Primary Science and Social Sciences and Digitalisation

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Primary Science and Social Sciences

The school subject of Primary Science and Social Sciences and the academic discipline of Primary Science and Social Sciences teaching at universities and teacher training institutions have particular challenges to deal with in relation to constantly changing living environments and ways of thinking. This position paper by the Gesellschaft für Didaktik des Sachunterrichts (Society for Primary Science and Social Sciences Teaching, or GDSU) identifies the implications of the increasing digitalisation of many areas of education and life for the theory and practice of Primary Science and Social Sciences teaching and is addressed to teachers, teacher trainers and researchers as well as school managers, producers of teaching materials and education policy makers. It is intended to prompt further essential discussion, above all in relation to the theory and multi-perspective nature of Primary Science and Social Sciences teaching.

The interdisciplinary approach of Primary Science and Social Sciences teaching makes it the appropriate forum in which to overhaul educational theory on such a complex issue; this is an appropriate context to pursue integrated and interdisciplinary approaches and strategies for primary education "in the digital world" (KMK, 2016). Under no circumstances should approaches be adopted that result in a singular, subject-related mindset or compartmentalised subjects. In order to achieve these ambitious goals it is necessary not only to integrate and interlink the perspectives of reference subjects and Primary Science and Social Sciences teaching theory with regard to different subject areas, but also to exchange views with other subject-specific teaching theories and educational disciplines and to collaborate on activities relating to education policy (GSV 2018; Brinda 2018; GI 2018).

The current challenges of digitalisation, as they are outlined and set out in a wide range of papers and studies and elsewhere (KMK 2016; GI 2018 und 2016; Bos, Eickelmann & Gerick 2013; Feierabend, Rathgeb & Reutter 2019), present Primary Science and Social Sciences teaching with a twofold challenge. On the one hand, we need to reflect creatively on the formats and environments where digital technology can meaningfully be used to add value to Primary Science and Social Sciences teaching and promote learning *using* media, taking both theory and practice into account. Existing teaching approaches and techniques can be used for this purpose and where necessary supplemented. The increasing importance of digital media and artefacts for children and young people (Schmeinck 2013a, 2013b; Feierabend, Rathgeb & Reutter 2019), on the other hand, and more recent developments that primarily emphasise the technological and economic issues, mean that there is an urgent need to develop and trial educational approaches and materials that treat digitalisation as subject in itself, with a range of

interconnecting perspectives, i.e. learning *about* the artefacts and phenomena of digitalisation and their complex connotations. The 'lens' of Primary Science and Social Sciences places particular emphasis on the dual task of learning both *about* and *using* media; yet Primary Science and Social Sciences teaching understands learning *about* media as dealing with their multiple interactions with everyday life and thus gives particular attention to the concepts of the digital world and digitalisation, and the associated spread of technology. How to reflect this duality is an issue with relevance for all levels of teacher training, the practice of Primary Science and Social Sciences teaching, the formulation of theory and for research.

Primary Science and Social Sciences focuses on children and their formative exploration of the world

It is precisely the interconnection of a variety of (subject-based) perspectives, which was first pioneered by Primary Science and Social Sciences and focuses consistently on primary school children's experience of the world and their thinking and actions, and which develops the relevant competences from the "point of view of the issue" and the "point of view of the children" (Köhnlein, 2012), that make the subject the ideal forum for tackling the phenomena and artefacts of digitalisation in an educational context (Gervé, 2019).

If education is understood as the development of individual potential in a values-based and socially, societally and ecologically determined context, and as the ability and readiness to play an active and responsible role in shaping this context in a spirit of solidarity (Klafki, 1992), the implication is that education bears particular responsibility for engaging with current and future changes, giving them direction and assigning them a framework, a goal and dimensions. In the same way as the goals of education for sustainable development, or in earlier times, education for democracy, arose from the challenges of the day, education in primary schools must also require children to engage with the forms, artefacts, and technological and social consequences of digitalisation (Irion, 2018) and it is just as inappropriate for it to confine itself to questions of how to handle or learn *using* digital media as to children's adaptation to a presumed "digital world" (Kammerl & Irion, 2018). If we keep primary school children strictly separate from all digital media (Lembke & Leipner 2015; Spitzer 2012; Teuchert-Noodt 2017), we do not, and we will not, face up to current and future challenges. On the contrary, we must put children in a position to reflect critically on their potential in relation to the phenomena, artefacts, problems and risks, so that they are able to understand the world and shape it in a democratic and sustainable manner (Straube et al., 2018). This includes the targeted and considered use of digital media in teaching (Schmeinck 2018; Peschel 2016a; Peschel & Irion 2016).

