

# An International Survey on Media Use for Learning

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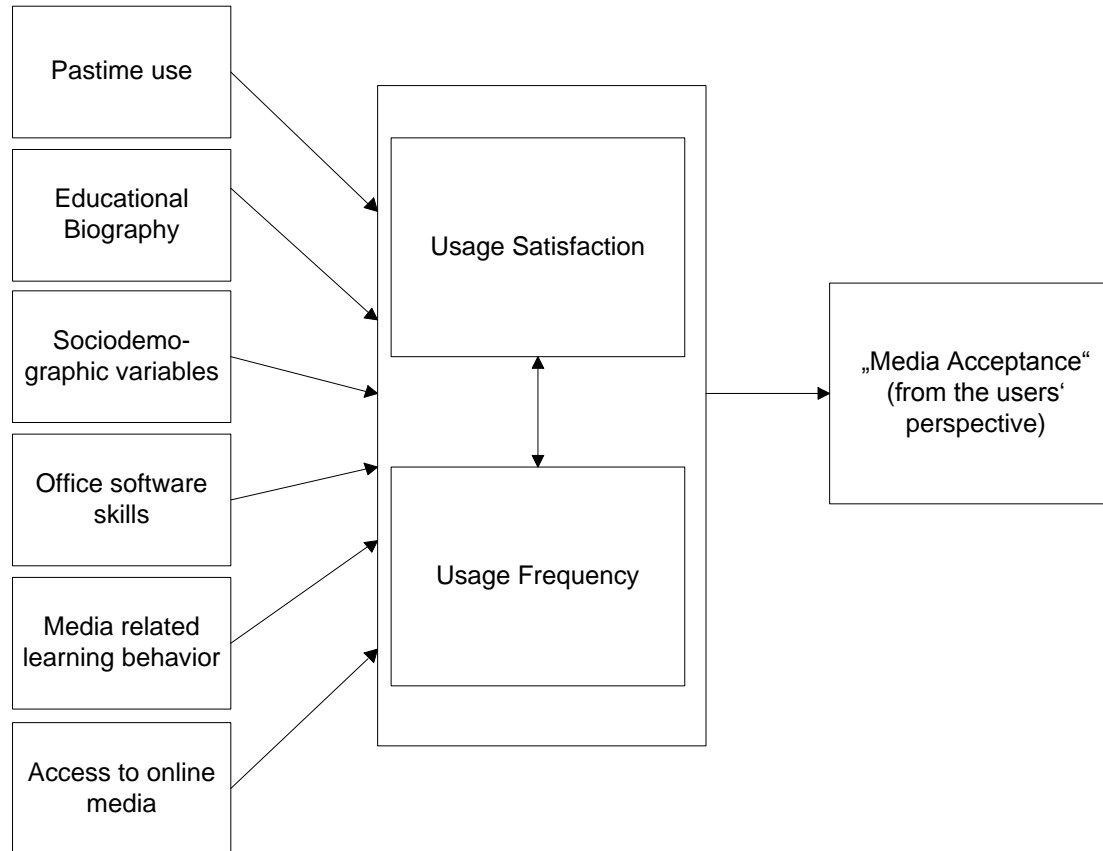


