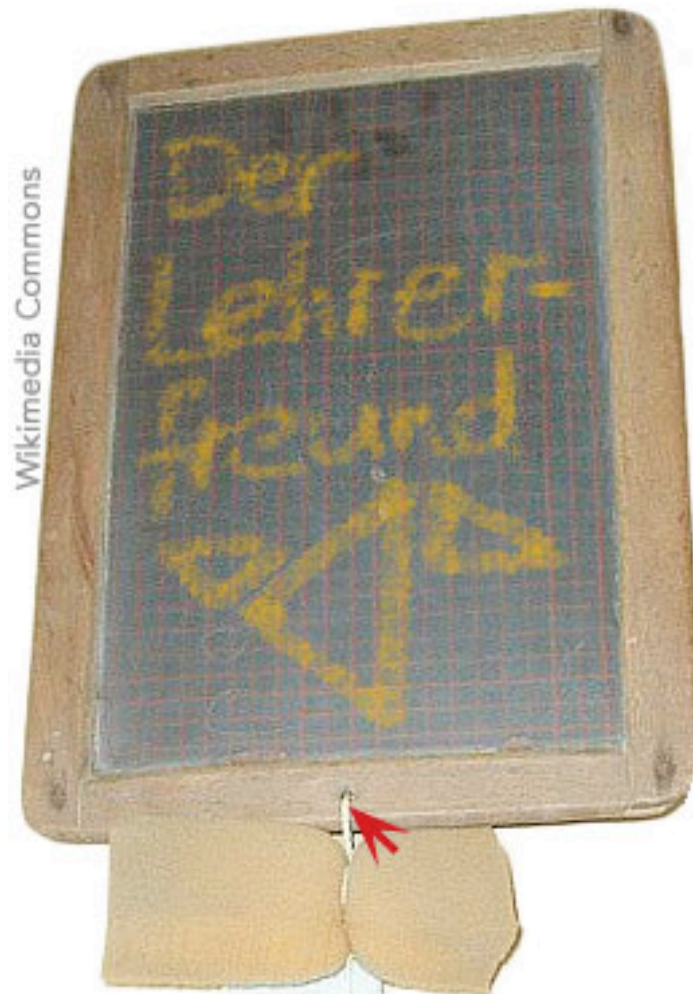


HANDOUT

DIDAKTIK MOBILES LERNEN MIT IPADS

One Size Fits All



Schiefertafel
(ca. 1950)



iPad
(ca. 2010)

www.lehrerfreund.de

SCHULE KANN MEHR...



