



K3 - Kollaboration, Kommunikation, Kompetenz

*Building information and communication competence
in a collaborative learning environment*

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The background of the K3 project

- **K3** (German acronym for **communication, collaboration, competence**) is a knowledge management project based on the thesis that knowledge production as well as information competence are to a large extent the result of **communication processes**.
- The main operational area of **K3** is academic teaching.
- The aim is to build **information literacy** and **communication competence** in learning contexts.

The background of the K3 project

- **Information literacy** includes
 - search, find and select needed information
 - evaluate the information's relevance and validity
 - apply information in given contexts/tasks
- **Communication competence** being the ability to argue one's opinion and to give adequate feedback to other people's view is crucial to achieve the best possible surplus value in knowledge management surroundings.

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Preliminary findings from a use-case lecture in 2003

The lecture's conceptual design

- The course “Communicative paradigm of knowledge management” was applied as a first use-case of K3's concepts in summer semester 2003 at the university of Konstanz.
- Blended learning: variation and combination of teaching methods. Alternation between face-to-face-lessons and virtual phases.
- Assumption: knowledge construction through active collaborative discourse is more effective and accepted than receptive individual learning.

Preliminary findings from a use-case lecture in 2003

Lehre



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Kommunikationsparadigma des Wissensmanagement

Sortiert nach aufsteigendem Datum

Informationen zu diesem Teilforum

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| Kursorganisation | griesbau_lehre | 254 | 17 | 25.07.2003 14:03 |
| T1 - Konzepte des Wissenmanagements | griesbau_lehre | 590 | 55 | 03.06.2003 11:19 |
| T2 - Modelle computervermittelter Kommunikation | griesbau_lehre | 33 | 1 | 27.05.2003 13:05 |
| T3 - Ausprägungen synchroner & asyn. Kommunikat. | griesbau_lehre | 23 | 1 | 16.06.2003 19:19 |
| T4 - Kollaborative Lexika, Enzyklopädien | griesbau_lehre | 189 | 18 | 23.06.2003 22:48 |
| T5 - Motivation, Anreiz-/Belohnungssysteme | griesbau_lehre | 27 | 1 | 16.06.2003 17:11 |
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| T9 - Open-Source als kollaboratives Wissensmanag. | griesbau_lehre | 11 | 0 | 28.04.2003 15:21 |
| T10 - Offene Publikationsformen | griesbau_lehre | 8 | 0 | 28.04.2003 15:22 |
| T11 - Evaluierung, Messparameter | griesbau_lehre | 17 | 0 | 28.04.2003 15:23 |
| Meta -Disk : Durchnummerierung der Beiträge sinnvoll? | kroeger | 29 | 2 | 10.07.2003 10:34 |
| PROT zur Einschätzung der Diskussion im Forum | AlinaBey | 30 | 0 | 20.05.2003 17:46 |
| Notizen zur Forensoftware | Alex | 93 | 10 | 09.07.2003 00:04 |
| Notizen zum Enforum | Alex | 61 | 5 | 23.07.2003 13:36 |
| DISK: Experimenteller Ansatz zur Bewertung | Alex | 58 | 4 | 24.06.2003 02:14 |
| T12 - Kommunikationsparadigma im Kontext | griesbau_lehre | 11 | 0 | 25.07.2003 13:36 |

[www.inf-wiss.uni-konstanz.de/cgi-bin/wt_lehre/postlist.pl?Cat=&Board=paradigmasummer03]

Preliminary findings from a use-case lecture in 2003

Student's expectations

- Number of participants: 10
- Expectations: (from a survey at the lecture's beginning)
 - “to learn knowledge management essentials”
 - “group work”
 - “practical exercises”
 - “to get to know the benefits and limits of electronic communication forums”

Preliminary findings from a use-case lecture in 2003

The lecture's conceptual design

- Face-to-face lessons:
 - lecturing (shorter periods of approx. 30 minutes introducing the topic)
 - group work
 - discussions

- Virtual phases:
 - group exercises (with a forum software)
 - individual glossary work with ENFORUM URL [<http://www.enforum.net>]

Preliminary findings from a use-case lecture in 2003

Contents, procedures and rating

- Individual exercises:
 - Individual glossary work (defining important terms of the lecture) was solely done virtually through face-file-face communication.

