



www.handywissen.at



USING THE MOBILE PHONE IN SCHOOL

Handling opportunities and risks appropriately

bm:uk



Saferinternet.at
Das Internet sicher nutzen!



ins@fe



**Using the mobile phone
IN SCHOOL**



Using the mobile phone in school

Dear Teachers / Heads of schools and colleges,

Handling opportunities and risks appropriately

The mobile phone has become a regular feature of our everyday lives. For example, in many European countries, the number of mobile phone contracts has surpassed the number of inhabitants.¹ A recent report from Nokia found that in Europe there is a mobile phone subscription for every 0.8 people (thirteen mobiles for every 10 people). In the fourth quarter of 2009, in Austria alone 1.59 billion text messages were sent. Across Europe, around 31% of 9 to 16 year olds go online using their mobile device.² **For children and young people in particular, the mobile is an indispensable item to be carried at all times**, and one which performs many more functions besides making calls and sending text messages. Mobiles are used to listen to music and the radio, to play games, to take and exchange photographs and videos, and to surf the net. Continuous internet access to see what is going on in a social network is enormously important for many young people. **At the same time, a mobile is the first private media device** for young people since, in general, they do not have to share their phone with anyone else. From a different point of view, the mobile is a means for parents to be able to reach their children at all times, wherever they may be. Thus the mobile in one's pocket plays an important role, not only within the circle of friends and for organising free time, but also within the family. In many schools, mobiles are forbidden because they constitute a nuisance (ring tones, talking, writing texts, cheating, taking and publishing photos and videos, etc). However, banning mobiles can lead to conflicts, not only with pupils but with parents too.

Establishing rules on the use of mobiles is an important step in school policy. However, children and young people do not always manage to keep to such rules. The need to be in contact with others and to know the latest news is at times simply too great and, at a certain stage of growing up, too important. Moreover, pupils find it hard to understand why teachers sometimes use their mobiles in school, whilst pupils may not. There is an increasing trend for people to own a second or third mobile, so that if a mobile is confiscated it can be immediately replaced.

A good way forward is to incorporate mobiles constructively in the classroom and to see them as an opportunity. Possible uses range from creating photo stories and SMS poetry to paper chases using the mobile. **The present teaching material contains suggestions for all subjects and levels.** These will be of interest to teachers eager to try something new and to give their lessons a modern twist. One teacher reports, for instance, that her pupils' vocabulary has improved since using mobiles to store glossaries.

Schools may not yet be at the stage of asking pupils or parents to acquire mobiles specifically for educational reasons. However, classes in which everyone owns a mobile are becoming increasingly common and teachers can thus make use of its potential. Access to online content and services will lead to further changes in the future and

¹ This includes second mobile phones, etc. Source: RTR GmbH, Telekom-Monitor 2/2010, www.rtr.at/de/komp/alleBerichte/TM2-2010.pdf (08.07.2010).

² EU Kids Online II - [http://www2.lse.ac.uk/media@lse/research/EUKidsOnline/EU%20Kids%20II%20\(2009-11\)/EUKidsOnlineIIReports/Final%20report.pdf](http://www2.lse.ac.uk/media@lse/research/EUKidsOnline/EU%20Kids%20II%20(2009-11)/EUKidsOnlineIIReports/Final%20report.pdf)

will pose new questions for school heads and teachers to address. With the advent of mobile internet, centralised control of access is no longer possible. Children and young people are becoming masters of their own media and content, creating and distributing material to an ever greater degree.

Even if it will be some time before all pupils have the same technical functionality and skills at their fingertips, **schools and teachers will find it is worth taking the new challenges to heart now, and becoming familiar with the mobile world.** Doing this is the best way of preparing for everything that the new media holds in store.

Children and young people are, as a rule, way ahead of their parents and teachers when it comes to mobile applications. Yet awareness of risks is not widespread. **For this reason, it is important to show children how to use mobile phones in a responsible manner and to strengthen their media skills.** Under certain conditions, educational methods can be adapted so as to encourage pupils' concentration and willingness to learn. **What is clear is that prohibiting mobiles in school is not a realistic long-term solution.**

The mobile per se is not dangerous. However, its use does not exclude the possibility of accessing and exchanging forbidden content such as violent or pornographic videos. These and other aspects such as the legal framework pertaining to schools will be discussed in the present teaching material.

This brochure is the result of an initiative by Handywissen.at in collaboration with experienced teachers and with the support of the Austrian Federal Ministry for Education, Arts and Culture and A1 Telekom Austria. It has been translated by the Insafe network.

We hope that you will find the information and ideas of practical assistance.

Best wishes,



Barbara Buchegger, M.Ed.
Handywissen.at/Austrian Institute for Applied Telecommunications (ÖIAT)
Margaretenstrasse 70, A - 1050 Vienna
Website: www.handywissen.at
Email: office@handywissen.at
Telephone: +43 (01) 595 21 12-0

Tips for teachers on using the teaching material

The teaching package "The mobile phone in school" is intended to support learning and to stimulate debate on the use of mobiles in school. It complements the package entitled "Safe and responsible use of mobiles", which is available free of charge at www.handywissen.at/downloads.

The material is primarily aimed at teachers of 12- to 15-year-olds, but can be used for all age groups. There are five chapters:

- **Chapter 1** The mobile in the everyday life of children and young people
- **Chapter 2** Violence and pornography on mobile phones
- **Chapter 3** FAQ and legal aspects of mobiles in school
- **Chapter 4** Learning and teaching with the mobile phone
- **Chapter 5** Exercises

Each chapter can be used as a single independent unit. The exercises in Chapter 5 feature one or more learning activities. Finally there are "Ten tips for teachers on dealing with mobiles in school".





Using the mobile phone in school

Handling opportunities and risks appropriately

Objectives

- To inform teaching staff and school directors of the opportunities and risks associated
- To provide awareness of legal aspects
- To enable the adoption of preventive measures
- To present the mobile as a creative teaching medium

Content

1. The mobile in the everyday life of children and young people	7
1.1 Use of mobiles by children and young people.....	7
1.2 Why mobiles are so important to children and young people.....	9
2. Violence and pornography on mobile phones	11
2.1 How images are transferred to a mobile	12
2.2 Young people's attraction to videos showing violence	13
2.3 Films showing violent acts	13
2.4 Depictions of extreme violence	14
2.5 "Cute violence"	14
2.6 Sex on the internet	15
2.7 Sending intimate pictures	15
3. FAQ and legal aspects of mobiles in school	17
3.1 Using mobile phones in school	17
3.2 (Mobile phone) photographs/videos in the classroom	21
3.3 Adult content on mobile phones	22
3.4 Harassment and bullying via mobiles	25

4. Learning and teaching with the mobile phone	27
4.1 Mobile applications	27
4.2 Why use mobiles in the classroom?	29
4.3 General tips on using the mobile as part of teaching	29
4.4 Proactive and creative uses for mobiles in the classroom (Examples)	32
5 Exercises	46
Ten tips for teachers on dealing with mobiles in school	52
Legal notice	54

Chapter 1

The mobile in the everyday life of children and young people

1.1 Use of mobiles by children and young people

The use of mobiles is a growing phenomenon even among 6-10 year-olds. The average age for a child in Europe to get their first mobile phone is 7.1 years of age.³

In the UK, 21% of teens say they would use or answer their smartphone in the toilet or bathroom and 18% would use it during mealtimes with others.⁴

For children and young people, the mobile phone is THE tool with which to keep in touch with family and friends and to organise one's day. In addition, the mobile provides a form of security in emergencies and offers many useful functions, from digital camera to internet access.

More than a phone

Mobiles are not just for making calls or sending text messages. In recent years, the mobile in one's pocket has become a multifunctional device. Many children and young people use their mobiles to take pictures and videos, to listen to music and to play games. When school-age people want to exchange photos, music, video or games, they send an MMS free of charge, use wireless interfaces such as Bluetooth, or swap removable smart cards. Of 11-18 year-olds in Austria, 69 per cent have sent pictures or MMS and 55 percent have recorded their own videos.⁵ In the UK, 49% have sent MMS and 74% use their phone for social networking. The average teen sends or receives 3,339 text messages every month.⁶

As more and more young people get online using a mobile device, this means that an increasing number of them have an autonomous internet connection, which cannot be controlled by the school.

Page 25 outlines the various options that mobile phones provide. New applications are constantly being developed. The event that has raised mobiles to a completely new dimension is the arrival of 'smartphones'. They come with an extraordinary number of programmes (often referred to as 'apps') on all manner of topics – from birthday calendars and weather forecasts to current cinema listings.

³ Source: *Mobile Youth 2010* www.mobileyouth.org

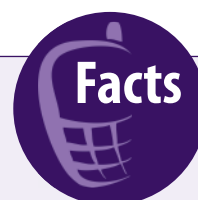
⁴ Source: Ofcom 2011 <http://stakeholders.ofcom.org.uk/market-data-research/market-data/communications-market-reports/cmr11/uk/?pageNum=3>

⁵ Source: *1.Educational Media Study* conducted by BIMEZ (Educational Media Centre) (2008), www.bimez.at/index.php?id=5411 (04.06.2010).

⁶ Source: <http://mashable.com/2010/10/14/nielsen-texting-stats>

The first private means of communication

For most children and young people, the mobile is the media channel of choice, rating even more highly than the computer or television in terms of importance.⁷ Usually, a mobile is for the individual's use and is carried at all times. What young people particularly appreciate is the possibility of making a call or sending/reading text messages, undisturbed by others. However, the mobile is also used by parents as a 'monitoring device' allowing them to stay in touch with their children at all times. This is the ambiguous nature of the mobile when it comes to the question of privacy.



