

Blended Learning for future competencies

The long road from tools and technologies to learning methods.

Prof. Dr. Nils Högsdal,
HdM Stuttgart, 25.06.2020

Learning Objectives

- You are able to differentiate between the terms eLearning and Blended Learning.
- You are familiar with the three basic concepts of eLearning and can assess their respective suitability for blended learning concepts.
- You know the difference between Macro- and Micro-Blended Learning
- We apply the concepts of Blended Learning for future (citizens') skills

Prof. Dr. Nils Högsdal:

academic career

- Studies of Business Administration at the University of Tuebingen and Texas A&M University 1993-1999
- Ph.D. student at the university of Tuebingen from 1999 – 2004 (full time until 2000), Dissertation „Blended Learning in Management Training“
- Design of approx. 100 management simulations and facilitated more than 500 trainings from High School students to senior executives
- Accepted a full-time professorship at Hochschule der Medien (Stuttgart Media University) in 2012
- Focus of research: Entrepreneurship, with a focus on Lean Startup
- Vice-Rector for Innovation since 2016



Prof. Dr. Nils Högsdal: entrepreneurial experience

- An Entrepreneur having
 - Asset Deal and new venture (1999)
 - Growth with a strategic Investor (2001)
 - Internationalisation with a new strategic Investor (2005)
 - Exit as a shareholder (2008)