DIDAKTIK

21st century skills

METHODIK

fachimmanent

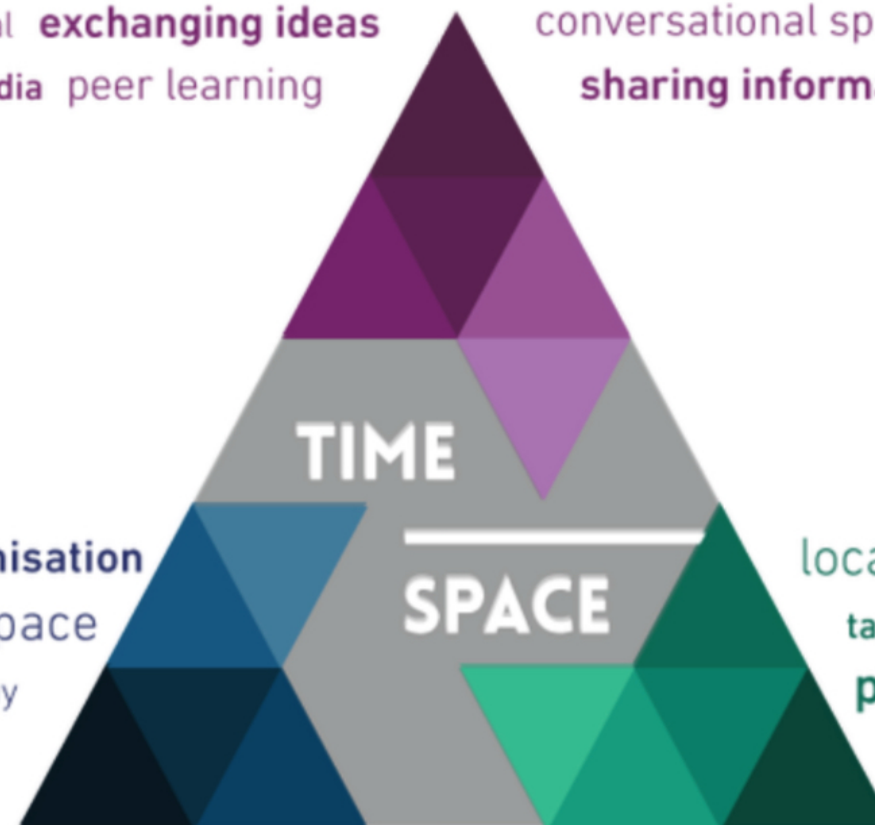


social interactivity learning from experts **interactions** face-to-face discussions
 face-to-face discussions **push-pull data** creativity **online conversations** social interactivity
 content currency cultural competencies **exchange data** connections **value-add**

data sharing **COLLABORATION** **conversation**

dynamic dialogue communication **multimodal literacy skills** sharing resources

social **exchanging ideas** conversational spaces **global**
social media peer learning **sharing information** team-players



choose own content **ownership** **customisation**
 tailored apps **self-directed** own place, own pace
 convenience **context-aware/sensitive** own way
games **instant feedback** self-initiated learning

PERSONALISATION

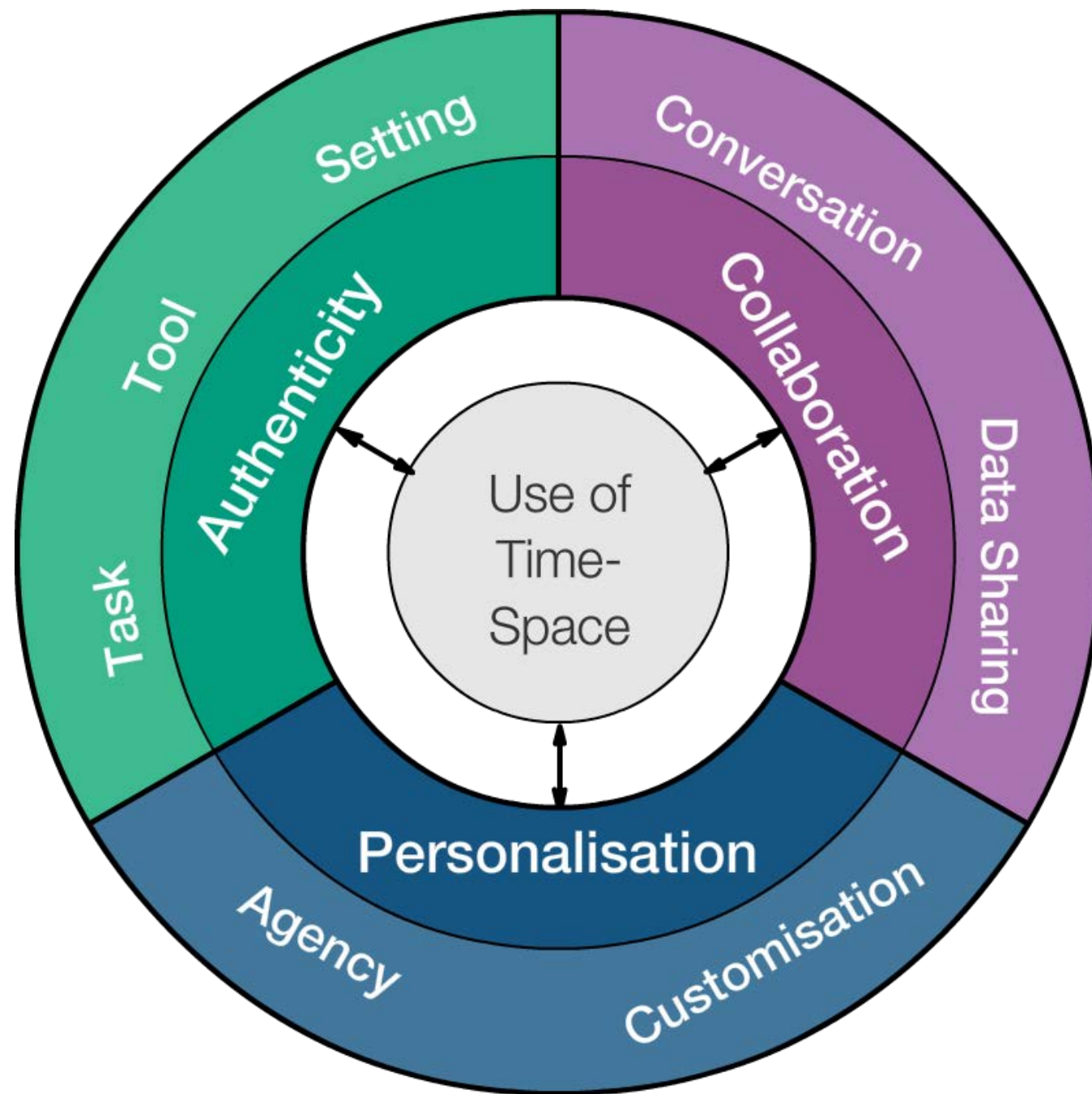
immediate, customised feedback autonomy just-in-time; 'on-the-fly'
agency self-regulation **choice** socio-cultural perspective
 learner-negotiated wearable devices **control** **self-assess**