The goal of Primary Science and Social Sciences is practical development of competences

The concept of competences (GDSU 2013, GDSU 2019) is a combination of understanding, the ability to take action and the willingness to take responsibility (Gervé, 2014) and refers to ways of thinking, working and acting and "approaches and subject areas" (GDSU 2013: 12f.) both within and outside of children's worlds, school and society. It thus extends far beyond both what is more narrowly described as 'operational competence' and the circumscribed idea of basic IT education as 'learning programming'.

Basic primary level IT with its competency goals, content and method (GI, 2018), and the *Dagstuhl-Dreieck* [Dagstuhl Dreieck, or Dagstuhl Declaration] (GI, 2016), which integrates technological, socio-cultural and user-oriented perspectives, both have a place in the context of Primary Science and Social Sciences teaching.

Primary Science and Social Sciences incorporates learning both *about* media (technological artefacts and social developments) and *using* media – not only in the context of digitalisation – considering and inter-connecting different perspectives, and integrating digitalisation into its core mission of exploring the world. Competences should thus be understood as the potential to take action – both in the context of one's own life and as part of learning in the context of one's ongoing, increasingly subject-specific edu-cational path. They include content and process, as presented in computer science, for example (GI, 2018), but from a Primary Science and Social Sciences perspective they are not limited to information technology; they present a multiplicity of interconnected perspectives promoting autonomous, co-de-termined and action-oriented interpretation and reflection.

The multi-dimensional nature of digitalisation requires a nuanced rethinking of ap-proaches to teaching

The contemporary phenomenon of digitalisation extends to and is changing more and more aspects of everyday life, the economy, politics, culture and science (Döbeli Honegger 2017). In the first instance, we view digitalisation as a technique for presenting, processing, storing and disseminating numerical values, text, images, sound and film in the form of numerical codes; however, the social implications of these are far-reaching. "Smart" devices enable a wide range of details - in the form of numerically en-coded data - to be generated, read, cross-linked, analysed and used for communication, monitoring and management. In the context of globalisation in general, the cross-linking, dissemination and analysis of large volumes of data from a wide variety of sources (big data) has a significant influence on work and communication processes as well as on technological, social and political monitoring and controls (Gryl, 2017) and can tempt people to describe and explain the world in terms of measurements (omnimetrics). Attempting to describe problems in terms of algorithms, or to transform them into algorithms (compu-tational thinking), enables them to be operationalised but allows for only a limited construction of real-ity. Digitalisation and its advances in areas such as automation, robotics and artificial intelligence (AI) impacts on core aspects of our collective life and changes the content, method and goals of education and the processes of teaching and learning. When we speak of "digitality", therefore, we are describing changes in society's cultural practices (Stalder, 2016).

A rethinking of approaches to (Primary Science and Social Sciences) teaching (Kattmann et al., 1997; Gervé, 2017) on the one hand takes into account the everyday meaning of these phenomena and on the other seeks specialist academic clarification, drawing on areas including sociology and computer science and their teaching theories. In hermeneutic circles, clarification of fact is interlinked with investigation of children's educational objectives, competences and developmental potential, and with the specific learning requirements, experiences, concepts and issues arising from the everyday environment of a heterogeneous group of learners. These have implications for the selection, design and articulation of (sub-)topics, lesson formats, methods, media and materials, and assuming their significance, for opening up the world to children, which includes specialist preliminary instruction.

If we apply this model to digitalisation and digitality, it becomes clear that classes will ultimately have to consider examples from across the whole spectrum of issues that are educationally important. The structure of the Primary Science and Social Sciences competence model (GDSU, 2013), with its different (i.e. social science, nature, spatial, technological and historical) and interconnecting perspectives, where appropriate in its circular representation (Peschel, 2016b) is useful here. Strategies and materials relating to digitalisation should be situated explicitly in this overall context and ensure integration and connectivity with other issues and perspectives. Digitalisation leads to shifts in how media are used in the classroom (such as increased usage of image and sound media), which alter the development of competences in media reception and production; here too, however, the development of critical and reflective media competences, as described in media pedagogy (e.g. Herzig, 2014) and the resolution of the Standing Conference of Education Ministers on *Medienbildung in der Schule* [Media literacy in schools] (KMK, 2012) goes beyond technological, user-related issues or simply what is digital or digitisable. The task of getting to grips with this in Primary Science and Social Sciences teaching thus consists in particular in the weighing of opportunities and threats in relation to personal development, identity building, physical, mental and social health, the development of ethical value judgments and the promotion of competences to ensure self-determined, active involvement and participation in society; all these are essential for children's development (Peschel, 2016a).