 - Professor for Corporate Finance & Entrepreneurship (2012) at the Stuttgart Media University
 - New „Master in innovative Entrepreneurship“ together with the (Technical) University of Stuttgart
- Coach and investor for startups
- Inventor of the German High School competition "Youth Founding"
- Regular trips to Silicon Valley

Overview

1. Brainwalk: eLearning
2. Impulse 1: eLearning
3. Impulse 2: Blended earning
4. Applying it for future comepetences
5. Conclusion/outlook

Brainwalk:

1. ELEARNING

Brainwalk

- In which learning settings have you already integrated eLearning elements?
- In which learning settings could you imagine the use of eLearning elements?
- Which learning methods/tools do you use?
- What is blended learning for you?
- How do you activate your students?
- What reasons do you see for using eLearning?
- For which competences/learning goals is eLearning suitable?

Keynote lecture I

2. ELEARNING

Definition

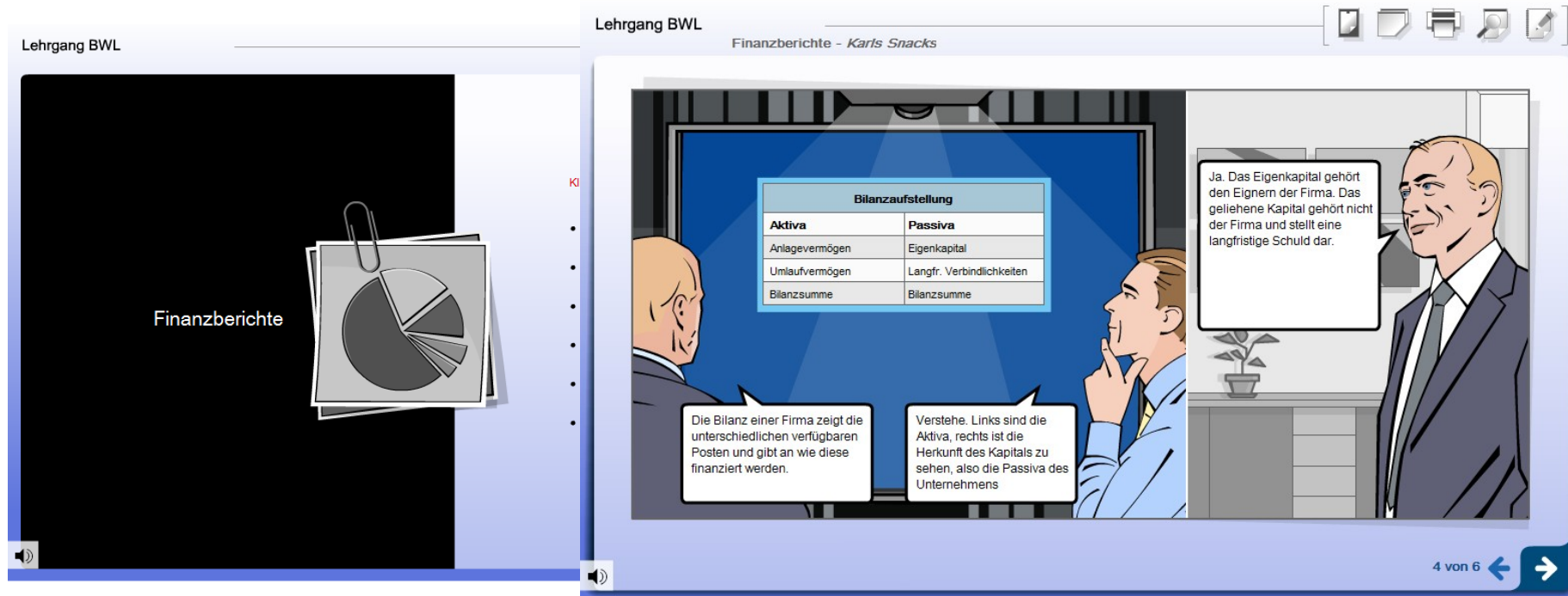
- "E-learning can be understood as learning that is supported or made possible by information and communication technologies".
- However, this must have a supporting role in the learning process, but the use of a video projector in a lecture does not yet make it an e-learning measure.
- The term was coined and comes from the family of e-terms, one could also say "e-Hype". In 1997 IBM launched a campaign to make the term e-business known