SMS language

When the SMS was first introduced, no one expected text messaging to achieve quite the level of success it now enjoys. Girls are more likely to text than boys with the average for 14-17 year olds being 30 per day for boys and 100 for girls. SMS is a simple, fast way of communicating, no matter the time of day.

A new language has come into being, using the standard 160 keyboard characters to devise new signs and abbreviations that increase content and save time. Young people in particular use these short forms, which also appear in conversations on the internet and in emails. Emoticons are also popular in messaging, to the extent that many new mobiles include them.

Popular SMS abbreviations / emoticons 10)

BCful	be careful)	:-)	cool
SH	shit happens	:-o	surprised
HAND	have a nice day	;-)	wink
4e	forever	:o\	fear/embarrassment
j4f	just for fun	:-/	sceptical
bbb	bye bye baby	:-(too bad
2g4u	too good for you	@---}--	a rose
t+	think positive!	:-x	kiss
cu	see you!	:-P	put out your tongue
lol	laughing out loud	(-_-)zzz	sleep
2L8	too late!	:-9	tasty!

A full list of abbreviations and emoticons is available at http://en.wikipedia.org/wiki/List_of_emoticons.

⁷ Source: 1. Educational Media Study conducted by BIMEZ (Educational Media Centre) (2008), www.bimez.at/index.php?id=5411 (04.06.2010).

⁸ This includes second mobile phones, etc. Source: RTR GmbH, Telekom-Monitor 2/2010, www.rtr.at/de/komp/alleBerichte/TM2-2010.pdf (08.07.2010).

⁹ Source: Verbraucherzentrale Nordrhein-Westfalen e.V. (North Rhine-Westphalia Consumer Centre), Checked4You: www.checked4you.de/UNI127565354323264/doc1812A.html (04.06.2010).

Some text messages can be quite difficult to read because of their relaxed and often very creative way of using language. Sometimes, SMS text is a type of secret code that expresses one's allegiance to a particular set of friends or a special sub-culture. What might seem strange to older generations is part and parcel of everyday communication for young people.

Does text messaging make you stupid?

Adults are often concerned that SMS messaging, with its reduced form of language and disregard for traditional writing norms, has a bad influence on linguistic ability. However, studies show that frequent use of such short forms can be linked to a high level of reading and writing skills.¹⁰ The engagement with the written language – in whatever form it takes place – helps to develop such skills. That is exactly what children and young people are doing when they employ short forms, whilst also having fun.

1.2 Why mobiles are so important to children and young people

The mobile is much more than a phone, in technical but also in social terms. For school-age young people, the mobile is an important part of everyday life and of growing up in general.¹¹

An everyday organiser

To be constantly reachable is important for children and young people. The mobile facilitates communication with friends and family but is also indispensable as a means of organising their daily lives, for instance planning their free time, working together on homework or exchanging school news. This makes it extremely difficult for children and young people to turn off their mobile. Turning off the phone means being cut off from one's surroundings and losing track of what is going on in one's peer group.

Parents are also generally very keen to be able to reach their children at all times and for this reason, they are often the driving force when it comes to acquiring a mobile phone.¹² Under these circumstances, conflicts with teachers and school directors may arise where use of mobiles in school is forbidden.

¹⁰ For example: Döring, Nicola (2002): „Kurzm. wird gesendet“ – Abkürzungen und Akronyme in der SMS-Kommunikation. (« Txt received » - Abbreviations and acronyms in SMS communication) *Muttersprache. Quarterly journal on the German language*, 112 (2), www.nicola-doering.de/publications/sms-kurzformen-doering-2002.pdf (04.06.2010).

¹¹ Source: Grimm, Petra / Rhein, Stefanie (2007): *Slapping, Bullying, Snuffing! Zur Problematik von gewalthaltigen und pornografischen Videoclips auf Mobiltelefonen von Jugendlichen*, (Happy slapping, bullying, snuff films : the problem of violent and pornographic video clips on young people's mobile phones), Verlag Vistas.

¹² Source: *The Handywissen.at study "family conflicts involving the mobile phone" (2009)*.

Management of relationships and feelings

Many young people are emotionally attached to their mobile. There are two aspects to this attachment. One aspect concerns the various ways in which a mobile allows expression of one's individuality through the choice of such things as ring tones, wallpaper and mobile phone jewellery. The other aspect concerns the mobile as a means of personal communication, of maintaining networks and friendships and of expressing and sympathising with feelings and moods. In other words, the mobile helps when learning to manage relations and feelings as well as building self-confidence.

Intimate relationships can be initiated, nurtured and just as easily ended via the mobile. Often, intimate pictures may be involved, which can lead to subsequent problems (see 'sexting', page 15). If a mobile number is deleted from one's contacts, this means the relationship is definitely over.

Identity formation

Young people see significant 'symbolic capital' in their mobile, just as they do in fashion or music. The mobile expresses identity and makes clear one's allegiance to a particular youth culture or lifestyle group, for instance through the choice of a ring tone.

To be accepted in a peer group, the 'right' mobile phone is as decisive a factor as the 'right' provider (the same as one's friends') or the mastering of certain communication rules. If A sends a text to B for instance, B must reply quickly (e.g. within three minutes). These types of behaviour are recognised practice and can serve to demarcate one's group from other groups, such as less experienced younger children or adults.

The set-up of a mobile can also play an important part in identity formation and being accepted within a group: the use of particular games, apps and songs that are considered to be 'cool', for instance. All of this requires a great deal of time and energy on the part of young people.

Self-expression and fun

As a personal and personalisable media channel, the mobile allows numerous types of self-expression. The games, videos, music and apps that are loaded onto one's mobile are an expression of individuality. Disseminating interesting content such as witty messages or films is a way of gaining recognition in the peer group. Social media platforms such as Facebook or YouTube are also accessible via the mobile phone, allowing round-the-clock cultivation of one's image. The 'art of self-portrayal' is thus something that young people do quite casually.

Chapter 2

Violence and pornography on mobile phones

Almost all mobiles now have a video function and using the built-in camera to film and download pictures and videos from the internet is very simple. Various channels enable fast and simple sharing of multimedia content with others (see 'How images are transferred to a mobile', diagram on page 12).

A problem arises when the content of videos (or photographs) includes violent, pornographic and/or illicit elements. Producing, owning and disseminating such files often constitute an infringement of laws protecting young people. It is the responsibility of the school to react in such cases (see FAQs on 'Adult content' from page 22).

Problematic content on the mobile should be discussed in class as a preventive measure, even if no previous incidents have occurred. Children and young people are often not aware of the consequences of their actions. They find it hard to understand that violent acts are shown on television or online video platforms, whereas having such a video on one's mobile is a punishable offence. Many pupils, especially younger ones, are extremely upset by content that glorifies violence and/or pornography. Whilst most adults have learned to handle extreme subject matter, children and young people exposed to a flood of images do not have the means to deal with it.

Again and again, children receive this type of video material on their mobile, perhaps from older pupils whose intention is to shock or 'test' them. One solution is to disable connectivity devices (e.g. Bluetooth) but this poses another dilemma: how will children communicate?



2.1 How images are transferred to a mobile

- 1 **Camera** – Videos can be filmed, stored and replayed by the user of a mobile phone.



- 2 **Mobile internet** – direct download to a mobile from websites; this is becoming the norm, as a result of ever faster internet connections and low costs.



- 3 **Computers** – files can be transferred via USB, memory cards or Bluetooth directly to the mobile phone.



- 4 **Bluetooth** – free, wireless transfer from mobile to mobile via a radio interface (approx. 10 metre range); this is the fastest and most popular way to exchange content.



- 5 **Infrared** – data sending and receiving devices require an IR eye; short range and visual contact are required and it works in the same way as a TV remote control.

- 6 **MMS (Multimedia Messaging Service)** – although similar to SMS, MMS allows the transfer, images and short films as well as text.



- 7 **Emails** – allow download via internet connection, as on computers.

2.2 Young people's attraction to videos showing violence

Films showing violence have a particular attraction for children and young people – whether these have been recorded on a mobile, downloaded from the internet or sent by friends. There are two key motives behind the consumption of violent content:¹³

1. Entertainment and pushing boundaries

Children and young people often 'get a kick' out of watching violence and overstepping boundaries. The desire is to experience something exciting and the activity is seen as an act of dissent and as an exploration of limits.

2. Common experience and social integration

Withstanding intense situations together is the central component here. Watching videos becomes a community experience. Particularly brutal scenes also provide a good point of discussion in the group, or are used to gain recognition. Part of this means forwarding shocking videos to younger pupils as a test of courage.

Young people may react to violent scenes with disgust, shock, fear and nightmares, even if they would rather not admit this to others. They may often identify with the perpetrator or the victim when watching films with violent scenes. If the former, the effect can be that of a role model; if the latter, the effects may range from general depression to strong self-reproach.

2.3 Films showing violent acts

'Happy slapping' is the term given to attacks on fellow pupils or completely unknown persons that are filmed on a mobile phone. The resulting videos are distributed via mobile and internet with the aim of earning as much recognition as possible. Young people enjoy collecting and swapping such films, competing to see who has the more brutal scenes on their mobile.

Videos follow a similar pattern: perpetrators are shown to be strong and superior, victims to be weak. The implication is that they deserve to be mistreated. Violence is presented as an acceptable means of solving a conflict. We should note that the mobile in itself is not the danger, but the readiness of perpetrators to commit acts of violence!

Above all, the term 'happy slapping' trivialises the event and is inappropriate. It suggests that the acts of violence that have been filmed are a simple joke. Yet serious criminal acts are involved such as assault and indecent assault. Sending images or videos that glorify violence to other minors may be a punishable act in itself, as is making such content public, for instance on a website.