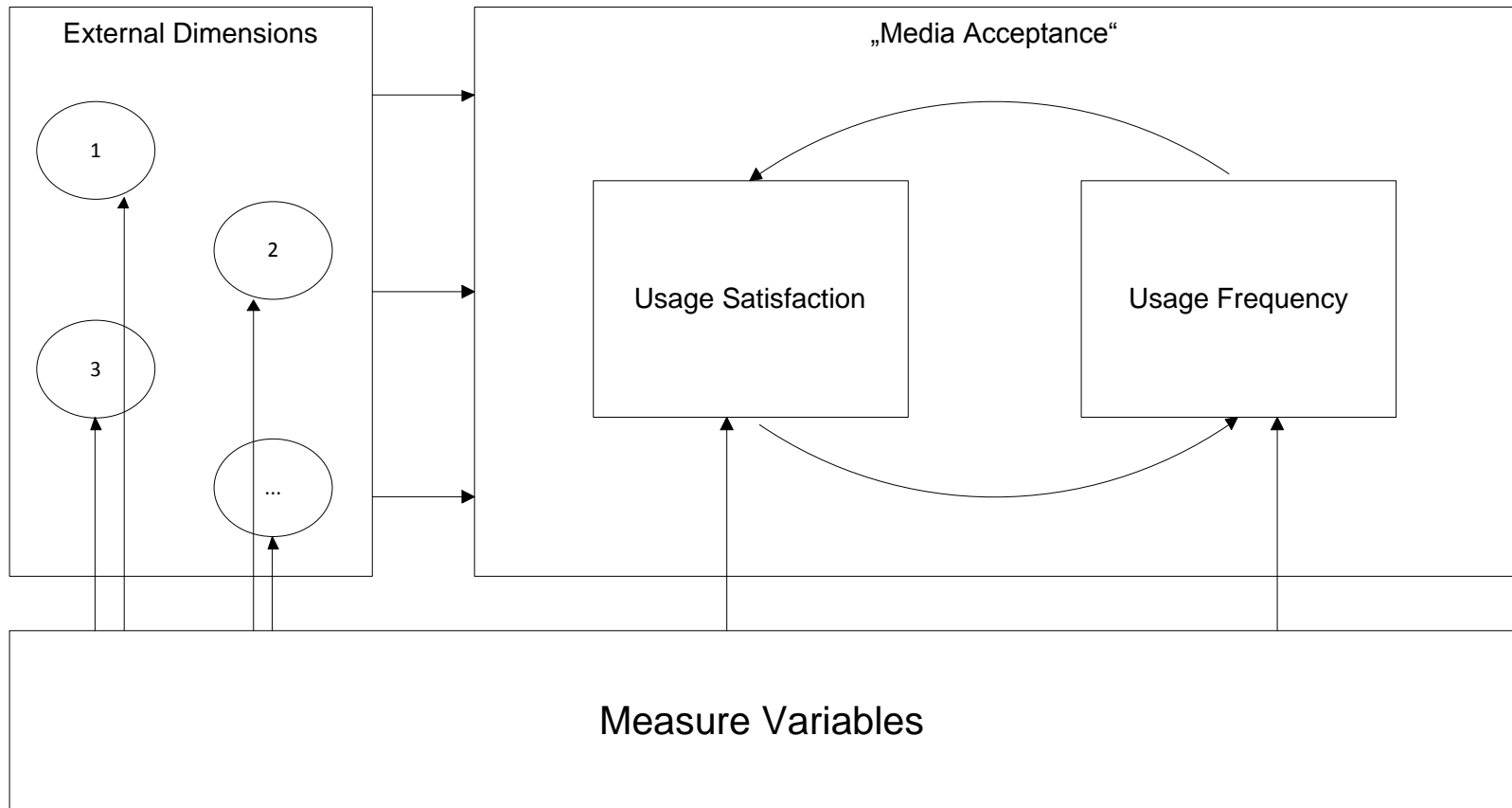
## „How do Students Utilize Media and IT for Purposes of Academic Learning?“

- Information media have totally disseminated into learning environments
  - Learners don't accept all media equally
  - Media offered by teachers are often rejected by learners
  - External, self-searched and web 2.0 media are becoming more and more important for learning
- It needs to be measured, which media are accepted by learners to what extent, to develop a successful media environment for learning, e.g. for the energy project

- A theory and survey instrument was developed and validated in several surveys (available in 7 languages)
- Questionnaire, measuring the media acceptance of 48 media services (print, online, web 2.0, e-learning) and related factors: media usage frequency and satisfaction for learning, media use during free time, learning behavior, educational background, media skills and sociodemographic variables

# Media Acceptance Model





# Methods – Survey Overview

	<b>Finished</b>	<b>Time</b>	<b>Size</b>
1	Karlsruhe Institute of Technology (KIT), Germany	07/2009	1,479
2	KIT II	06/2011	1,485
3	KIT teachers	07/2011	173
4	Mahidol University International College (MUIC), Bangkok, Thailand	02/2011	542
5	University of the Thai Chamber of Commerce (UTCC) , Bangkok, Thailand	08/2011	499
6	Technical University of Braunschweig, Germany	07/2011	686
7	King Mongkut University of Technology Thonburi (KMUTT) , Bangkok, Thailand	09/2011	897
	<b>Running</b>		
8	University of Barcelona (UB), Spain	01/2012	1,000*
9	UB teachers	01/2012	400*
10	UB administrators	01/2012	200*
11	Rangsit University, Bangkok, Thailand	02/2012	500*
12	Kasetsart University, Bangkok, Thailand	02/2012	500*
13	Bangkok University, Thailand	02/2012	500*
14	Khonkaen University, Thailand	02/2012	1,000*
15	Mahidol University, Bangkok, Thailand	02/2012	1,000*
	<b>Planned</b>		
16	University of Bochum, Germany	2012	
17	Technical University of Dortmund, Germany	2012	
18	RWTH Aachen University, Germany	2012	
19	Hoa Sen University, Ho Chi Minh City, Vietnam	2012	
20	University of Technology Malaysia, Johor Bahru	2012	