Paradigms of eLearning

- Technology as teacher
 - Didactically prepared contents
 - "fake" self-learning since it is guided learning
- Technology as lecture/exercise room
 - Use as communication medium
 - Transmission of events also asynchronous
- Technology as library
 - "Knowledge repository"
 - Real self-learning or reverse teaching

Web as teacher

- Example: Online learning modules on basic business studies, available to all teachers and students at the HdM in Moodle



Lehrgang BWL

Finanzberichte - Karls Snacks

Finanzberichte

Bilanzaufstellung	
Aktiva	Passiva
Anlagevermögen	Eigenkapital
Umlaufvermögen	Langfr. Verbindlichkeiten
Bilanzsumme	Bilanzsumme

Die Bilanz einer Firma zeigt die unterschiedlichen verfügbaren Posten und gibt an wie diese finanziert werden.

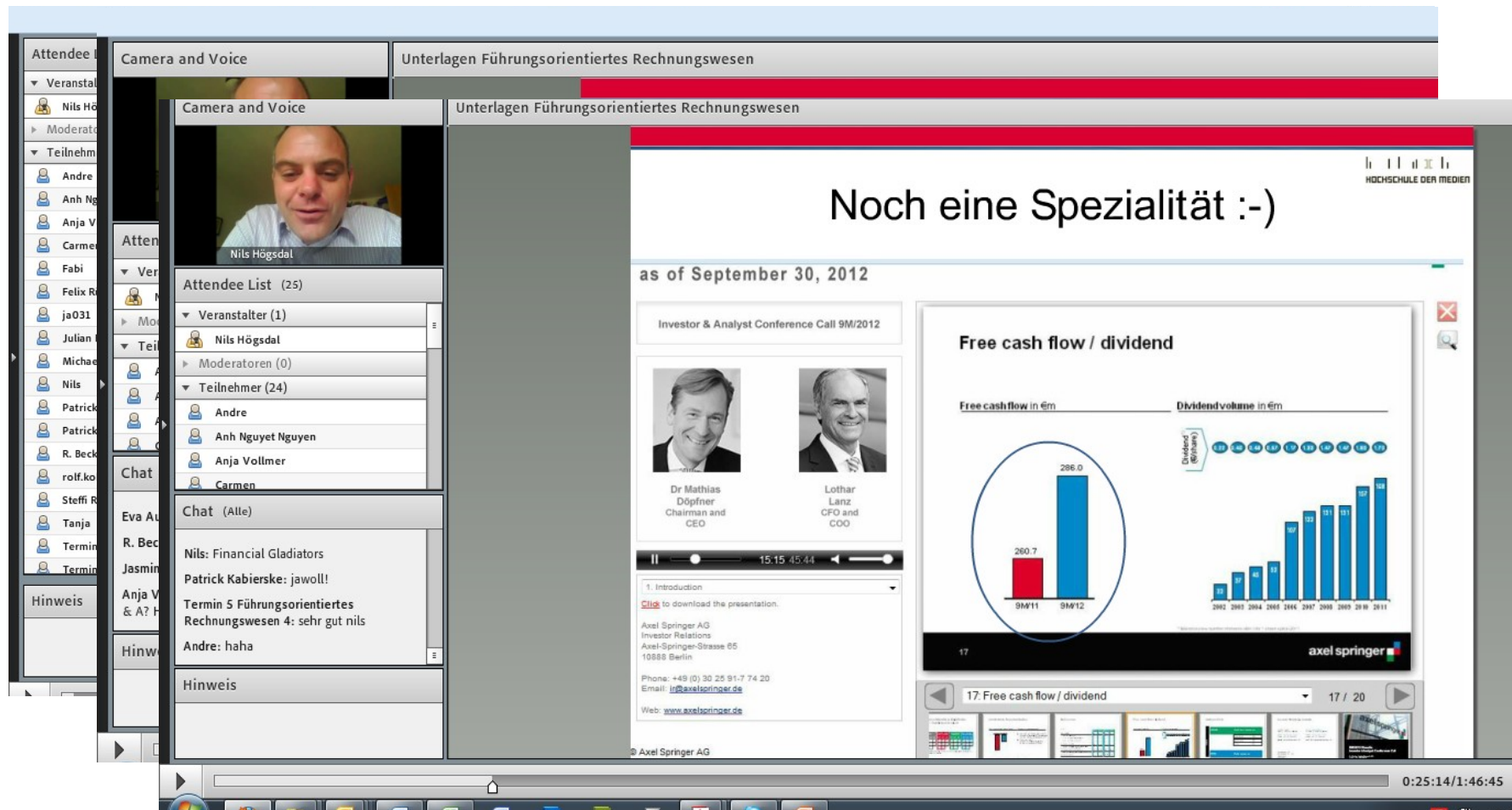
Verstehe. Links sind die Aktiva, rechts ist die Herkunft des Kapitals zu sehen, also die Passiva des Unternehmens

Ja. Das Eigenkapital gehört den Eignern der Firma. Das geliehene Kapital gehört nicht der Firma und stellt eine langfristige Schuld dar.