¹³ Source: Grimm, Petra (2009): Gewalt im Web 2.0 – wie gewalthaltige Internetangebote Heranwachsende beeinflussen. [Violence on the web 2.0 – how violent content on the internet affects young people]. In: Pro Jugend. Journal of the action group Aktion Jugendschutz Landesarbeitsstelle Bayern e.V. No 2, pp. 12-15. 1

When does something stop being funny and become serious?

Numerous 'funny videos' circulate among children and young people. These show accidental and unintended events, the enactment of daring stunts or disturbing tests of courage. The MTV programme 'Jackass' shows popular examples that are widely copied. 'Funny' videos and clips can raise the question as to whether what is being shown is amusing or whether a dangerous accident has taken place and someone has actually been hurt. It is not always easy to draw the boundary. This problem should be discussed with children and young people.

2.4 Depictions of extreme violence

There are many freely available internet products that are illegal. Thus, images or films that glorify violence and/or contain pornography are frequently downloaded and shared on young people's mobiles. These may depict real or enacted executions, rape, sodomy, desecration of dead bodies or fatal accidents. Such barbarous content is termed a 'snuff film' (a genre depicting actual death or murder).

The reasons for young people's consumption of such videos and images are mostly the desire to be 'cool', to prove one's courage or to shock others. Often things can descend into a spiral of who can show the most atrocious image or video. It can even lead to the realistic re-enactment of horror scenes with friends.

Removing this type of content from the internet is impossible in most cases, as sources are predominantly foreign and cannot be traced and legally prosecuted. The sources will also rely on the defence that the law prohibits only those representations that glorify violence. Websites often feature images or pictures of dead bodies and serious injuries following catastrophes, accidents and other violent events, and this is not in contravention of the law.¹⁴

2.5 "Cute violence"

Violence is not by any means the preserve of real life films. Several computer animations or cartoon series such as 'South Park', 'Happy Tree Friends' or 'Itchy and Scratchy' contain extremely brutal scenes. Figures that appear 'cute' are subjected to extreme violence or inflict violence on others. The majority of such programmes are for adults, but naturally attract the attention of young children as a result of the way they are made. In general, however, children are not emotionally equipped to deal with this subject matter. Brutish cartoons are available for unlimited consumption via the internet or for download on mobiles and these can then be forwarded to friends. At first glance, many clips seem quite harmless. They often begin in a normal way, but turn violent several minutes into the film.

¹⁴ Source: The Austrian Ministry of the Interior – Crime prevention, Information sheet "Violent films on mobile phones"; www.bmi.gv.at/cms/BK/praevention_neu/info_material/files/Gewaltvideos_auf_Handys.pdf

2.6 Sex on the internet

Watching and exchanging pornographic films is not uncommon among young people, although youth protection laws frequently prohibit it. For example, in Austria school workshops have found that almost every 11-year-old has seen a pornographic film. This can occur inadvertently whilst searching the internet using completely innocuous terms. Similar content can also appear on website advertising. It is therefore sensible, where younger children are involved, to use filter programmes which lock out certain web products. Nonetheless, they will still come across questionable content on their mobiles. The earlier such issues are discussed with children, the better they know how to deal with them. Older children and young people soon find their way round internet filters and often deliberately watch pornographic material.

Sex education experts warn of a distorted picture of sexuality. Most pornographic films have little to do with real relationships. Situations, roles and the human body are frequently shown in unrealistic, one-sided and violent ways. Men are generally 'masters' of women. In real life, young people form certain expectations that may be influenced by what they have seen in pornographic films.

2.7 Sending intimate pictures

Inspired by television programmes, advertisements, teen magazines and so forth, it is now the 'in' thing for children and young people to portray themselves in the most provocative way they can. Various poses are tried out in front of the mirror and then photographed with a mobile. The best pictures are then displayed, perhaps via a social network or via mobile messages to friends. This posing phenomenon is most common among girls, but boys are increasingly succumbing to the trend.

The problem here is that once circulation of such pictures has begun, it is almost impossible to stop it. Even if photographs on the internet are published only to 'friends', their falling into the wrong hands cannot be ruled out. Pictures that have been distributed at a certain point can reappear years later and have a highly detrimental effect on future careers and private relationships. A danger also exists in the fact that a paedophile may be attracted by provocative pictures on the internet and may try to contact the underage person involved. It is thus necessary to talk to children as early as possible about the significance of intimate pictures.

A closely connected aspect of posing is 'sexting', involving intimate pictures sent by MMS. Erotic images or nude photographs are initially shared between two people or best friends, perhaps as a sort of proof of love or friendship, or a way of flirting. But when relationships founder, some of the images can be used in revenge, ending up on other mobiles or published on the web and can even be used to pressurise someone into sending more images. Most young people are unaware that distributing and publishing erotic pictures of minors is against the law and can have legal consequences. This also applies if the person who is the subject of the photograph agrees to the picture, or has taken it him/herself.



Chapter 3

FAQ and legal aspects of mobiles in school

3.1 Using mobile phones in school

The school as a mobile exclusion zone – would this make sense?

Who is liable if a mobile is stolen from a locker?

Under what circumstances and in which way may teachers confiscate a mobile phone?

What would a contract for the use of mobiles in school look like?

How should use of mobiles at school events be regulated?

Why is it often so important to parents that their children should have mobiles?

The school as a mobile exclusion zone – would this make sense?

Many schools have incorporated in their rules the stipulation that mobiles must be placed in lockers during lessons (and sometimes during breaks, too). This rule is effective in schools in which damage to property or theft is very rare. However in institutions where possessions have a habit of disappearing, this rule can prove problematic.

Given the significance of mobiles in the everyday lives of children and young people, forcing them to be kept in lockers or introducing a total ban is not a practical solution. For example, pupils will often leave a second or third mobile phone in their lockers, while continuing to carry their first mobile in their bags, because they do not want to be parted from it.

A ban on mobiles can, however, be an effective temporary measure to defuse a difficult situation in a school. In the end, the school cannot avoid making mobiles part of the educational programme as media channels. A first step might be for all members of a school to draft a contract on the use of mobiles in school (see page 18).

Who is liable if a mobile is stolen from a locker?

Some schools require that mobiles are left in lockers. Pupils or their parents are responsible for the phones in the same way as for other private property. Firstly, it should be noted that pupils are not obliged to take their mobiles to school, but do it for their own interests. Secondly, the use of any kind of locker or cloakroom is generally at the risk of the owner of the mobile. If a theft occurs, the police will be notified but the school would not normally accept liability. Sometimes, the parents' household insurance covers loss or damage.

Under which circumstances and in which way may teachers confiscate a mobile phone?

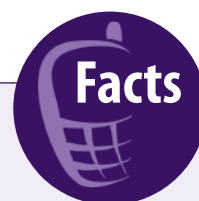
If a lesson is disrupted for a certain length of time by a pupil's use of his or her mobile, the teacher can confiscate the mobile in the interests of educational aims. This eventuality is also covered by school rules in many cases. The following should be noted:

1. Ask the pupil in question to show you that the mobile being confiscated is a functioning device with an active SIM card and ensure that the pupil turns it off whilst you are watching. You can thus be certain that the pupil is not handing over an old mobile.
2. The mobile is generally returned to its owner at the end of the lesson. If the mobile is to be returned at the end of the school day, week etc., a recommended precaution is to leave the device in the director's office in the meantime, to ensure that it is not lost.
3. In case of repeated interruptions by a pupil using his/her phone, parents should be contacted in order to talk about how to proceed.

What would a contract for the use of mobiles in school look like?

'Contracts' are a good way of involving all school members in the process of negotiating use of mobile phones in school. The mobile plays a special role because ALL stakeholders have interests of varying kinds.

It is important to involve all members of a school community in the drafting and formulation of a contract as this will ensure that its terms are acceptable and that the community feels responsible for its implementation. An ideal method would be for pupils at all levels to have the chance to draft rules (e.g. as part of group work in the classroom). Once this joint contract has been finally agreed, it should be signed by teachers, parents or guardians and pupils. The points of the contract can be incorporated in school rules.

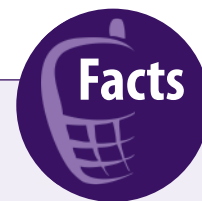


Suggestions for elements of a school contract

The following questions should be clarified in connection with a joint contract on the use of mobiles:

- In which school situations (on- and off-site) should mobiles be permitted or prohibited?
E.g. calls during lessons are prohibited; calls at lunch time are allowed etc.
- Where should a mobile be kept during class?
E.g. on the desk, in a school bag etc.
- Where should mobiles be left during gym classes?
E.g. in the changing room, in the gym itself, with the teacher etc.
- How should mobile use be regulated during school events?
E.g. mobiles may be used half an hour before the evening meal during school trips, otherwise they must be turned off etc.

- Where can mobiles be safely kept during after-school supervision?
E.g. in a staff room, a communal bag in a locker etc.
- To what extent might taking photographs or videos with a mobile be permitted in school? Under what conditions might the resulting photographs/videos be published?
E.g. only with the consent of subjects of the photo or film, given verbally; only with the written consent of subjects at the start of the school year; only within school and class projects; not at all etc.
- Which mobile applications may be permitted in school, and which prohibited?
E.g. bluetooth (data transfer) and mobile cameras may only be used in the context of class work, SMS permitted only during breaks etc.
- To what extent should agreements on the use of mobiles be binding? What consequences might infringements of the agreement have?
E.g. noted in the student's behaviour record (up to 7th grade), brought before the school forum etc.
- How will any rules be monitored?
E.g. by the school forum, regular joint evaluation etc.



Theme: "Agreement means responsibility"

Insafe has recently produced two acceptable use posters for schools which provide six statements for pupils and staff to work towards when they use the internet. These are available from <http://www.saferinternet.org/web/guest/acceptableuseposters>

How should use of mobiles at school events be regulated?