		Very often				Never	Don't know
4.	<b>Which of the following do you <u>use for study</u>?</b>						
4.1	Study using a computer	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4.2	E-learning as part of the class	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4.3	Newsgroups, internet forums	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4.4	Wikis with active participation as part of the class	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4.5	On-line materials from other universities than MU/MUIC	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4.6	Learning software	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4.7	University website	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4.8	Web portal for online student web services	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4.9	Online dictionary	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4.10	Dictionary software installed on your computer	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4.11	Computer labs on campus	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4.12	Wireless connection ("Wi-fi") on campus	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4.13	Working with own notebook own campus	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

From MUIC Survey 2011





The top-ten accepted media services of students (KIT 2011 survey)

# Acceptance Ranking

Service	Acceptance			Frequency			Satisfaction		
	Rank	M	SD	Rank	M	SD	Rank	M	SD
External e-mail (not KIT)	1	3.29	0.85	2	3.36	1.08	2	3.10	1.04
Google Search	2	3.28	0.86	1	3.38	1.07	1	3.11	1.03
Wikipedia	3	2.92	0.93	3	2.95	1.09	4	2.85	1.06
Online dictionaries	4	2.84	0.90	10	2.48	1.22	3	3.04	1.02
Class attendant slides	5	2.73	0.90	4	2.75	1.23	8	2.57	1.01
Class attendant journals	6	2.69	0.93	5	2.68	1.27	9	2.57	1.02
Printed books	7	2.69	0.89	8	2.51	1.18	5	2.70	1.07
Word-processing	8	2.67	0.95	6	2.54	1.30	6	2.65	1.03
Web portal for online student web services	9	2.54	0.91	7	2.52	1.14	12	2.49	1.12
Printed class attendant materials	10	2.53	0.96	9	2.51	1.26	14	2.44	1.06
Working on campus with own notebook	11	2.53	1.05	15	2.00	1.50	7	2.65	1.12
Campus Wi-Fi	12	2.47	0.99	12	2.15	1.50	17	2.37	1.21
E-books	13	2.41	0.92	13	2.13	1.22	15	2.43	1.10
E-learning platform "Ilias"	14	2.37	1.08	16	1.91	1.45	18	2.36	1.16
KIT library catalogue	15	2.37	0.98	18	1.88	1.33	11	2.49	1.11
....									
Online services from external libraries	31	1.83	0.98	34	0.87	1.15	27	2.13	1.18
Online exams	32	1.81	1.01	31	0.93	1.21	34	1.91	1.17
E-learning as part of the class	33	1.81	1.06	27	1.41	1.34	36	1.88	1.15
Bibliographic software	34	1.81	1.06	39	0.66	1.13	33	1.98	1.23
Interactive tests/self-tests	35	1.79	0.95	30	0.99	1.18	35	1.91	1.14
Dictionary software on computer	36	1.73	1.07	37	0.75	1.15	31	2.05	1.22
E-learning platform "Moodle"	37	1.63	1.13	41	0.62	1.11	38	1.79	1.28
Social bookmarking services	38	1.57	1.02	40	0.64	1.06	37	1.83	1.20
Wikis	39	1.48	1.02	35	0.85	1.13	41	1.66	1.14
Learning software	40	1.48	1.02	33	0.88	1.10	39	1.71	1.15
Weblogs	41	1.45	0.98	42	0.61	1.02	40	1.69	1.18
Other social networks (not Facebook)	42	1.41	1.05	38	0.66	1.09	42	1.63	1.21
Virtual class in non-real time	43	1.24	1.04	43	0.50	0.94	43	1.45	1.30
Virtual class in real time	44	1.16	1.07	44	0.43	0.93	44	1.38	1.30
Twitter	45	1.12	1.13	45	0.29	0.83	45	1.32	1.29

Table: Usage frequency, satisfaction and acceptance rankings from KIT 2011 survey

- During free time: Teachers read more books than students
- Teachers use social media on a very low level
- Students own more notebooks than teachers
- Teachers own more mobile flat rates