location-based **relevance** **unexpected**
task practice field **multi-modal communication**
personal meaning participatory learning
 emergent tasks **'in-situ' practices** setting

AUTHENTICITY genuine

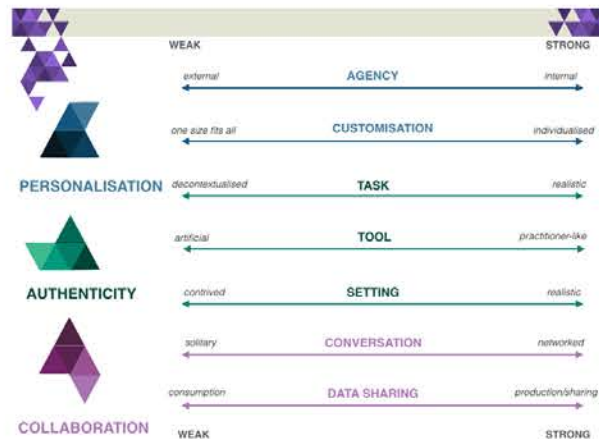
participatory real world relevance **context sensitivity**
realistic use of tools serendipity **real community**
 contextualisation realistic setting & process **situatedness**

iPAC FRAMEWORK



A Mobile Learning Toolkit for Teacher Educators

www.mobilelearningtoolkit.com



2.

Teacher and Student Online Survey Tools
survey tool for teachers and trainee teachers & students based on the constructs of the iPAC framework. This enables teacher educators and their trainee students to evaluate any mobile learning activity. The results are displayed in a both chart and polar chart format (see right) enabling practitioners to identify areas of mobile learning they wish to develop further. The instrument generates a short, personalised report outlining strengths and weaknesses and directing the user to a set of bespoke resources (e.g. m-learning video case studies) suggesting routes forward. One of these is illustrated below (see 5)



1.

The iPAC Framework

Based on a theoretical model developed by academics in Australia and the UK (Kearney, Schuck, Burden & Aubusson, 2012), the iPAC framework underpins all aspects of the Mobile Learning Toolkit. It captures in the form of three constructs and seven sub-constructs, the 'signature pedagogies' of mobile technologies. These include Personalisation, Authenticity and Collaboration (see diagram right). Each of the sub-constructs is represented by a set of binaries (see diagram above) describing strong and weak characteristics. These form a repertory grid which is the basis of the survey tool (see 2 above). At the centre of the iPAC framework are the concepts of time and space which capture the malleable contexts within which many m-learning activities occur, removed from the traditional temporal and spatial constraints that have traditionally 'bounded' learning in formal and time specific settings (Traxler, 2007).