Pupils often place particular value on having their mobiles to hand during school events such as sport meets or group excursions lasting more than one day. Alongside constant contact with family and friends, there is always a competition for the 'best' mobile content whether that is writing the most shocking text messages, taking the most embarrassing pictures or downloading the coolest videos. Pupils try to outdo each other and often concentrate on little else.

However, a complete ban on mobiles at school events and trips is almost impossible to put into practice. Parents are keen to be able to reach their children in emergencies or if the children are homesick. Parents also want to be reachable in case of any other indisposition. But to counteract the dubious activity of mobile competition, the following rules might, for example, be laid down:

Mobiles may be used for one hour per day (e.g. before the evening meal). For the rest of the time they must be turned off, and during the night left with a teacher.

In order to avoid conflict, rules should always be laid down before the event or trip and agreed with pupils and parents. Of course, it is not possible to exclude the possibility that pupils break contracts by, for instance, using

a second mobile. Nonetheless, rules can considerably restrict the use of mobiles, and can have the added positive effect of pupils feeling more relaxed and relieved of a burden. This is because vying for strength exerts intense personal and social pressure.

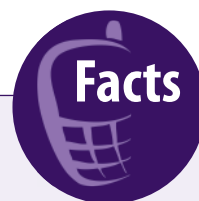
Why is it often so important to parents that their children should have mobiles?

One in three 9-16 year olds who use the internet goes online via a mobile or handheld device according to a recent EU Kids Online study. Children are keen to own phones, but parents are often the ones to push for the acquisition of a mobile. They want to be able to reach their children at all times and to be reassured that if an emergency arises, their children are all right. For many working parents, the mobile does the job of 'remote care' when their children are at home after school or off school with a minor illness. This allows parents to be in regular contact with their children, despite being physically absent. Formerly, they would have had to rely on other people such as neighbours.

For parents it is thus very important and in some cases essential that their children take a mobile to school and are able to use it there. This means that conflicts with teachers, especially in schools that operate a ban, is inevitable. One solution that keeps everyone happy is a common effort to agree to contracts on the use of mobiles in school (see page 18, What would a contract for the use of mobiles in school look like?).

The loss of a mobile phone (perhaps through theft) is one of the main concerns of parents with regard to their children's use of a mobile.¹⁵ Where theft is concerned, it is generally parents and not the school who are liable. It is therefore a good idea to hold talks to inform all parties of this. In fact, theft of mobile phones is showing a marked increase in many schools as a way of obtaining a new, more fashionable mobile. For example, so called 'gifts' of mobiles are often in fact blackmailed out of fellow pupils and are a current challenge for teachers, in communicating with parents, too.

A parents' evening or the regular exchange of information on mobiles can go a long way towards creating a better climate for communication between parents and teachers, and improving understanding. It is not essential that all parents attend, as information very quickly spreads to the parents who were not present. These meetings should not be used to criticise parents for the way they bring up their children or to attribute bad behaviour to family circumstances. It is far better to seek a constructive solution together so that better support of pupils can be given, including help in developing their technical media skills.



Using the mobile as a basis for discussion

The mobile phone can, at times, provide the impetus for the school to get in touch with parents who are otherwise barely reachable, perhaps because they do not turn up to parents' evenings or open days. Teachers frequently say they have had very productive discussions during meetings with parents, called because of a pupil repeatedly disturbing a lesson through use of their phone. This is a good opportunity to discuss other school-related issues!

¹⁵ Source: *The handywissen.at study, 'Familial conflicts involving the mobile phone' (2009).*

3.2 (Mobile phone) photographs/videos in the classroom

Should pupils take pictures or videos of each other within class projects and use the results in the project material?

Should photographs or videos of pupils be published on the school website?

Is it permissible for the school to publish pupils' independent work?

Should pupils take pictures or videos of each other within class projects and use the results in the project material?

It is advisable for the school to obtain a signed consent form from parents and from pupils over the age of 14 to ensure that there is a legally assured basis for using photographs and films. The consent form can be signed once yearly, for instance at the start of the school year. Over and above this agreement, publishing photos or videos should always be with the consent of the subjects.

Sample parental consent form

(This can be adapted for pupils)

I _____, consent to the taking of photographs/films as part of the school activities of my son/daughter _____ and to the publication of these photographs/films on the school website and in other school publications. The photographs will show pupils at work or during the course of a school day. No portraits or images will be published with the full name of the pupil.

Should photographs or videos of pupils be published on the school website?

A prior consent form from the parent or pupil must be obtained before photographs/videos are published on the school website. Ensure that no names can be connected with faces. It is perhaps best to publish class photographs with the name of the class only, and not with the names of the individual pupils.

Parents or pupils may withdraw their consent at any time. If this happens, the photographs/videos must be removed from the network. Images that may compromise pupils or other persons (e.g. in which revealing clothing or drunkenness is shown) may not be published. This would contravene 'portrait rights' (see 'What are portrait rights?' in the box on page 25).

Is it permissible for the school to publish pupils' independent work?

Prior consent from a pupil and his/her parents must be obtained before publication of the pupil's work (e.g. photographs, videos, audio recordings, texts). The author enjoys legal protection for his/her creation – as intellectual property – which is embodied in copyright law. A written form of consent (see following example) confers the right to publish work to another person or organisation, e.g. the school. However, the copyright remains the property of the author. Parents and pupils may withdraw their consent at any time.

Despite the existence of a consent form, it is advisable in each case to obtain the agreement of the pupil and where appropriate, the parents. Note also that the name of the author of the published work should be stated.

Sample parental consent form

(This can be adapted for pupils)

I _____, confirm that _____ School has my consent to publish in school publications or publications in the context of school, works that my son/daughter _____ has produced during class.

3.3 Adult content on mobile phones

What material on mobile phones does the law prohibit children and young people from consuming?

Do teachers have a right to monitor the mobile phones of their pupils?

How should the school staff react when they suspect that there is adult content on a pupil's mobile?

What material on mobile phones does the law prohibit children and young people from consuming?

The application of youth protection legislation often varies across and even within different European countries. For example, there is no uniform regulation of the Youth Protection Act in Austria. Every federal state has its own youth protection law. There are however many similarities. The youth protection legislation provides, for example, for the permitted length of absence from school for a young person, the age at which smoking and drinking alcohol is allowed and how to deal with adult content. Infringements by adults are punishable by fines and even imprisonment; those by young people are punishable by compulsory counselling and in some cases fines.

On the topic of “Adult content in media, storage media, products and services” the law on youth protection in Upper Austria, for instance, says¹⁶:

The following media, storage media, products and services may not be offered, performed for, forwarded or in any other way made available to young people:

- material glorifying criminal acts featuring inhuman brutality or representations of violence
- material showing discrimination against people because of their race, skin colour, national or ethnic origin, sex, religious belief or disability
- pornographic material.

IMPORTANT: The acquisition, possession and use of these media, storage media, products (e.g. softguns) and services by young people are also prohibited!

What do you know about the youth protection legislation in your country? Where can you find this information?

Do teachers have a right to monitor the mobile phones of their pupils?

The determining factor in this question is whether the teacher has a specific reason for suspecting illegal content on a pupil’s mobile phone. Where this is the case, teachers are not only entitled but required to inspect mobiles and, where necessary, confiscate them. Every occurrence must furthermore be suitably documented to ensure that others, such as school directors, parents and police, can trace and record incidents.

Note: A purely routine inspection of mobiles without suspecting inappropriate content breaches the pupil’s privacy. This applies also to the inspection of school bags.

How should members of teaching staff react when they suspect that there is adult content on a pupil’s mobile?

The stretching and breaking of rules by young people is, generally speaking, a challenge that parents and teachers must always face. This is a normal part of adolescence. Consumption and dissemination of adult content should thus always be seen in this context.

Where teachers notice that incidents in this area increase (e.g. when older pupils send pornography to younger pupils’ mobiles or when pupils compete to show ever more violent videos), the issue should be immediately discussed openly both with the pupils distributing and those ‘only’ watching the material. The following questions for pupils can provide a basis for addressing the topic in class:

¹⁶ Source: OÖ Jugendschutzgesetz – Jugendgefährdende Medien, Datenträger, Gegenstände und Dienstleistungen: (Upper Austria Youth Protection Act – Adult content in media, storage media, objects and services: www.jugendschutz-ooe.at (30.05.2010).

- What should I do if someone sends extreme material to my mobile?
- Why is it wrong to forward such material to others?
- What might be the effect of violent or pornographic videos or photographs on younger pupils and classmates?

A very effective awareness-raising initiative in school is to run workshops with external experts. Depending on the topic and cause, the following should be considered:

- Police officers specialising in prevention
- Workshops on the prevention of violence

The simple measure of informing pupils of the legal consequences of, for instance, the exchange of adult content can help to make young people more careful when it comes to inappropriate material.

Nonetheless, teachers must report any suspicion of punishable behaviour to school directors. This includes illegal content on mobile phones. The school directors will then decide whether notification is required.

Police officers specialising in prevention can often be of assistance in making a decision. If the school has a good relationship with the responsible police officer, it is a good idea to contact him or her with regard to the exact procedure. In practice, the decision on whether to report the contravention is often made jointly.

A duty to report is not involved if the disclosure would endanger the relationship of trust between pupil and teacher and would hinder educational work or the upbringing of the young person. Where such issues are involved, the school must nonetheless take active measures to protect other pupils. Measures can include the confiscation of mobile phones.

3.4 Harassment and bullying via mobiles

What can teachers do if photos or videos of them are taken during class?

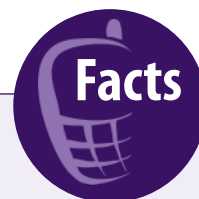
What are the particular characteristics of bullying via mobiles?