# Connections of Satisfaction with Study Situation

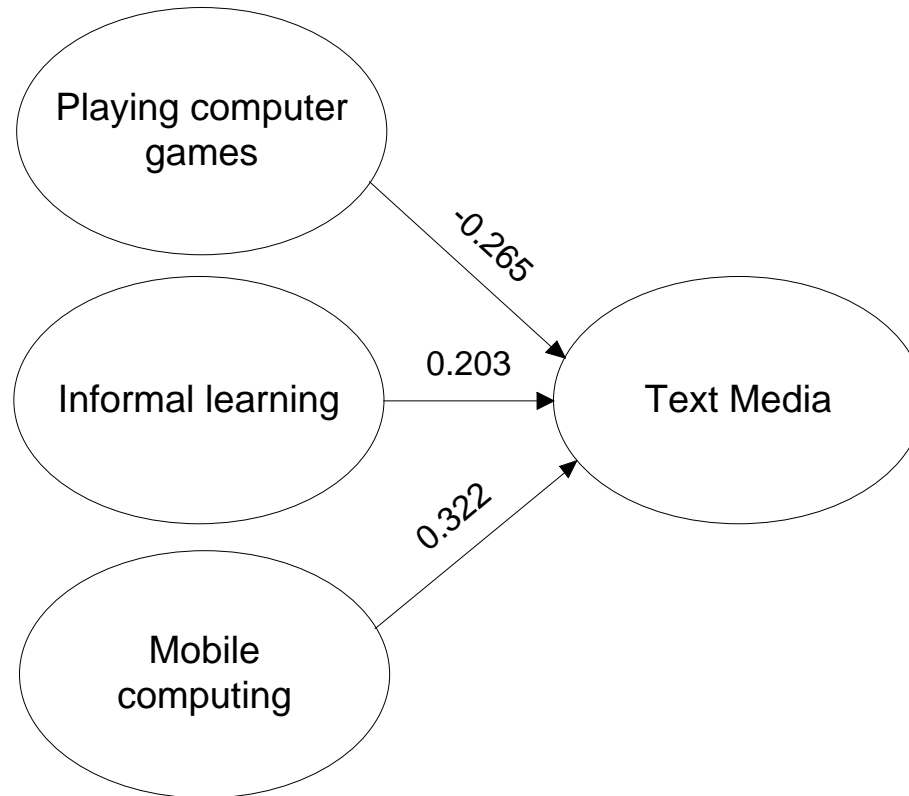
	<b>B</b>	<b>SE</b>	<b>Beta</b>	<b>T</b>	<b>Sig.</b>
Faculty e-learning-services in general	0,164	0,026	0,177	6,206	0,000
Internal newsgroups/forums	0,131	0,03	0,121	4,342	0,000
Computer workstations on campus	0,100	0,025	0,109	4,076	0,000
Class attendant materials	0,106	0,029	0,101	3,670	0,000