QR code 2



3.

Exemplar eBooks

Mobile devices enable students and teachers to read and generate their own eBooks in ways which were previously impossible. These technological changes are disruptive and challenging and promise to transform how knowledge and understanding is constructed, validated and shared. Textbooks have traditionally played a central role in defining the identity and purpose of teachers and therefore the Mobile Learning Toolkit has created a set of exemplar eBooks to explain how this epistemological revolution can be harnessed by teacher educators to help turn their trainee teachers into knowledge constructors rather than knowledge consumers (Scardamalia & Bereiter, 1994). These eBooks serve as a model for what might be possible in the Mobile Age and how teacher educators might position themselves to exploit these changes most effectively for their trainee students.



6.

A 6 week online course (multi-platform)

This free online course supports teacher educators and teachers involved in training teachers to understand and use mobile technologies effectively in their classroom. It demonstrates how to gain the maximum effect from the Mobile Learning Toolkit, including how you could adapt this for use in your own institution. It will be available for user tester from April 2017. Please contact us if you wish to be involved.



QR code 1

The Mobilising and Transforming Teacher Educators' Pedagogies project (www.mtpep.eu)

An international Erasmus+ project, funded by the European Commission to ensure the next generation of teachers are capable and confident in using mobile technologies to make learning more personalised, authentic and collaborative (see: Kearney, Schuck, Burden & Aubusson, 2012, **QR code 2**). To achieve this ambition the project partners have constructed a freely available Mobile Learning Toolkit and an international mobile learning network for teacher educators (see www.mobilelearningtoolkit.com). The SIX individual elements of the toolkit are illustrated in this poster. A video explaining how to use the toolkit can be accessed through **QR code 1**.

4.

A rubric and database for evaluating pedagogical apps

Although there are now thousands of educational apps, there is little or no guidance available to teacher educators and teachers to help them select apps for a particular pedagogical purpose. The rubric and associated database of recommended apps uses the iPAC framework to rank apps by their pedagogical value (see above). Rather than focusing on the aesthetic or technical features of an app (which are the focus of other rubrics) our rubric enables users to search for particular pedagogical activities they wish to undertake (e.g. fieldwork) matching apps that have been validated by other teachers as strong in this regard. The database will therefore help teacher educators and their trainee students select apps that have a strong pedagogical potential based on the iPAC framework constructs.

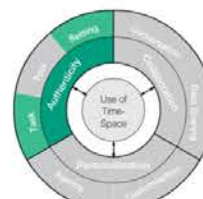
5.

Trainee History Teachers Using iPads in fieldwork



Introduction

This scenario explores how trainee history teachers use the UK used their mobile devices (iPads) to undertake a fieldwork visit to the battlefields of the First World War. This is traditionally a 'paper and pen' exercise with students collecting data on a clipboard. This scenario illustrates how mobile technologies can be used in a genuinely mobile fashion in a very situated context to collect and construct data.



Focus: Authenticity: Task and Setting

Apps used in this scenario

Explain

Mobile Learning Video Case Studies

Exemplar video scenarios have been created to illustrate the three MPF constructs. These video cases have been organised into a matrix according to their curriculum area and the MPF construct (Personalisation; Authenticity and Collaboration) illustrated. The Matrix enables users to view and select mobile learning video case studies in a simple to use interface. See **QR code 3** for an example from History discipline area.