What is the law with regard to harassment via a mobile?

What can teachers do if photos or videos of them are taken during class?

It is increasingly common for teachers to be filmed or photographed during class with the images ending up on the internet. Disparaging comments can often be added, in the same spiteful manner as might be heard in the playground. The teachers in question often learn of these incidents much later.

With regard to the law, portrait rights usually apply to all such hurtful representations on the internet (see box). Publication of videos or photographs taken or edited so as to make fun of a teacher, for example, is against the law in most European countries.



What are 'portrait rights'?

Copyright law in most European countries includes provisions for portrait rights. These protect the subject of the film or photograph from undesired publication of disadvantageous material, for instance when a third party uploads it to the internet. Photographs or videos and/or captions that compromise or belittle someone may not be published. It is not sufficient in this respect if the subject simply dislikes a photo or video – embarrassment should be objectively verifiable (e.g. a close-up picture of a student wearing clothing with a low-cut neckline).

What does this mean in practice?

- On the one hand, you are entitled to have the image deleted if you discover derogatory material on the internet. In such cases it is legitimate to ask the person responsible for the publication of a photo or video to remove the image. If this does not work, you can contact the website or platform operator to report the content in question. In serious cases, an action for an injunction and a demand for damages can be made. Where minors are involved, the guardian or parent is responsible in case of a breach of the duty of supervision.
- On the other hand, it is a matter for individuals to exercise caution when publishing pictures of others on the internet. Images taken in public spaces are generally inoffensive but if the situation is disadvantageous for the subject (e.g. a topless picture on the beach), the image must be protected. Interests are far more easily affected in the private sphere, including privately arranged events like parties. In summary, it is always advisable to check that you have the consent of the subject before publishing photographs or videos!

We should remember that many pupils are unaware of the consequences, for themselves as well as for the person involved, when they distribute disparaging photographs or defamatory material on the internet or via mobile phone. Their actions are often not malicious, rather they are badly informed. Once content has been circulated it quickly reaches a large public and is often difficult to remove. Timely information, for instance in the form of workshops on 'Safe use of the internet', is a helpful preventive measure. Similarly, jointly drafted contracts on the use of mobiles in school can be very effective (see page 18).

What are the particular characteristics of bullying via mobiles?

Cyber-bullying (cyber mobbing and cyber stalking being related concepts) are deliberate, sustained efforts to insult, threaten, expose or disturb someone via the internet or mobile phone.

People who harass others via mobile phones use various means, including calls, text messages, MMS, voicemail or camera – often with internet links. Photographs taken on a mobile may, for instance, be published on a social network.

The mobile is, of course, only one possible tool among many used to annoy others. The particular characteristic of cyber-bullying is that the victim can be 'remotely' harassed or frightened, without having to look him or her in the eye. Moreover, cyber-bullying does not stop at the end of the school or working day: people keep their mobiles with them at all times and, despite harassment, find it hard to go without their phones. Not being reachable means not being able to arrange to meet up with friends and thus becoming somewhat excluded. If someone is being bullied via their mobile, it is not that easy to simply turn the device off.

What is the law with regard to harassment via a mobile?

Regular bullying can be a very painful experience. Victims experience widely diverse feelings, ranging from fear through hate and vulnerability to shame. Many wrongly think that the bullying is their own fault and they find it hard to even admit that it is other people who are to blame for the harassment.

Cyber-bullying is more than 'fooling around'; it is not a trivial offence. Yet many school age youths are unaware of the criminal status of cyber-bullying. For example, in Austria there are several legal provisions relating to mobile phone or internet harassment:

- The so-called 'Anti-stalking Law' (Article 107a of the Criminal Code) prohibits stalking and sustained harassment not only in the 'real' but also in the 'virtual' world. Possible measures to counter stalking range from removal orders to trespassing bans or arrest.

In some EU countries legislation includes provisions that may apply to forum postings or online social networks: libel, defamation or slander can incur fines or even imprisonment.

- There can also be a legal right to the protection of privacy. This law will forbid the publication and exploitation of private information. In particular, publications that expose a person's private life can be liable to damages.

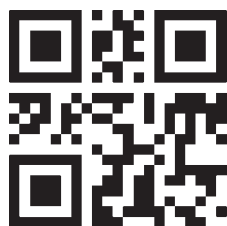
Chapter 4

Learning and teaching with the mobile phone

4.1 Mobile applications

Telephone	Even though multiple mobile functions have developed, making telephone calls remains one of the most common uses.
SMS/MMS	Sending and receiving text messages (SMS) and images (MMS) are the most popular mobile phone functions among young people. Over time, text messaging has developed its own language (see Chapter 1.1 Use of mobiles by children and young people).
mp3 player	Listening to music on a mobile is a part of many young people's lives. Generally music files are downloaded from the internet, which is permissible for private use. However, exchanging files may breach copyright law. Exceptions include music licensed by Creative Commons (www.creativecommons.org) and some audio recordings such as radio podcasts.
Camera	Almost all mobile phones on the market today have an integrated digital camera capable of taking high quality photographs. As mobile phones are generally carried at all times, they provide a practical way of recording everyday situations and experiences. Photographs can be loaded onto the internet or sent to another person's mobile in seconds (see Chapter 2.1 How images are transferred to a mobile).
Videos	Most mobile phones can also record videos. Children and young people use their mobiles to record, watch and exchange videos. Transfer is generally done wirelessly, from mobile to mobile (see Chapter 2.1 How images are transferred to a mobile).
Internet	The latest mobile phones afford internet access with a web browser installed as standard. The mobile network allows surfing and additional W-LAN interfaces are increasingly available. Internet via mobiles extends access beyond traditional websites to numerous applications specially developed for mobiles (see Applications). Within a few seconds, photographs, videos, etc. can be uploaded from a mobile to the web. An increase in the use of mobile internet is expected in the future.
email	The mobile internet allows the retrieval and sending of emails via a mobile phone. Many mobiles have pre-installed email programmes.

Apps	Apps, or applications, are small user programmes for the mobile (smartphones in particular) that can be downloaded from the internet. The most popular apps among mobile users are useful and practical aids. These include weather forecasts, compasses, work planners, pocket lamps and traffic jam alerts. Today there is an application for almost any situation. Various social networks or news sites are now available in user-friendly format via a mobile device.
Games	There are numerous games for download from the internet onto a mobile phone. Whether action, adventure, 'jump n run', or strategy – almost any category of game is represented. More and more educational games have been developed and many mobiles come with several games pre-installed.
Radio and television	There have been mobile phones with integrated radio receivers for many years. Since 2004 it has been possible to watch television on a mobile and the number of options and functions grows continuously.
Office	Useful office applications such as calculators, notepads, calendars, address books, task lists and stop watches are now part of the standard equipment of a mobile.
Navigation	Equipped with a GPS receiver and the appropriate software, the mobile phone becomes a mapping system that guides the user from A to B. 'Location Based Services' allow access to various geodata such as the nearest pharmacy or restaurant ratings from other users. Geocaching is a modern treasure-hunting game using a GPS.
Codes	QR codes (quick response codes) are two-dimensional codes consisting of black and white points in a square. They are used to codify web addresses, telephone numbers or longer texts. Many mobiles have the reader software to de-code QR codes. The internet allows free generation of QR codes (e.g., via http://goqr.me). Barcodes can be used by a company to send an MMS to their loyal customers allowing them to redeem vouchers.



4.2 Why use mobiles in the classroom?

Many schools forbid mobiles because of the disturbance they cause. Yet mobiles are important to the everyday lives of children and young people (see Chapter 1.2 Why mobiles are so important to children and young people). One approach is to incorporate mobiles constructively into the class and to see them as an opportunity.

For example, in Austria the teaching of media skills is prescribed for all school types as part of the Federal Ministry for Education, Arts and Culture's 'Basic Ordinance on media teaching' (2001)¹⁷. This means that every teacher should welcome a natural, yet discriminating use of media in the teaching of their subject and actively promote audio-visual media as a means of imparting knowledge. Taking into consideration the 'habitus' of children and young people has long been a requirement for the educator.

It is clear that schools today cannot expect all parents to ensure that children are equipped with a suitable mobile for use in the class. It is also clear that mobiles cannot replace current classroom tools like computers. Nor is it the aim for mobiles to replace current classroom tools like computers. Yet in increasing situations where all pupils do have a mobile, many being smartphones with multiple functions, it is worth thinking about the positive potential of this technology.

Consider using 'mobile learning' in your classes! Below you will find many ideas and suggestions for actively and creatively using the mobile in class. The suggestions cover various subjects and areas of application, ranging from photo stories through SMS poetry to treasure hunts.

4.3 General tips on using the mobile as part of teaching

All mobiles are not the same

One of the challenges of working with mobiles is technical variety. Most schools cannot provide 'classroom devices' so they must rely on pupils' own mobiles. This means having to work with diverse technical features and programmes. Do not be discouraged, allow pupils to be the experts here!

Group work

Whilst many children and young people may own more than one device, there are also some pupils without a mobile phone or perhaps a relatively old model. A way to retain mobiles as a tool in class is to use group work. Groups can be formed so that there is always one up-to-date phone per group. If the school has W-LAN, pupils with the relevant mobiles will not incur additional internet costs.

There should be no compulsion whatsoever on pupils to use mobiles in class, the idea should be to open up new possibilities. Why shouldn't a particular pupil be able to use his/her mobile to research biology in various contexts

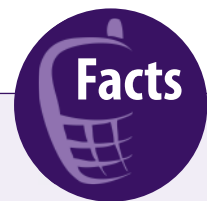
¹⁷ See: mediamanual.at, www.mediamanual.at/mediamanual/leitfaden/medienerziehung/grundsatzlerlass/ (08.07.2010).

on the internet and present the results to the class? Why not allow a vocabulary book to be kept on a mobile, or the use of a dictionary application? Why shouldn't the mobile serve as a camera for pictorial education needs?