Primary Science and Social Sciences and digitalisation: guidelines

The Society for Primary Science and Social Sciences Teaching follows the guidelines below and requests that central priorities for Primary Science and Social Sciences be set for a world that is increasingly influenced and shaped by digital media and technologies.

Focus 1:Focus on competences and children

The focus of Primary Science and Social Sciences lessons is children's formative exploration of the world in which they live.
This includes the artefacts and phenomena of digitalisation.

Basic Primary Science and Social Sciences education aims to support the development of competences (understanding, ability to act, desire to take responsibility), sees children's everyday world as the core point of reference and thus places the focus on children, their experience of the world, their interpretation of the world, their actions in the world, their individual prerequisites for learning and development and their right to education, protection and active participation. In this context, Primary Science and Social Sciences teaching takes account of learning (and prior learning) both in the classroom and the real world. Terms should thus be developed for digital phenomena and artefacts that children can connect with and that they can use to apprehend and reflect on their experience of the world so as to be able to derive actions from their understanding, put them into practice and take responsibility for them. Accordingly, a focus on competences means more than the development of media skills in the form of "the ability to deal responsibly with (digital) media in a range of situations, to use them in a purposeful manner and design them for oneself" (Gervé & Peschel, 2013: 60). It goes further, focusing on the development of the ability to act in a critical, reflective and values-based manner. The aim is to ensure children's own use of media is as informed as possible, so that they can participate in social discourse about

digitalisation and capitalise on media and technology in order to tackle problems in their own lives and in society, including the promotion of democracy and sustainability (Pokraka & Gryl, 2017).

Digital media enable children to tap into new, interactive sources of information and channels of communication that support the democratic process of opinion-forming and thus contribute to vital political education. They give children constant access to the world and enable them to construct the world; it is precisely the use of digital technology as a tool rather than as a presumed ambassador for the world that this continuum emphasises. The immense scale of the "analogue" consequences of "digitally supported" action requires a broader sense of responsibility. Although a multiplicity of natural and cultural worlds are more accessible and the boundaries between analogue and digital are dissolving, our particular responsibility to deal with each other in a respectful and fair way and to engage in sustainable thinking and action is becoming clear.

With regard to priorities for primary school education, this demanding requirement must be balanced against – and constantly updated in the context of – children's right to be protected against overwork and against the social and health risks and dangers of digital technologies. When dealing with digital media and technology, therefore, children's developmental processes should be neither ignored nor hastily judged from an adult perspective as questionable, without taking sufficient account of the way children approach and evaluate things (Irion 2016).

Focus 2: Primary Science and Social Sciences, media education and basic IT education

Primary Science and Social Sciences education must always cover a wide range of perspectives and be delivered in context with the goal of exploring the world.
This principle also applies to the incorporation of media education and basic IT into Primary Science and Social Sciences.

Critical reflection on media is at the heart of the practice of Primary Science and Social Sciences teaching. Digital technology and media have evolved rapidly and dramatically over recent decades and the social implications of their use are an increasing feature of everyday life. As a consequence, rather than a new overall theory of Primary Science and Social Sciences teaching, what is required is a consistent and open attitude to incorporating and addressing new topics and behaviours that are relevant to everyday life and can be linked to different subject areas. It is important here not to repeat the mistakes of the late 1970s by adopting single-perspective, subject-specific approaches (Thomas, 2013) or by introducing technical IT education in primary schools as happened during the first wave in the late 1980s (Bos, Eickelmann & Gerick, 2013). Nevertheless, Primary Science and Social Sciences can and must provide an elementary understanding of algorithms, automation (e.g. computational thinking – amongst others, Wing, 2006; Brennan & Resnick, 2012) and human-computer interaction as the basis for understanding digitalisation. However, this should only take place in context and as part of a Primary Science and Social Sciences approach whose aim is to explore the world, not in the form of an additional topic area or subject that deals separately with the phenomena of digitalisation. So approaches that offer, for example, one isolated programming course, do not provide children with appropriate support in engaging with a digitalised world if they do not explicitly integrate the potential applications and implications for society of algorithms, connecting them with phenomena that relate to the everyday world and children's perspectives.