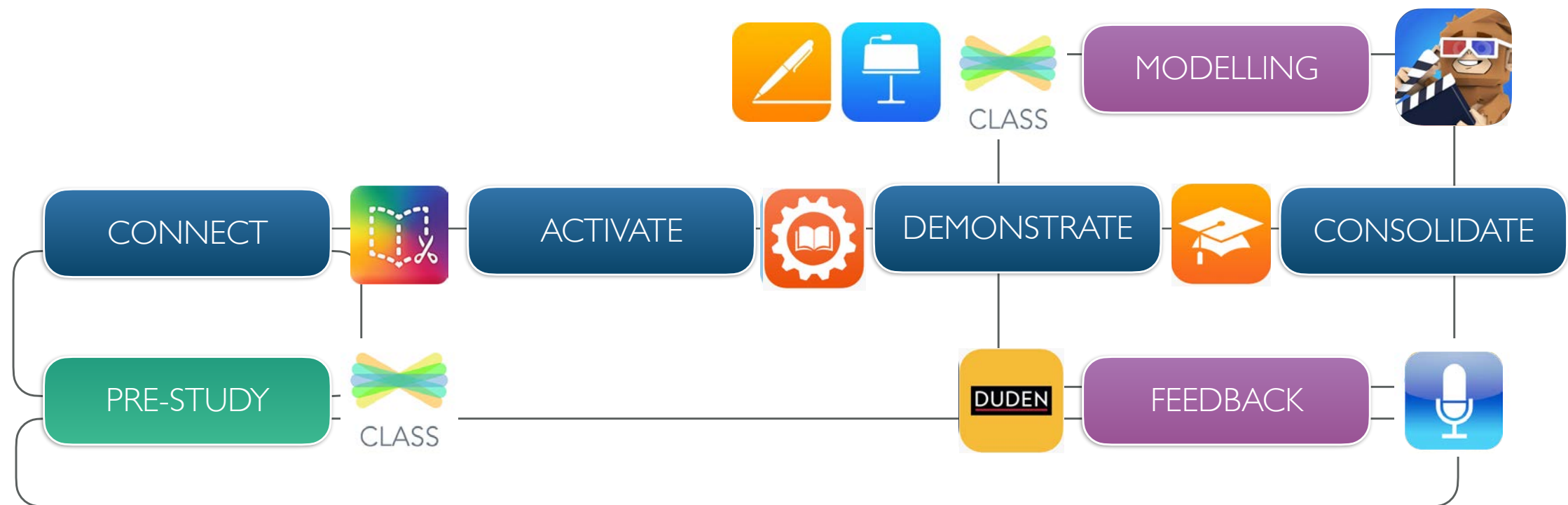


QR code 3

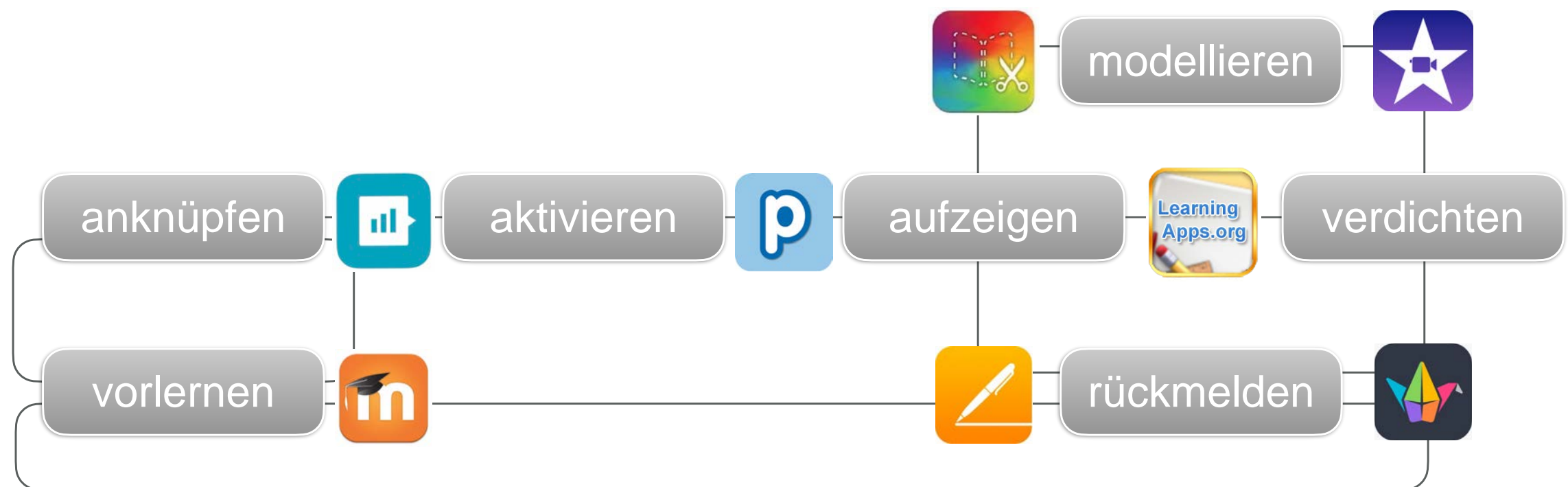
References:

- Kearney, M.D., Schuck, S.R., Burden, K. & Aubusson, P.J. 2012, 'Viewing mobile learning from a pedagogical perspective', *ALT-J, Research in learning technology*, 20, (3), pp. 1-17.
- Traxler, J. (2007). Defining, Discussing and Evaluating Mobile Learning: The moving finger writes and having writ.... *The International Review of Research in Open and Distributed Learning*, 8(2).
- Scardamalia, M., & Bereiter, C. (1994). Computer support for knowledge-building communities. *The journal of the learning sciences*, 3(3), 265-283.

Accelerated Learning Cycle



Accelerated Learning Cycle





E-Teach The Teacher

Maximillian Stoller und andere

[Anzeigen in Apple Books ↗](#)



Mobile learning objectives/aims for the lesson		
Technology used and the stage of the lesson it is used at.	iPac	Notes
PRE-STUDY		
CONNECT		
ACTIVATE		
DEMONSTRATE		
MODELLING		
CONSOLIDATE		
FEEDBACK		

UNTERRICHTS-ANALYSE

LERNRÄUME DER ZUKUNFT



Ørestad Gymnasium in Dänemark, Foto: Adam Mørk

Didaktische Schieberegler

nach Axel Krommer & Kollegen

Freiheit  **Zwang**

Vertrauen und Freiheit  **Kontrolle und Struktur**

Einfache Technik  **Neue Technik**

Asynchron  **Synchron**

Offene Projektarbeit  **Kleinschrittige Übungen**

Peerfeedback  **Feedback durch Lehrende**

APP-CURRICULUM

KLASSE 8

KLASSE 8

APP	FACH	LEHRER/IN	EINGEFÜHRT
	Bio		
	BK		
	Ch		
 	D		
	E		
 	EK		
 	Fr/Te/AES		
	G		
 	M		
	Mu		
	Ph		
	Rel/Eth		
	WBS		
	GK		

Das SAMR Modell zur Integration von Lerntechnologie

SAMR

Was machen
die da nur
im Wasser?



KEIN TECHNOLOGIEEINSATZ

ERSETZUNG
(Substitution)

Technik ist direkter Ersatz
für Arbeitsmittel, ohne
funktionale Änderung

ERWEITERUNG
(Augmentation)

Technik ist direkter Ersatz für
Arbeitsmittel, mit
funktionaler Verbesserung

ÄNDERUNG
(Modification)