Making the rules

When deciding to use mobiles in class, you should agree rules with your students. The rules might relate to taking pictures and publication only with the consent of the subject of the photograph; they might exclude 'unrelated' mobile phone activity during a project, for example surfing the social network or writing text messages to friends.

The use of mobiles in class should be made clear to parents. The following is an example:



Entry in pupil/parent contact book

As part of the project 'Spices', we will be making extended use of mobiles in school in the next few weeks. We will not be using applications that incur charges (SMS, MMS, internet, etc.) but mobiles will be a means of documentation.

Please indicate whether your child may bring their mobile to school and use it in class during this period. This will help us to plan the project. It is not necessary for all children to have their mobiles with them.

Yes my child may bring his/her mobile phone to class and use it during this period.

No my child may not bring his/her mobile phone to school.

The results of the project will be presented on 13 May 2011 from 14.00-16.00 hours in the auditorium. We would be happy to see you there!

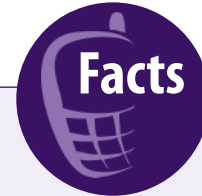
There should be no pressure

Do not subject pupils to pressure, so that they feel the need to bring a 'nice' mobile to class. Ensure also that such pressure does not arise among pupils, help them to determine what tools will be relevant and how many devices will be needed. One way to use mobiles in class effectively can be through group work, as described above. Offer pupils alternatives, such as the use of a school digital camera.

Ideal equipment for schools

Naturally there may be limitations in adapting existing school buildings to new technologies. New buildings, conversions and extensions however should take the following requirements into account, so that there is nothing to stop the use of new media, such as mobiles, in the class:

- Sufficient sockets to charge mobiles.
- WLAN access so that pupils do not incur charges when using the internet.



Mobiles and cheating

Previously, there were limited possibilities for cheating. However, electronic devices now make it easy for pupils to deploy numerous 'high-tech' ways of outsmarting teachers. Sending a text message with a maths exercise to an older brother during a class test, or quickly making a mobile call with a phone previously left in the lavatory are two examples. An entire sheet might be photographed with a mobile and sent onwards. Mobiles are also excellent calculators, and can store formulae or vocabulary. Mobile internet allows answers to be researched very easily and text to be translated. Another favourite trick is to prepare aids as audio files at home and to hide ear pieces under hair. If a pupil is caught with a mobile the excuse is often that he or she was just looking at the time.

Basically, it is at the discretion of each teacher what they will or will not allow. In many cases there is nothing wrong with allowing pupils to look at notes made on their mobiles. To stop the use of mobiles, teachers will often collect all devices before a test or leave them on the tables, but change the class seating. This can be effective as long as pupils have not cleverly hidden their second or third mobiles somewhere. It is thus better to set exercises that are not a test of knowledge but of the ability to reflect and that are less easily solved with a mobile. During final exams, some schools set up interfering transmitters which prevent the use of mobiles. However, this is not a recommended long term solution, as it can quickly lead to conflicts with parents (see page 17, *Why is it often so important to parents that their children should have mobiles?*)

4.4 Proactive and creative uses for mobiles in the classroom (Examples)

Below are some suggestions and practical examples for using the mobile phone as a means of creative learning in class. The suggestions encompass various subjects and areas in which you can utilise this technology imaginatively.

Example 1 *The mobile photo story*

Subjects: *Language, social skills*

Learning objectives

- To create captions for pictures
- To use images to inspire a story
- To formulate image and text into a unit

Procedure

Pupils (as individuals/partners/groups) are given the task of creating a short story that takes place around school. They are asked to formulate a cartoon strip using five to ten pictures taken with the mobile phone camera. The pictures are then mounted on a poster with the appropriate speech, thought balloons or narrative. The photo stories are then presented to the class.

Further links:

Center for Digital Story Telling: www.storycenter.org/index1.html

Example 2 *The mobile video story***Subjects:** *Language, arts***Learning objectives**

- To tell a story through film
- To draft a screenplay
- To plan, prepare and implement the filming of the story
- To record the story in image and sound
- To compare own productions to professional works and discuss

Procedure

The class is divided into small groups which choose a school-related topic for their video story (e.g. a current event in the class). All the necessary elements of the film are then decided (location, equipment, actors, etc.), roles and tasks allocated and a script prepared. Scenes are then filmed and edited using the mobile video function. The groups then present and discuss the results in class. Depending on their content, videos can be uploaded to the school website.

Finally an exercise is organised comparing and contrasting home-made videos with professional films. Why are their own works more interesting for the class?

Notes on equipment

Many mobiles have pre-installed video software. Story boards (visual screenplays) can also be produced with most programmes. One example is Sony Ericsson's VideoDJ™.

Example 3 ***The mobile podcast***

Subjects: ***Language, others (as per podcast content)***

Learning objectives

- To prepare a topic for audio presentation
- To deliver clear, correct and accentuated speech

Procedure

The class is divided into small groups which choose a topic for the purposes of audio recording (e.g. radio play, poem, paper, panel game, etc.). Tasks are then allocated within the group. Who should be responsible for content, who should write texts, who should speak, who should record, who should edit? A clear allocation of roles will help pupils to stay on course and complete the task. Scripts should then be discussed, written, practised and recorded using the mobile. Clear, correct and fluent delivery is especially important for podcasting.

Results are presented in class, discussed and analysed. One of the topics for discussion might be the way in which one's own voice sounds 'strange' when played back.

Example 4 *Mobile applications***Subjects:** *IT, general (as per application content)***Learning objectives**

- To equip one's mobile so that it is a personal, digital study aid
- To use mobile applications

Procedure

Firstly pupils should find out which applications are available for their own mobile and how useful they might be. Depending on subject, they should then install and try out appropriate apps (NB: some apps are free, others involve costs). For example, for geography, a country quiz might be useful; for maths, a formula calculator could help; for French, a vocabulary trainer, etc.

Notes on equipment

An initial survey should be conducted to ascertain how many pupils can download applications on their mobiles. Because of possible costs, parental consent is recommended. If there are insufficient suitable mobiles, it is better to explore the possibilities on one device (e.g. in an IT lesson). A teacher's mobile can be used for this.

Further information (from manufacturers)

Apple: www.apple.com/iphone/apps-for-iphone, www.apple.com/ipad/apps-for-ipad

Blackberry: <http://us.blackberry.com/apps-software/appworld/>

Nokia: <https://store.ovi.com>

Samsung: www.samsungapps.com

Android (operating system): <http://www.androidpit.com/en/android/market/app>

Example 5 *Mobile GPS*

Subjects: *Geography and economics, Discussion of George Orwell's '1984'*

Learning objectives

- To be able to read geodata
- To work with spatial coordinates
- To give images geographic positions
- To debate the concept of 'total transparency'

Procedure

Stage 1

Pupils take photographs of their surroundings – preferably when on school outings (e.g. a city walk) or during a winter sports trip. Each photo is stored with its 'geotag' (geographic coordinates of the specific location).

Stage 2

Photographs and geotags are uploaded on computers with suitable programmes, e.g. using Picasa and Google Earth on a PC, iPhoto and Google Earth on a Mac.

Pupils use satellite images to find out where each photo was taken. If for instance a ski slope has been photographed, one can look up the location to see a view of it in the summer.

Stage 3

Geotagging allows the identification using a photograph of the exact location of a person. Often subjects do not realise that photos have this hidden data. This is where 'total transparency' comes in. A debate on this can be tied in with the study of George Orwell's '1984'. One point of discussion could be to what extent pupils themselves feel as if they are being monitored, and by whom.

Notes on equipment

This activity requires mobiles equipped with the geotagging function. Alternatively, the (latest) digital cameras may be used as they generally come with the geotagging function.

Example 6 *Mobile interfaces***Subjects:** *IT***Learning objectives**

- ➔ To exchange content via various channels
- ➔ To discuss data transfer via the mobile

Procedure

Pupils form groups according to the technology standard(s) that their mobile uses.

Examples:

- Group 1 – no interface
- Group 2 – serial digital interface (cable)
- Group 3 – ... + infrared
- Group 4 – ... + USB
- Group 5 – ... + Bluetooth

Stage 1

In each group, one file (e.g. blackboard image, home video) is transferred via the relative interface to all available mobiles. The procedure is documented in the form of 'user instructions'. Target groups could be younger members of the family or grandparents.

Stage 2

Thereafter a class discussion takes place on the findings of the exercise:

- Which interfaces are best suited a) to certain content, b) to certain situations?
- Which interfaces are most popular for everyday use?
- What problems arose when exchanging data?

Results can be recorded in various formats (videos, photo collage, audio recordings, etc.).

Stage 3

Not all files on a mobile may be forwarded to others. Generally, most young people are not aware of this. Each group now collects material which for legal reasons should not be passed on to others.

Suggestions :

- Works protected by copyright (music, images, programmes, films etc.)
- Unflattering photographs/videos of other people (where portrait rights apply)
- Adult content (violence, pornography)

Notes on equipment

Almost all mobiles have some kind of data transfer interface. It can however take time to find them (especially on older devices).

Example 7 *Geocaching – treasure hunts using mobiles*

Subjects: *Geography, a multi-disciplinary school project*

Learning objectives

- To work with spatial coordinates
- To be able to read geodata
- To design a treasure hunt for fellow pupils
- To follow and solve a treasure hunt using a mobile

This activity is especially suited to larger areas. It can be undertaken within many varied contexts and tasks.