Preliminary findings from a use-case lecture in 2003

The screenshot shows the ENFORUM website interface. At the top left is the logo 'ENFORUM für Studenten'. Navigation links include 'FAQ', 'Über Enforum', 'Kompetenzzentren', 'Impressum', 'EMail an Admin', and 'Feedback-Forum'. The main content area is titled 'Begriffe (insg. 133) nach Alphabet' and lists letters 'A B C D E F G H I J K L M N O P Q R S T U V W X Y Z'. A search bar labeled 'Freitextsuche' with a 'suchen' button is present. The main entry is for 'Kognitivismus' by 'Alexander Warta' (29.08.2003). The entry includes a 'Definition:' section with a quote from Rolf Schulmeister (1997) and a 'näherung:' section with a quote from Niklas Werner (2002). A 'Literaturliste:' section lists works by Hasebrook (1995) and Schulmeister (1996). On the left, a 'Forennavigation' Java Applet window displays a diagram with 'Kognitivismus' at the center, connected to 'Weiterführende Links und Literatur zu Kognitivismus', 'Weitere Literatur', and 'Kommentar'. The diagram also shows a coordinate system with 'Y' and 'X' axes.

[http://www.enforum.net/www/inf/iwk/enforum_studenten.nsf/]

Preliminary findings from a use-case lecture in 2003

Contents, procedures and rating

- Group work exercises (mainly discussed and worked out in forum software):

[http://www.inf-wiss.uni-konstanz.de/cgi-bin/wt_lehre/showthreaded.pl?Cat=&Board=paradigmasummer03&Number=2010&page=0&view=collapsed&sb=6&vc=1#Post2010]

Preliminary findings from a use-case lecture in 2003

Contents, procedures and rating

- Rating of students work:

Intellectual feedback (text) from instructors and scores concerning discussed criteria*

* for example: length, arrangement, exemplification, comprehensibility, validity, news value, completeness, coherence, adequacy, argumentation

Preliminary findings from a use-case lecture in 2003

Students' feedback

- What did they learn?
 - knowledge management essentials
 - analyzing information resources in a structured manner
 - efficient working in partly virtual working groups
 - moderating electronic communication forums/solving communication problems
 - >>> knowledge & communication skills

Preliminary findings from a use-case lecture in 2003

Students' feedback

- General opinion
 - Variation of teaching methods including constructivist parts with self determined collaborative and individual work is motivating and inspiring but probably less apt for basic lessons with the primary goal of mere knowledge acquisition.
 - Virtual exercises without detailed working guidelines are overstraining.
 - Concept oriented work takes high learning skills as a prerequisite.
 - Learning success is probably at least as high as success achieved by traditional lecturing

Preliminary findings from a use-case lecture in 2003

Students' feedback

- Opinion on rating
 - Students sense immediate rating as a very helpful feedback.
 - The idea of automatic rating processes with its limited quality control is not well accepted by students yet.
- Opinion on used forum software
 - Danger of cognitive overload
[http://www.inf-wiss.uni-konstanz.de/cgi-bin/wt_lehre/showthreaded.pl?Cat=&Board=paradigmasummer03&Number=1804&page=0&view=collapsed&sb=6&vc=1]

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Requirements to the K3 project

- The used concept seems to be an appropriate teaching and learning method.
- It seems to be essential to provide the necessary resources and motivating exercises for the efficient use of the K3 environment to the participants.

Requirements to the K3 project

- Ongoing intellectual evaluation of students' contributions is very labour-intensive. The question is how to make rating more feasible?
- Automatic rating processes could serve as first filters that do not determine the complete rating but support the scholars in their rating decisions.

Requirements to the K3 project

- Communication forums are a basic means for knowledge sharing but can also end up in total chaos.
- New concepts for semantically structuring communication forums and support of collaborative work need to be developed.

Requirements to the K3 project

- Status of K3:
 - Fundamental design and concept of K3 software already developed
 - Programming work starts in October 2003
 - First prototype is to be expected at the end of 2003
 - Project homepage: [<http://www.k3forum.net>]

Thank you

Thank you for your attention !

