b) DIGITAL TECHNOLOGIES USAGE IN SCHOOLS

98% of teachers in Germany use digital technologies in teaching.

Digital technologies

used by teachers in a classroom (%)

Technology	Percentage
smartphones	62
Interactive Whiteboard	38
Virtual Learning Environment	32
Interactive Online Platform	22
Tablets/Ipads	20
computer	12
laptop	8
Open badges	6
QR codes	4
USB sticks	4

Digital technologies/tools are used in schools for:

- watching movies and videos,
- showing explanatory videos,
- visualization – PowerPoint presentations,
- presenting content,
- learning vocabulary with an Interactive Whiteboard and a dictionary of a smartphone,
- researching,
- homework via email,
- short quizzes (Kahoot),
- answering questions,
- online tests,
- creating surveys,
- making videos with smartphones and cameras, using audio recorders for practising – practical tasks for students,
- checking the knowledge of the students via Moodle and/or open badges,
- communicating with students through apps,
- providing classroom materials,
- collecting and evaluating seminar papers,
- placing QR codes on every equipment in a classroom.

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c) DIGITAL LITERACY SKILLS

TEACHERS	STUDENTS
88% said that their school encourages the use of digital technologies in teaching	44% agree that they enjoy using digital devices and they like to keep up with the new technological discoveries
57% of schools/organizations provide regular staff development training (CPD) on how to use digital technologies to better support teaching.	56% agree that their teachers should use digital technologies more
56% agree and 44% strongly agree that they are willing to learn more about digital technologies	56% strongly agree and 44% agree that they are willing to learn more about digital technologies
86% know how to use various types of digital devices	40% agree that they feel comfortable using any digital device
51% feel left behind and 31% do not feel left behind when others talk about digital technologies	69% disagree or strongly disagree that they feel left behind when others talk about digital technologies, 25% are not sure
- 39% are not sure if their students know how to use technologies better then them - 31% disagree with the same statement	40% agree that they feel comfortable using any digital device
68% agree and 32% strongly agree that it is important for them to improve their digital skills	48% agree that it is important for them to improve their digital skills
78% agree or strongly agree that they would like to use technologies more often in teaching	78% agree or strongly agree that they like learning while using digital tools
60% consider finding information they need online very easy and 40% think it is relatively easy	56% consider finding the information they need online easy and 36% relatively easy; 12% find it not easy
62% know what happens to the information they post/share online and 48% are not sure of it	60% know what happens to the information they post/share online
88% know how to find someone online (e.g. a well-known scholar in their field)	76% know how to find someone online
54% know what online information they can legally re-use	50% do not know what online information can be legally re-used and 40% know it
74% know how to use an online database to find useful resources for teaching (e.g. the library's online catalogue)	48% know how to use the library's online catalogue to find useful resources to support their studies and the another 48% do not know how to do it
86% do not have a blog	76% do not have a blog and 20% have a blog

90% know how to cite an online reference in their lecture	60% do not know how to cite an online reference in their essays and 28% know how to do it
40% know how to identify fake news and another 40% are not sure how to do it	44% do not know how to identify fake news and 39% know how to do it
44% are not sure how to report a fake website and 30% do not know how to do it	64% do not know how to report a fake website
62% know how to use media capture devices to record or edit a podcast or a short video	80% know how to use media capture devices to record or edit a podcast or a short video
84% did not have any training on how to stay safe online in the last year	68% had a training on how to stay safe online
68% know how to change their privacy settings on Facebook	68% know how to change privacy settings on Facebook and 32% do not know how to do it
	72% never supported any online campaign by signing a petition and 28% have done it
	39% strongly agree and 35% strongly disagree with the statement "I understand what it means to be a responsible digital citizen"
94% use their mobile phone to take pictures	
84% know how to identify different file types	
64% know how to refine their searching when looking for something online	
36% can recognize and 40% of teachers are not sure if they can recognize if a student is a victim of cyberbullying	
46% know how to recognize if an online source or website is reliable and 32% are not sure of it	
84% know how to legally share files with students and other teachers	
82% know how to use the appropriate tools to find, use or create information online	
72% know how to promote themselves or an event online	
63% feel they know how to make the best of online networking tools (Facebook, Twitter, etc.) and 37% do not	

know how to do it	
79% agree or strongly agree that teachers should have regular training on how to use digital technologies	
The main reasons that detain teachers from using digital technologies in teaching are: - WiFi problems – 63% - lack of time – 40% - lack of training – 28% - no technical support – 20% - lack of budget/appropriate facilities – 18%	

d) SKILLS GAP

	TEACHERS	STUDENTS
SKILLS THAT NEED DEVELOPING	identifying and reporting fake news	
	reporting a fake website or recognizing if an online source or a website is reliable	understanding the idea of being a responsible digital citizen
	learning how to stay safe online (attending training)	using the library's online catalogue to find useful resources to support studies
	recognizing if a student is a victim of cyberbullying	re-using online information legally
	knowing what happens to the information posted/shared online	citing an online reference in essays
	not feeling left behind when others talk about technologies	
	solving WiFi problems and dealing with the lack of time while using digital technology in teaching.	

4. CONCLUSION – FUTURE

a) RECOMMENDATIONS (based on the surveys)

Organizing trainings/workshops/lessons:

	for STUDENTS	for TEACHERS
1.	about identifying and reporting fake news and fake websites	
2.		about staying safe online and knowing what happens to the information posted/shared online
3.		about recognizing if a student is a victim of cyberbullying
4.		about learning about new technologies which are used by students and can be used in teaching
5.	about citing an online reference in essays	
6.	about using the library's online catalogue to find useful resources to support studies	
7.	about legal ways of re-using online information	
8.	about being a responsible digital citizen	

b) POLICY RECOMMENDATIONS

Schools and teachers should not be left alone in establishing media concepts. Experts are needed in order to answer all the questions which many teachers have. There is a risk of degenerating digital education into mere technical education. Education of the teachers is crucial.

Additionally, one of the German teachers suggested that a debate should be organized and certain questions asked – How much more digitalisation do we really need at schools and how to use it properly?

c) SUGGESTIONS FOR FUTURE RESEARCH

Critical reflection from one of the German teachers:

- Are classes with respectively using digital media better at all and if so when?
- Which dangers and chances does the digital future have?
- What kind of a society do we want and how can the next generations be prepared for that?

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6. IDENTIFICATION OF EXPERTS

Name:

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