Procedure

Stage 1

Pupils receive photographs that are geotagged (geographically identified) as part of a treasure trail. The photographs depict prominent objects (buildings, statues, fountains, etc.) the challenge is to use the relevant computer programmes (e.g. Picasa and Google Earth) to find out where they were taken. Research data can be printed out or stored as a note on the mobile. Locations may also be put together by the pupils themselves, perhaps in groups, in advance of the game.

Stage 2

During a field trip, the various locations must be found, where necessary using a street map (e.g. Google Maps). As soon as the location or object on the photograph has been identified, an object facing it is then photographed and stored with the relevant geotag.

Stage 3

Back in school, the geotags of the new images are compared with those of the original photographs. The correct coordinates provide proof that the pupils have in fact been to the appropriate locations. Additionally, locations can be stored, for instance in Google Maps. This allows the creation of a route which can, for example, show how many kilometres were covered during the course of the treasure hunt. Another possibility is the creation of a time-path diagram.

Notes on equipment

This activity requires mobiles equipped with the geotagging function.

Background information

'Geocaching', as treasure hunts using a mobile are also called, have become very popular among people of all ages. Besides the enjoyment of the game, participants are motivated to be active outdoors. Some geocaching events attract several hundred participants.

Example 8 *The SMS language***Subjects:** *Languages and English in particular***Learning objectives**

- To consciously make a distinction between traditional and SMS discourse
- To see SMS language as a reduction of language
- To recognise English language influences on SMS language

Procedure**Stage 1**

The class is divided into two or more groups. Following the set task (see below), one group formulates a short letter or postcard message, the other group a text message. Both groups must report the number of characters used. Duration: 10 minutes.

Task (message to friend)

Greeting – ask whereabouts of friend – suggest cinema visit – request a reply – sign-off

Stage 2

After the set time, both sets of texts are presented and discussed:

- What are the differences between a letter and a text?
- How do such differences come about?
- What expressions have become part of the SMS 'reduced' language?

Stage 3

Finally, all groups are asked to compose the answer (see below) as a text message with the fewest possible number of characters. Again, results are presented to the whole class.

Answer

Hello Alex! Many thanks for your answer! I am glad you want to go the cinema with me. We will meet at my house at 17.00 hours. Please don't be late! See you this evening! (136 characters)

Example 9 A SMS passage

Subjects: English

Learning objectives

- To learn SMS language
- To see SMS language as a collection of abbreviations
- To think about correct spelling as a means of general understanding

Procedure

Stage 1

The class receives a passage written in 'SMS language' to be translated into both English and their own language. First, pupils try to translate themselves, then the class works on the translation together.

Stage 2

The passage is then discussed and important questions are then considered:

- In what way does this form of writing contribute to the depletion of language?
- How high a percentage of the passage is not easily understandable? Why is this?
- What English short forms have become part of their own SMS language?
- What expressions do the pupils themselves use and why?

Stage 3

Finally, the class is divided into two groups. One group is set the task of typing the SMS passage into a mobile as fast as possible. The other does the same with the translation. A stop watch is used (which can be a mobile phone stopwatch).

SMS passage in 'English' (original schoolwork of an Irish pupil)

My smmr hols wr CWOT. B4, we usd 2 go 2 NY 2C my bro, his GF & thr 3 :-@ kds FTF. ILNY, its gr8. Bt my Ps wr so {:-/ BC o 9/11 tht they dcdd 2 stay in SCO & spnd 2wks up N. Up N, WUCIWUG -- 0. I ws vvv brd in MON. 0 bt baas & ^^^^A. AAR8, my Ps wr :-) -- they sd ICBW, & tht they wr ha-p 4 the pc&qt...IDTS!! I wntd 2 go hm ASAP, 2C my M8s again. 2day, I cam bk 2 skool. I feel v O:-) BC I hv dn all my hm wrk. Now its BAU ...

Solution (the 'translation')

My summer holidays were a complete waste of time. Before, we used to go to New York to see my brother, his girlfriend and their three screaming kids face to face. I love New York, it's a great place. But my parents were so worried because of the terrorism attack on September 11 that they decided we would stay in Scotland and spend two weeks up north. Up north, what you see is what you get - nothing. I was extremely bored in the middle of nowhere. Nothing but sheep and mountains. At any rate, my parents were happy. They said that it could be worse, and that they were happy with the peace and quiet. I don't think so! I wanted to go home as soon as possible, to see my mates again. Today I came back to school. I feel very saintly because I have done all my homework. Now it's business as usual ...

Example 10 *Everyday geometrical forms***Subjects:** *Maths***Learning objectives**

- To forge new patterns of learning
- To integrate everyday situations in teaching
- To identify geometrical figures

Procedure

Pupils are given the task of exploring the school grounds and photographing geometric shapes in everyday objects (square, sphere, trapezium, rhombus, etc.). To make identification more exciting for others, the shapes should be taken from the most unusual angle possible (sections, zoom, bird's eye perspective, etc.). Photographs are then presented to the class in the form of a guessing game, for instance.

Example 11 *Documenting a field trip*

Subjects: *German, history, biology, arts ...*

Learning objectives

- To document elements of the field trip on a mobile
- To expand on media skills

Procedure

The class is given the task of documenting a field trip using photographs, videos or audio recordings on their mobiles. Depending on the subject being taught, certain focus points are set. For example:

- Language – Writing captions for photographs/videos
- History – Tour of city, photographing historic buildings and squares, assembling a collage
- Biology – Nature tour, photographing plants and identifying these later in class using books or the internet
- Arts – Museum visit, voice recording of impressions on visiting galleries (permission to take photographs or videos must generally be sought from the museum).

Example 12 QR codes**Subjects:** IT**Learning objectives**

- To be able to generate a QR code
- To detect and decode QR codes in advertising material
- To send QR code puzzles

Procedure

Pupils are given various advertising materials (e.g. car manufacturers' advertisements) in which there are QR codes (see Chapter 4.1 Mobile applications). Using their mobiles they can decode them – what is hidden behind the code?

The internet allows free generation of QR codes (e.g., via <http://goqr.me> or <http://qrcode.kaywa.com>). Examples of items that can be coded are URLs, texts, telephone numbers or text messages. The class then discusses:

- What uses do QR codes have?
- What are their advantages and disadvantages?

Notes on equipment

Many mobiles already have a reader software for QR codes. Readers can also be downloaded from the internet, for instance via www.beetagg.com.

If a QR code leads to a website, internet access is required. Any costs to the pupils should be agreed with parents before the lesson.

Example 13 *Digital flickerbook*

Subjects: *Arts*

Learning objectives

- Drawing and photographing images
- Adding speech and/or music to a photo series

Procedure

Pupils prepare a drawing on a particular topic. The picture is photographed at regular intervals during the drawing. Just as in a flicker book, a paper creation will develop that can then be made into a short film in digital form. Impressive animations can result, taking inspiration, for instance, from the Italian cult TV animation series “La Linea” (http://en.wikipedia.org/wiki/La_Linea_%28TV_series%29). Animations can also be produced with speech or music.

Finally, results are presented and discussed in class. Films can also be uploaded on the school website.

Notes on equipment

An appropriate programme is needed to run images and sound together (e.g. Sony Ericsson’s VideoDJTM). Computers can also be used to achieve this (e.g. Windows MovieMaker or WindowsLive).

Example 14 SMS poetry**Subjects:** Languages**Learning objectives**

- to write poems
- To reflect on SMS language

Procedure

Pupils write a poem roughly the length of a text message (approximately 160 characters). Prior to the exercise, it is decided whether SMS language is permitted and whether there is a specific topic.

There are variations on the format of the poem:**1. 11-word poem**

This consists of eleven words in a pre-determined sequence over five lines. It looks like this:¹⁹

Line	Words	Content
1	1	A thought, an object, a colour, a smell, etc.
2	2	What makes the word on line 1?
3	3	Where or how does the word on line 1 arise?
4	4	What are your thoughts?
5	1	Conclusion: What is the result?

Example:

- Yellow
- It is summer
- Heat
- The sun
- Everyone wants ice cream

2. Haiku

This is a Japanese poetic form consisting of three groups of words each of 5, 7, 5 syllables. Traditionally haiku describes nature.²¹

Example:

- From the afternoon
- Clouds across the sky
- Muted colours give respite

3. Free or rhyming poem

¹⁸ Source: de.wikipedia.org/wiki/Elfchen (15.07.2010).

¹⁹ Source: de.wikipedia.org/wiki/Elfchen (15.07.2010).

Chapter 5

Exercises

The following exercises are suggested ways in which you as a teacher can bring the subject of responsible use of mobiles into the classroom. Examples of exercises using specific mobile applications are in Chapter 4.4.

The exercises are not limited to any teaching subject but can be used in any area where they seem appropriate, or where problems have arisen. Please consider that even if your pupils are well versed in mobile phone functionality, they still need support when it comes to moral and legal questions.

Exercise 1 | Safety and Bluetooth

Age group: 10 to 12

Learning objectives

- To be able to use the Bluetooth standard on a mobile phone
- To become more expert in handling mobile files

Procedure

Stage 1

This begins with a short introduction on the use of Bluetooth on a mobile phone which can be led by the teacher or pupils.

Stage 2

The second step is a discussion of situations in which pupils use Bluetooth. Questions could include:

- When was the last time you received a file (photo, video, audio) via Bluetooth?
- What did you do with this file?
- Were you asked to accept the download first or did you simply receive it?
- What happens when a recipient does not accept a file?
- Have you ever sent a file to someone else via Bluetooth?

Stage 3

Following the discussion pupils can gather in groups of four or five. Groups can be determined by level of use of mobiles (e.g. number of texts written in a month) or by make of mobile phone. Bluetooth is enabled for all mobiles in the groups. Two pupils from each group now attempt to send as many pictures as possible to their fellow group members. These try to repel download of the files. Duration: approximately five minutes.