Since the 1990s, Primary Science and Social Sciences teaching has developed sound strategies and models for an integrated approach that includes technology-enhanced learning, is relevant to current challenges and is further differentiated through the explicit integration of teaching strategies for primary-level media studies and IT (GI, 2018) that focus on digital media. The goal here remains to support children to develop process- and content-related competences that enable them to get to grips in a reflective way with the phenomena and artefacts of digitalisation as part of a basic education. Given the requirement of Primary Science and Social Sciences for learners to reflect on the world and on themselves, and for self- and co-determination, this goes beyond media education and IT teaching models.

Focus 3: Two-fold integration

A key characteristic of Primary Science and Social Sciences is the duality of learning both about and using media. Primary Science and Social Sciences teaching treats digital media and technology as an <u>aid</u> to learning but also as a <u>topic</u> to be learnt about, including its implications and consequences, and they are integrated into lessons and teacher training.

The task for Primary Science and Social Sciences teaching is to develop, test and evaluate concepts and materials that both focus on fact-based learning *using* digital media and technology (to support and extend ways of thinking, working and acting) and also to describe learning environments that have a sound theoretical basis and are proven in practice, promoting learning *about* the phenomena, implications, artefacts and consequences of digitalisation.

In view of the current (over-)emphasis on learning *using* digital technology, it is particularly important to stress that learning *about* digitalisation is an essential aspect of Primary Science and Social Sciences, which considers the various perspectives (technological, sociological, scientific, historical, geographical) on digitalisation, digitality, digital technology and information technology as the content of a subject area with a network of perspectives. Even if learning *using* media should always be associated with learning *about* media, where the suitability of the media that are used is evaluated (Schulze et al. 2015), learning *about* media, broadened to include learning *about* the phenomena of digitalisation, cannot take place 'en passant'. On the contrary, it must be given particular attention, with lessons focusing explicitly on the competences required to process content and concepts that are relevant to life and education. These include automation, robotics, big data, virtual reality, augmentation, personality rights, data storage, and manipulation, but also changes relating to democracy, politics, human rights, the economy, ecology, health, sustainability, etc. The process can in turn be supported by the original encounter with the topic of 'digital media and technologies', which steers focus and motivation away from digital devices towards an engagement with content. Here, Primary Science and Social Sciences must provide a guiding framework for action that is both grounded in theory and capable of being put into practice. Philosophising with children also provides learners with the opportunity to question and reflect critically on digitalisation media and structures and to develop their own position in dialogue with others (see May-Krämer, Michalik & Nießeler, 2018).

Focus 4: Language and terminology

Exploration of the world is inextricably linked with language.
Primary Science and Social Sciences lessons and Primary Science and Social Sciences teaching must therefore always be sensitive to language and terminology, including in the context of digitalisation.

Drawing on Primary Science and Social Sciences' tradition of sensitivity to language, the language used around digitalisation and education must also be broadened and specified for Primary Science and Social Sciences, in order to counter the risk of reducing the world and the discovery of the world to what that can be digitised (i.e. comprehended through numerical codes). Just as - since the world can only be explored at a higher abstract level with the help of language - the focus of Primary Science and Social Sciences is on language and terminology, reality is shaped by language (Wittgenstein, 2003) and language thus influences the matter dealt with in Primary Science and Social Sciences.

Primary Science and Social Sciences teaching should therefore work towards ensuring that terms such as digital learning, digital competences, digital education and digital world are never thought of as simplifications of more complex interlinked phenomena. Language use in Primary Science and Social Sciences teaching should take an especially careful approach to such abbreviated terms, guarding against the risks of using abridged modes of expression. The one-dimensional use of the term "digital education", for instance, contracts the exploration of the world in a Primary Science and Social Sciences context where the world is increasingly influenced and shaped by digital media and technology and prevents learners from developing the competences required to play an active role in shaping the world (Peschel, 2016a); in a Primary Science and Social Sciences context it should be considered, understood in this broader sense and clarified.

Focus 5: Equipment and innovation

Modern, forward-looking learning environments are based on concepts that are firmly grounded in Primary Science and Social Sciences teaching.

Against the background of the fast pace of digitalisation, this requires constant, Social Studie-specific innovation, professionalisation and updating of equipment.