Survey: KIT 2009 survey, beta>0,1

# Media Typology for Learning

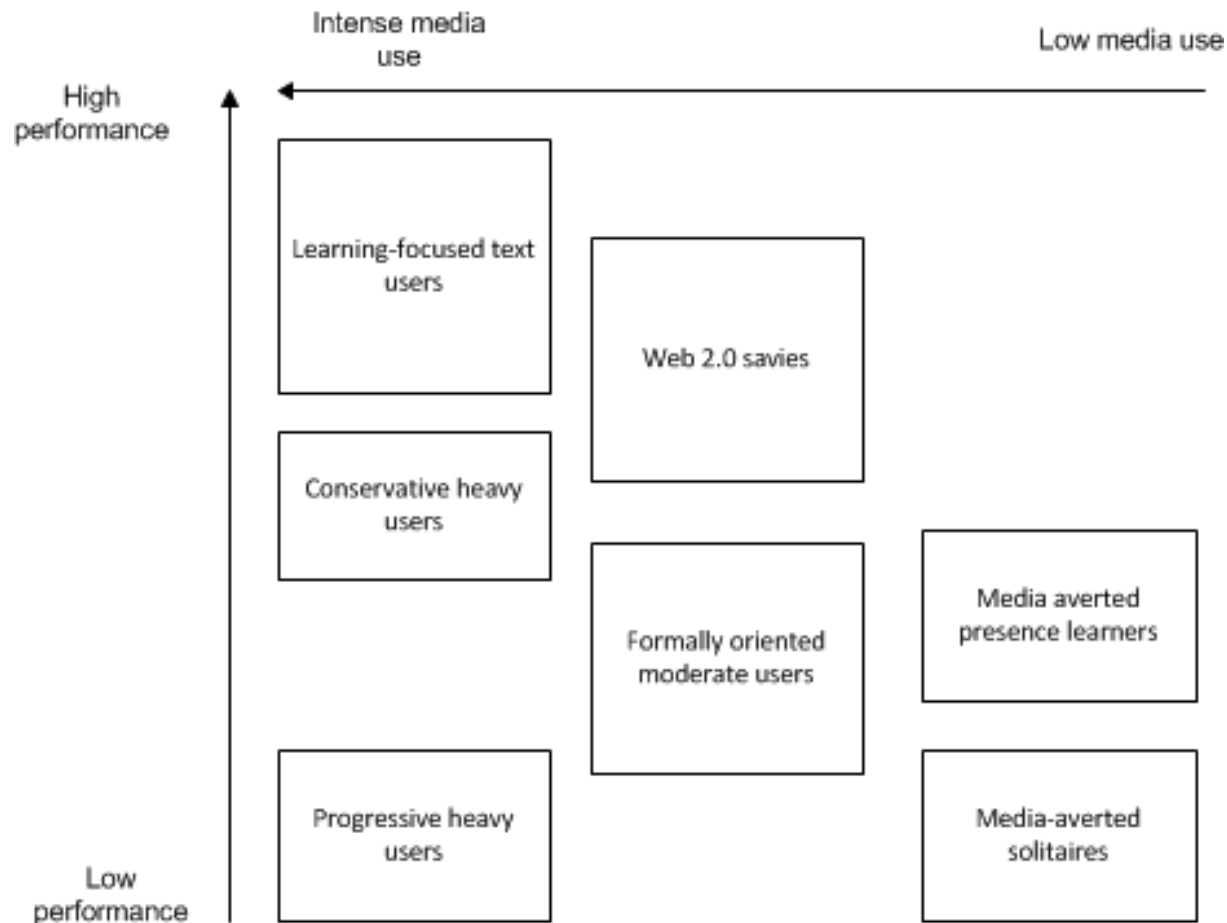
Media Type	Ubiquitous Media	Social Media	Text Media	E-Learning Services	Class Attendant Media	University Web Services
<b>Item/factor load</b>	Google Web search 0.726	Other social networks (not Facebook) 0.648	E-journals 0.622	Wikis 0.704	Class attendant journals online 0.800	Online self-tests 0.687
	External e-mail (not KIT) 0.655	Facebook 0.643	Printed journals 0.617	Learning software 0.683	Class attendant slides online 0.778	Online exams 0.680
	Wikipedia 0.606	Twitter 0.588	Bibliographic software 0.537	Newsgroups/forums 0.556	Printed class attendant materials 0.528	KIT e-mail account 0.575
	Online dictionaries 0.493	Instant Messengers 0.587	Services of other libraries (not KIT library) 0.537	E-learning as part of the class 0.534	E-learning platform Ilias 0.490	University website 0.461
	Google Books 0.467	Video platforms 0.512	KIT library catalogue 0.500	Online materials from other universities (not KIT) 0.484	Recorded lectures (audio. video) 0.486	Student web portal 0.426
	Wordprocessing 0.463	Weblogs 0.505	Google Scholar 0.463	Virtual class in non-real-time 0.450		
		Social bookmarking 0.454	Printed books 0.443	Dictionary software on computer 0.401		
		Google Apps 0.422	E-books 0.437	E-learning platform Moodle 0.401		

# Example: Connections between Use of Media during Free Time and Use of Text Media for Learning



Survey: MUIC 2011

# Media User Typology



Survey: KIT 2011

- Students use a broad variety of media for learning on a high level
- Text media play a key role in the learning environment
- The usage satisfaction of internal services tends to be lower than the frequency
- The most important university services for students are class attendant media and IT infrastructure
- The intense media users may also be the better students



- Positive effects of media usage on learning seem to be higher than negative influences
- There may be a global culture of media usage among students which is indicated by a high usage level of ubiquitous web 2.0-media such as Google, Facebook & Co.
- The results also give hints regarding the use of media for distance and open learning

- Establishing a global media survey for Tertiary Education
- Measuring national and cultural differences
- Survey open and distance learning universities!!
- Transferring the survey into a long-term survey

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