Finally, the class as a whole deliberates on:

- the best way of deflecting files sent via Bluetooth
- how to set the mobile so that a minimum of unwanted files is received

Pupils can design a poster for the classroom wall to represent the results.

Exercise 2 | Keeping mobile internet costs down**Age group: 12 to 17****Learning objectives**

- To obtain an overview of mobile internet costs

Procedure

All pupils with mobile contracts research the following as homework:

- Can I use internet on my mobile?
- How much internet use is covered by the 'free' data package on my mobile contract?
- How much does an additional megabyte (1 MB) cost once the inclusive 'free' data package has been exceeded?
- Roughly how many YouTube videos can I watch each month before I use up my 'free' data package?
- How long can I be on Facebook each month before I use up my 'free' data package?
- Where on my mobile can I activate or deactivate internet use?
- When is it a good idea to deactivate mobile internet?

To round up, results are discussed and compared in small groups or among the class.

Variations for maths or IT classes

An excel sheet is set up to compare the mobile internet and data packages of various mobile network operators. How are tariffs shown? How large is the difference between the cheapest and the most expensive? Which provider gives the most services for the lowest cost?

Exercise 3 | Killingly funny

Age group: 10 to 14

(adapted from: Gewalt und Horror in Medien. (Violence and horror in media) Teaching material for media studies in 5th – 9th grades. BMUKK, Vienna, 1992. Page 9)

Learning objectives

- To examine why fictional representations of violence are sometimes perceived as 'funny'
- To understand that watching 'funny violence' can also be a means of eliminating real and notional fears and of experiencing release

Procedure

Stage 1

Pupils work together to find internet images, videos or comics which they find immediately funny and that also contain a small amount of violence. The resulting material is gathered centrally, for instance using a learning platform, or printed out and mounted on posters.

Stage 2

In pairs, pupils analyse why the chosen pictures, videos and comics have been judged to be amusing. Questions could be, for example:

- Did all pupils find the material immediately funny?
- What things do many people find especially funny, and why do others not appreciate them?
- What do the images, videos or comics have in common (e.g. depictions of mishaps/accidents, figures with particular features ...)?
- Why is it sometimes funny to witness someone's misfortune?

Each group designs a drawing, poster or power-point presentation.

Stage 3

Findings are collected and discussed by the whole class. This can also be the occasion to bring in the subject of home-made films containing violence (e.g. happy slapping).

Suggestions

Violence is 'funny' above all when representations have all or some of the following:

- A disaster befalls someone of a kind that the viewer would like to avoid.
- The consequences of violent actions depicted are left open.
- Laughing can be a substitute for acting in a mature fashion.

Exercise 4 | A quiz on the use of mobiles – what is reasonable, what is unreasonable?

Age group: 10 to 16

Learning objectives

- To provide an overview of laws governing the use of mobile phones
- To encourage appropriate reactions in critical situations

Procedure

This exercise has been designed for work over several hours or for a day's project.

Stage 1

Groups of three to four pupils are given five multiple choice questions on the legal aspects of using mobile phones. Target groups should be peers who are old enough to be legally bound by contracts. The following topics can be worked on:

- Payments via mobile phone
- Downloading apps
- Adult or illegal content
- Harassment via mobile (cyber-bullying)
- Mobile phone contracts
- Publishing material, such as photographs or videos, on a mobile
- Copyright
- Portrait rights

Each group can either research all the topics, or topics can be allocated to groups. Pupils must formulate three possible answers to each question (one correct and two false) and a short text with a solution to the question. The solution can include links to further information.

Stage 2

The next step is for a group of editors and/or the teacher to compile a quiz using the questions. The following quiz generators can be useful: www.edhelper.com/puzzles.htm, www.mystudiyo.com, www.wordlearner.com/print.php, www.flash-gear.com/puzzle/.

Stage 3

A group presentation then takes place in which groups exchange the material they have researched. New groups are formed, each with a representative from the former group. Pupils pass on the information needed to answer the quiz questions. Quiz questions are not directly discussed, only the relevant material.

Stage 4

Finally, all pupils take the quiz. There is one point for each correct answer. Pupils who have given the clearest presentations of their research gain extra points.

Exercise 5 | Rules on using the mobile phone in school

Age group: all

Learning objectives

- To reflect together on the use of mobiles in school
- To work out a solution in which all stakeholders are involved (teachers, parents and pupils)

Procedure

Stage 1

First, an explanation is given as to why use of mobiles in school can cause problems and why a 'contract' (see Chapter 3.1) can be helpful in resolving them.

Stage 2

Pupils then work in small groups to gather topics that they would consider important elements of a contract on the use of mobiles in school. Using these topics, they then try to roughly formulate initial rules.

Some questions that might help here are:

- Should the use of mobiles be permitted during class and/or during breaks?
- What should be done with mobiles during non-class periods?
- Where should mobiles be kept during sports lessons?
- What rules should be laid down on use of mobiles to photograph and film in school?
- Under what conditions might photographs/videos taken in school be published?
- What rules should govern the use of mobiles at school events?
- How might adherence to the rules be monitored?

Stage 3

The class should then consider questions that will also enable parents to be involved in the agreement of a contract on the use of mobiles in school. A homework exercise is set for pupils to interview parents and note their responses.

Stage 4

Parents', pupils' and teachers' opinions are then collated in class. Finally, a draft contract on the use of mobiles in school is produced.

Exercise 6 | Life without mobile phones**Age group: all****Learning objectives**

- To facilitate an evaluation of the effects of mobiles on communication between people
- To consider one's own use of the mobile

Procedure**Stage 1**

First, pupils complete the following sentences either on their own or in pairs:

- I use my mobile mainly to...
- The practical thing about a mobile is ...
- What worries me about mobiles...
- Life without mobiles ...

Stage 2

Divided into small groups, pupils now work on the following tasks:

Task 1:

The parents of a friend no longer want to pay the rather high costs of their daughter's mobile and threaten to cancel the contract.

What arguments might the friend use to persuade her parents not to act in this way? Make a list of usable arguments!

Task 2:

Pupils in a school are continually playing with their mobiles in class. This has made the school directors decide to ban mobiles.

What rules might be agreed that would persuade the directors not to ban mobiles? List proposals.

Variations

Pupils conduct an experiment and go without their mobile for one day or perhaps one afternoon. They make notes on the course of their day. What does not happen when you do not have a mobile? What is done instead? Pupils' findings can be gathered in a blog (www.blogger.com, www.wordpress.com).

Ten tips for teachers on dealing with mobiles in school

1 Talk about mobiles

Recognize the importance of mobiles in the everyday life of pupils and tackle the question of safe and responsible use of mobiles in your lessons. Find out about mobiles beforehand and follow the latest developments.

2 Agree on rules

Together with parents and pupils, agree on a contract on the use of mobiles in school. A general ban on mobiles is only valid as a short-term measure to tackle a problem.

3 Involve parents

Parents are your most important partners with regard to your pupils' use of mobiles. To avoid conflicts, broach the subject of mobiles at parents' evenings and together, reach a sensible method of working.

4 Respect privacy

Respect your pupils' mobile phones as private, in the same way as school bags. Material should be examined only in exceptional cases. However you should be receptive to being shown mobile content. If you want to confiscate a mobile, ensure that it is first turned off while you watch.

5 Encourage mobile phone etiquette

Mobile phone etiquette concerns the use of mobiles when others are present. This includes for instance not allowing the mobile to ring during class and not using it as a music player in school buildings.

6 Tackle the subject of photographs

Ensure that your pupils are familiar with the basic legal aspects of taking pictures with mobiles, for instance portrait rights. Explain which pictures may be taken and published and which may not.

7 Learning and teaching with mobile phones

Try something new. Use mobiles as a creative learning and teaching method. If not all pupils in a class possess a mobile, make groups with one device per group.

8 Take cyber-bullying seriously

Be sensitive to issues of group dynamics in your class. Do not make light of incidences of cyber-bullying. Support the affected pupils and promote understanding of this issue in school.

9 Be an example

Make sure that your dealings with mobiles match what you expect from your pupils. If you adhere to contracts, it is more likely that your pupils will do the same.

10 Do not forget: the opportunities and uses of the mobile far outweigh the risks!

The mobile phone is an excellent means of communication and fulfils many useful functions. Encourage your pupils to consciously use their mobiles and to explore all positive possibilities.



Legal notice

Teaching material
The mobile phone in school
Handling opportunities and risks appropriately
©Austrian Institute for Applied Telecommunications (ÖIAT)
1st edition 2010
All rights reserved.

Owner, publisher and editorial office:

Handywissen.at/Austrian Institute for Applied Telecommunications (OIAT) Margaretenstrasse 70, A
1050 Vienna

Editors: Barbara Amann-Hechenberger, Barbara Buchegger, Sonja Schwarz

Educational and teaching skills consultant:

Christian Gatterer, Dr Evelyn Stepancik

Design and typesetting based on the original Austrian edition by Blufish 21 Kommunikationsdesign,
www.blufish21.de

English version produced by Insafe under CC licence

Enquiries and extra copies:

Insafe
European Schoolnet
61 Rue de Treves
Brussels
1040
Belgium
info-insafe@eun.org

Non-commercial copying and dissemination of this publication are permitted with the mention of Handywissen.at and the www.handywissen.at website.

The accuracy and completeness of the information in this brochure is not guaranteed.

The authors and Handywissen.at/the Austrian Institute for Applied Telecommunications do not accept responsibility for the material in this brochure.

With the support of:

The Austrian Federal Ministry for Education, Arts and Culture

European Union – Safer Internet Programme: <http://ec.europa.eu/saferinternet>

A1