The development of teaching approaches and materials on the one hand and the provision of hardware and software and the associated technical support on the other must be brought together in implementation strategies, pilot projects, teacher training and development processes for schools and courses that are grounded in theory, practical and experiential. To this end, it is also desirable to have connectivity between federal states in relation to frameworks for planning and media literacy etc. The impact on children of strategies such as Bring Your Own Device (BYOD), classes where every student has a tablet, mobile network connections (e.g. through lighting technology or wireless networks that can be switched off) must be subjected to critical evaluation and should not be monetised or lead to the introduction of an unthinking paradigm of digitalisation. Media literacy concepts should be focused first and foremost on children's education, not on financial matters or buzzwords. New media, new concepts, new teaching approaches and new technology must be introduced as part of a collective process that is supported by theory and evaluated on an ongoing basis, with good practice pilot projects being used at a broader level to clarify theoretical prerequisites and explore practical implications. Good (Primary Science and Social Sciences) teaching needs learning environments that are well thought out in terms of teaching theory and teaching methods, and (digital) media can only provide

meaningful support for this if they are also designed (software) and integrated (hardware) with teaching theory and teaching methods in mind and function reliably (hardware and support). Digital transformation also requires long-term financing and the investment of time and personnel resources in development, research, education and training, above all on the spot in schools and in classrooms. At the same time, education must remain independent of private companies and large corporations, particularly in relation to digitalisation and the concomitant collection and processing of data.

These guidelines are intended to provide the basis for discussion of policy, teaching techniques and subject-based approaches. They should be taken into account in the development of teaching programmes in schools, in all phases of teacher training and in education policy. Above all this position paper tasks Primary Science and Social Sciences teaching with presenting the multiple perspectives of digitalisation in tangible terms. At the same time, it seeks to stimulate and challenge at a much broader level, requesting that approaches and materials be developed specifically for primary schools and critical reflection be undertaken in relation to the protection of individuals and data, health, democracy, the potential for misuse and manipulation, and technology assessment in relation to sustainability at the level of the individual and society. **Last but not least, the Primary Science and Social Sciences and Digitalisation position paper considers education policy with a view to providing the appropriate framework and support to enable these challenges to be met in the context of school and curriculum development, and teacher training.**

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Primary Science and Social Sciences and Digitalisation – Position paper of the Gesellschaft für Didaktik des Sachunterrichts (GDSU) **Stand 02.04.2021**

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- 08.10.2018: Redaktionelle Arbeiten durch Inga Gryl und Markus Peschel
- 10.11.2018: Diskutiert auf der Jahrestagung der AG „Neue Medien (ICT) im Sachunterricht" in Saarbrücken
- Kommentiert von Christian Borowski, Philipp Straube und Martin Brämer im zeitlichen Umfeld der Tagung
- 14.12.18 und 15.01.19: Überarbeitet von Friedrich Gervé und Markus Peschel
- 09.04.19: In der Fassung vom 15.01.2019 auf der GDSU Jahrestagung in Lüneburg im Rahmen eines Symposiums vorgestellt, auf der Mitgliederversammlung avisiert und den GDSU-Mitgliedern anschließend online zugänglich gemacht
- Kommentiert von Thomas Irion (26.1.19) und Inga Gryl (3.2.19)
- 28.02.2019: Überarbeitet von Friedrich Gervé
- Weitere Kommentare von Detlef Pech, Helga Ritter, Walter Köhnlein, Roland Lauterbach, Lydia Murmann für die AG Technik, Martin Binder, Kerstin Michalik für den Vorstand der GDSU;
- 28.06.2019: Einarbeiten der o.g. Rückmeldungen aus der GDSU (Treffen in Köln) von Philipp Straube, Inga Gryl, Daniela Schmeinck, Friedrich Gervé, Thomas. Irion, Markus Peschel
- 16.09.2019: Vorlage für Endredaktion von Friedrich Gervé
- 26.10.2019: Vorläufige Endredaktion und Kurzfassung von Markus Peschel und Friedrich Gervé
- Rückkoppelung mit Autor*innenteam ab 29.10.2019
- 29.10.2019: Endfassung durch Markus Peschel (Sprecher der AG) an den Vorstand der GDSU
- 08./09.11.2019: Beratung, Diskussion und (Neu-)Verabschiedung der am 29.10.19 an den Vorstand gesendeten Version auf der Jahrestagung der AG Medien und Digitalisierung in Berlin (FU)
- Ergänzt durch eine Kurzfassung vorgestellt und im Plenum diskutiert in der Mitgliederversammlung im Rahmen der Jahrestagung 2020 in Augsburg am 05.03.2020 und dort zur Finalisierung und anschließender Veröffentlichung im Namen der GDSU bei wenigen Enthaltungen verabschiedet mit der Vorgabe, kleinere Änderungsimpulse noch einzuarbeiten, die in der Mitgliederversammlung gegeben wurden oder in der Folge bis 30.03.20 noch eingehen.
- Überarbeitung von Friedrich Gervé (bis 10.05.2020-25.09.20) auf der Grundlage der vorgetragenen oder eingegangenen Änderungsimpulse (insb. Kerstin Michalik (22.03.20), ergänzt von weiteren Vorstandsmitgliedern (25.03.20).
- 01./02.10.2020: Kommentierte Änderungen umfassend diskutiert, abschließend beraten und erneut finalisiert auf der Arbeitstagung der AG Medien und Digitalisierung in Köln (2020), bereinigt von Friedrich Gervé und Markus Peschel 05.-08.10.20
- 09.10.2020: Neuerliche Endfassung an den Vorstand geschickt
- 14.10.2020: Verabschiedung vom Vorstand der GDSU (Kerstin Michalik, Sandra Tänzer, Ute Franz, Andrea Becher, Andreas Nießeler)
- 27.10.2020: Letzte Redaktionelle Anmerkungen und kleinere Änderungsvorschläge vom Vorstand der GDSU
- 01.11.2020: Einarbeitung, letzte redaktionelle Änderungen von Markus Peschel
- 24.03.2021: Finalisiert vom Vorstand der GDSU