Technik ermöglicht beachtliche
Neugestaltung von Aufgaben

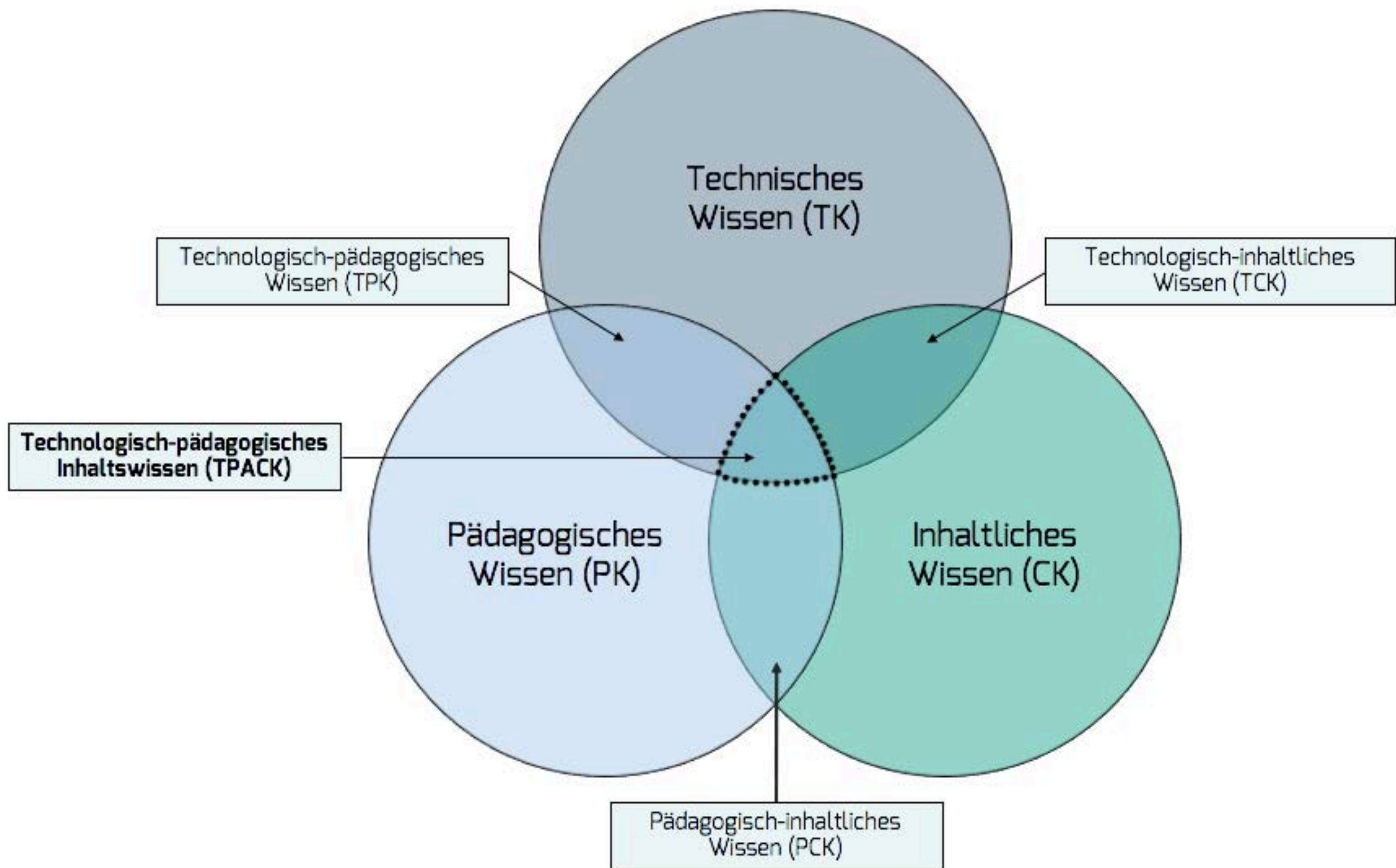
NEUBELEGUNG
(Redefinition)

Technik ermöglicht das Erzeugen
neuartiger Aufgaben, die
zuvor unvorstellbar waren

VERBESSERUNG
(enhancement)

UMGESTALTUNG
(transformation)

@silviodruckwerk
i @edappadvice
deutsch von
von E. H. H. H. H.
2018/01/02



Grafik: Gesellschaft für digitale Bildung, adaptiert von Harris und Hofer (2011)

Das iPad im Unterricht

PRAXISBEISPIELE AUS GEISTESWISSENSCHAFTLICHEN FÄCHERN

Können leider aufgrund des Datenschutzes der beteiligten Personen nicht dargestellt werden.