4 von 6

Web as lecture hall

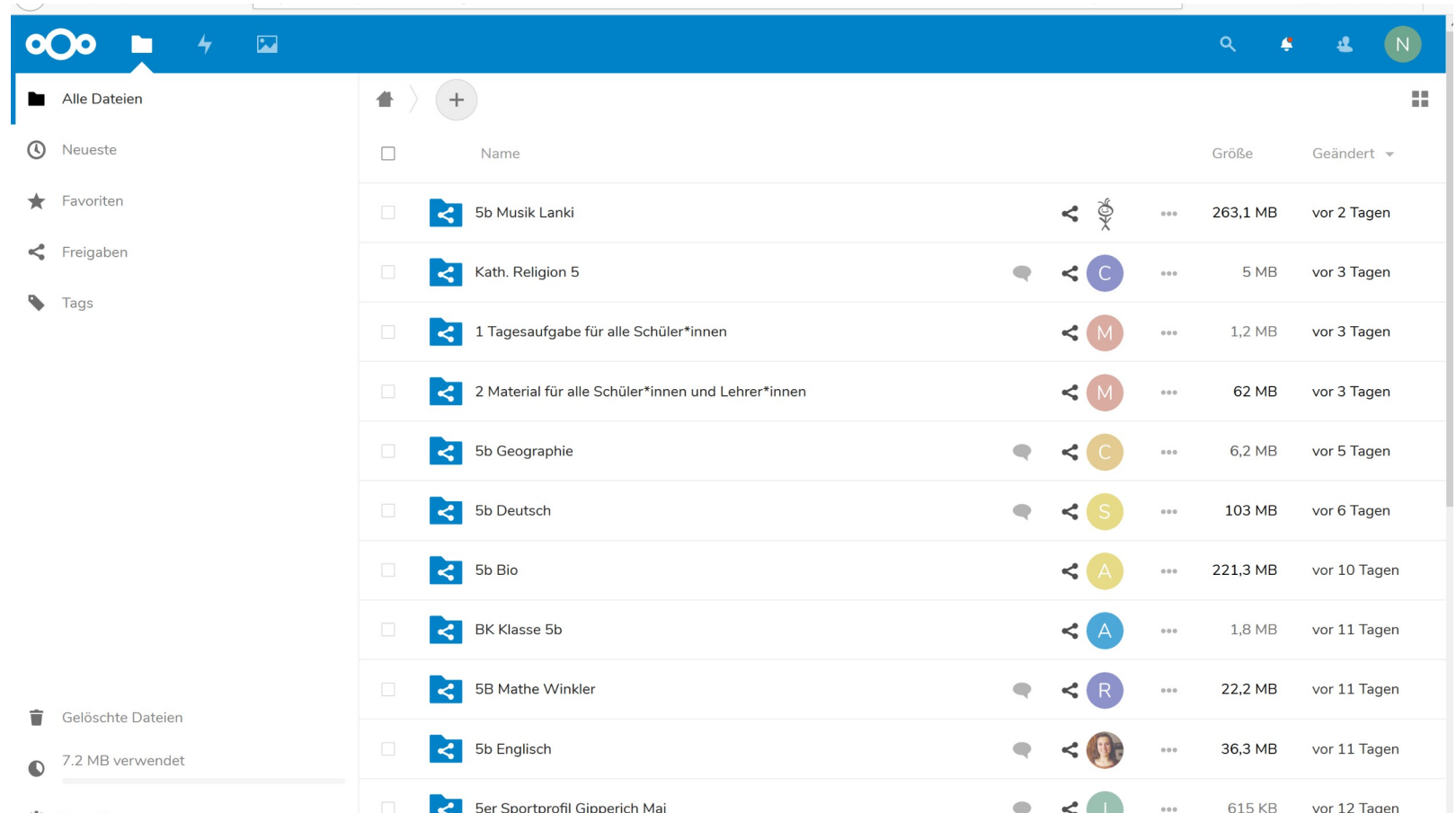
- Example: Adobe Connect, available for free



The screenshot shows an Adobe Connect web conference interface. The top header displays the title "Unterlagen Führungsorientiertes Rechnungswesen". The left sidebar contains an "Attendee List" with 25 participants, including Nils Högsdal, Andre, Anh Nguyen, Anja Vollmer, and Carmen. The central video area shows a speaker, Nils Högsdal, with the title "Camera and Voice". The main content area displays a presentation slide titled "Noch eine Spezialität :-)" with the subtitle "as of September 30, 2012". The slide content includes a video player, a bar chart titled "Free cash flow / dividend", and a list of participants: Dr. Mathias Döpfner (Chairman and CEO) and Lothar Lenz (CFO and COO). The bar chart shows free cash flow in €m for 9M11 (260.7) and 9M12 (286.0). The dividend volume in €m is shown for the years 2002 to 2011. The slide footer includes contact information for Axel Springer AG.