Genesis ("Cologne paper")

- Developed in meetings on 28.5.18, 8.6.18, 29.6.18, 9.7.18 by Inga Gryl, Daniela Schmeinck, Friedrich Gervé, Thomas Irion, Markus Peschel
- 08.10.2018: Editorial work by Inga Gryl and Markus Peschel
- 10.11.2018: Discussed at the annual meeting of the New Media (ICT) in Primary Science and Social Sciences
- Teaching Working Group in Saarbrücken
- Comments from Christian Borowski, Philipp Straube and Martin Brämer within the time frame of the meeting
- 14.12.18 and 15.01.19: Revised by Friedrich Gervé and Markus Peschel
- 09.04.19: Version of 15.01.2019 presented to a symposium in the context of the GDSU annual meeting in Lüneburg, notified to the general meeting and subsequently made available online to GDSU members
- Comments by Thomas Irion (26.1.19) and Inga Gryl (3.2.19)
- 28.02.2019: Revised by Friedrich Gervé
- Futher comments from Detlef Pech, Helga Ritter, Walter Köhnlein, Roland Lauterbach, Lydia Murmann for the Technology Working Group, Martin Binder, Kerstin Michalik for the GDSU Board;
- 28.06.2019: Incorporation of the abovementioned feedback from the GDSU (meeting in Cologne) by Philipp Straube, Inga Gryl, Daniela Schmeinck, Friedrich Gervé, Thomas. Irion, Markus Peschel
- 16.09.2019: Submitted for final editing by Friedrich Gervé
- 26.10.2019: Provisional final edit and executive summary by Markus Peschel and Friedrich Gervé
- Feedback from writing team from 29.10.2019
- 29.10.2019: Final version presented by Markus Peschel (Working Group spokeman) to the GDSU Board
- 08./09.11.2019: Consultation, discussion and (re)adoption of the version sent to the Board on 29.10.19 at the annual meeting of the Media and Digitalisation Working Group in Berlin (FU)
- Supplemented by an executive summary, presented and discussed at the plenary session of the 2020 annual general meeting in Augsburg on 05.03.2020 and adopted with few abstentions for finalisation and subsequent publication in the name of the GDSU, with the instruction to incorporate minor amendments raised in the general meeting or submitted prior to 30.03.20.
- Revised by Friedrich Gervé (between 10.05.2020 and 25.09.20) on the basis of suggested amendments raised at the meeting or subsequently (esp. Kerstin Michalik (22.03.20), supplemented by other Board members (25.03.20).
- 01./02.10.2020: Annotated changes discussed in detail, then debated and once again finalised at the Media and Digitalisation Working Group workshop in Cologne (2020), adjusted by Friedrich Gervé and Markus Peschel 05.-08.10.20
- 09.10.2020: Further final version sent to the Board
- 14.10.2020: Adoption by the GDSU Board (Kerstin Michalik, Sandra Tänzer, Ute Franz, Andrea Becher, Andreas Nießeler)
- 27.10.2020: Final editorial annotations and minor amendments by the Board
- 30.10.2020: Incorporation of final editorial annotations by Markus Peschel
- 24.03.2021: Finalised by the GDSU Board