Web as library

- That's how most people use Moodle

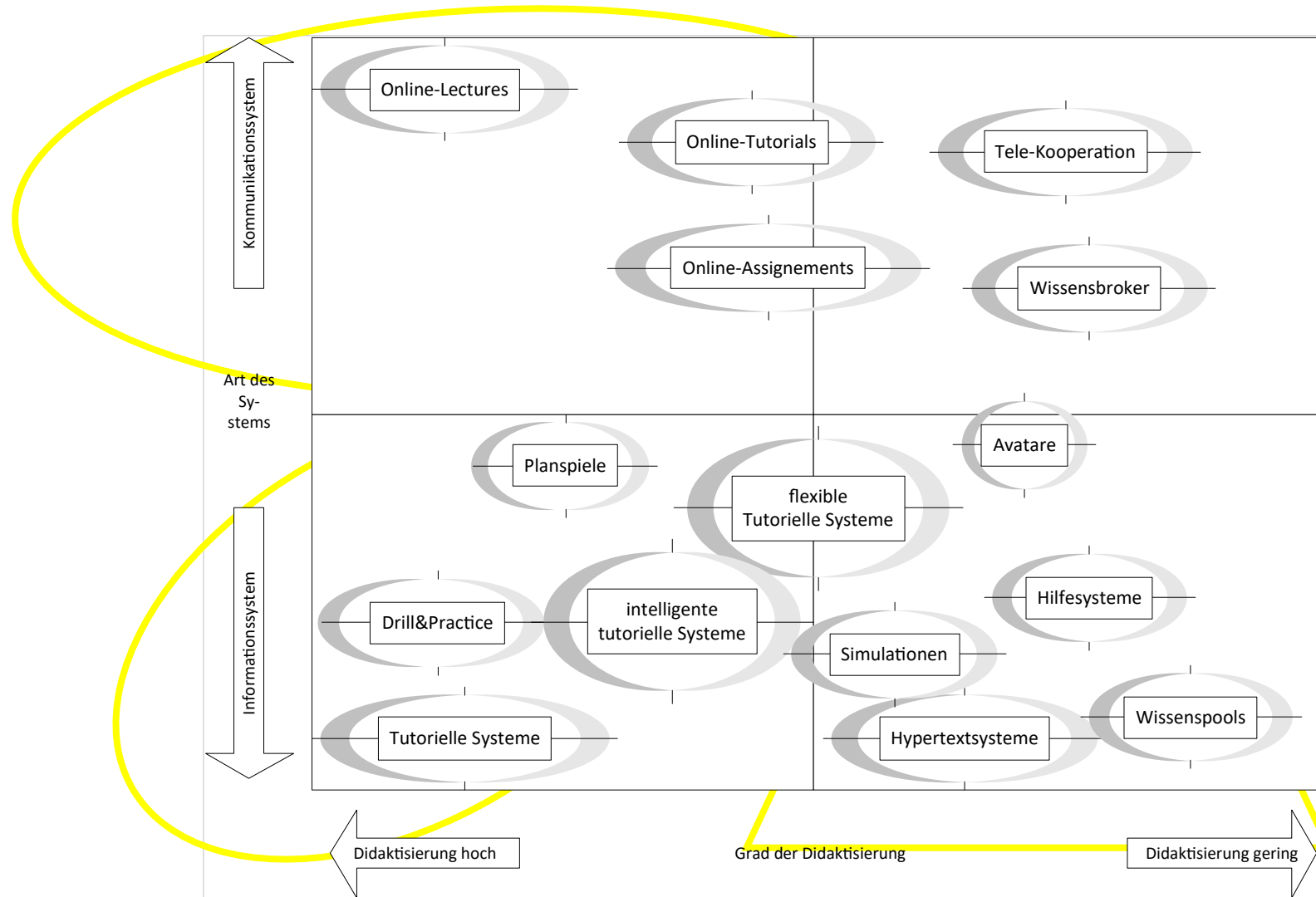


The screenshot shows the Moodle file manager interface. The left sidebar contains navigation options: 'Alle Dateien', 'Neueste', 'Favoriten', 'Freigaben', and 'Tags'. The main area displays a list of folders and files with columns for 'Name', 'Größe', and 'Geändert'. The list includes folders like '5b Musik Linki', 'Kath. Religion 5', '1 Tagesaufgabe für alle Schüler*innen', '2 Material für alle Schüler*innen und Lehrer*innen', '5b Geographie', '5b Deutsch', '5b Bio', 'BK Klasse 5b', '5B Mathe Winkler', '5b Englisch', and '5er Sportprofil Gipperich Mai'. Each entry shows its size and the time it was last modified.

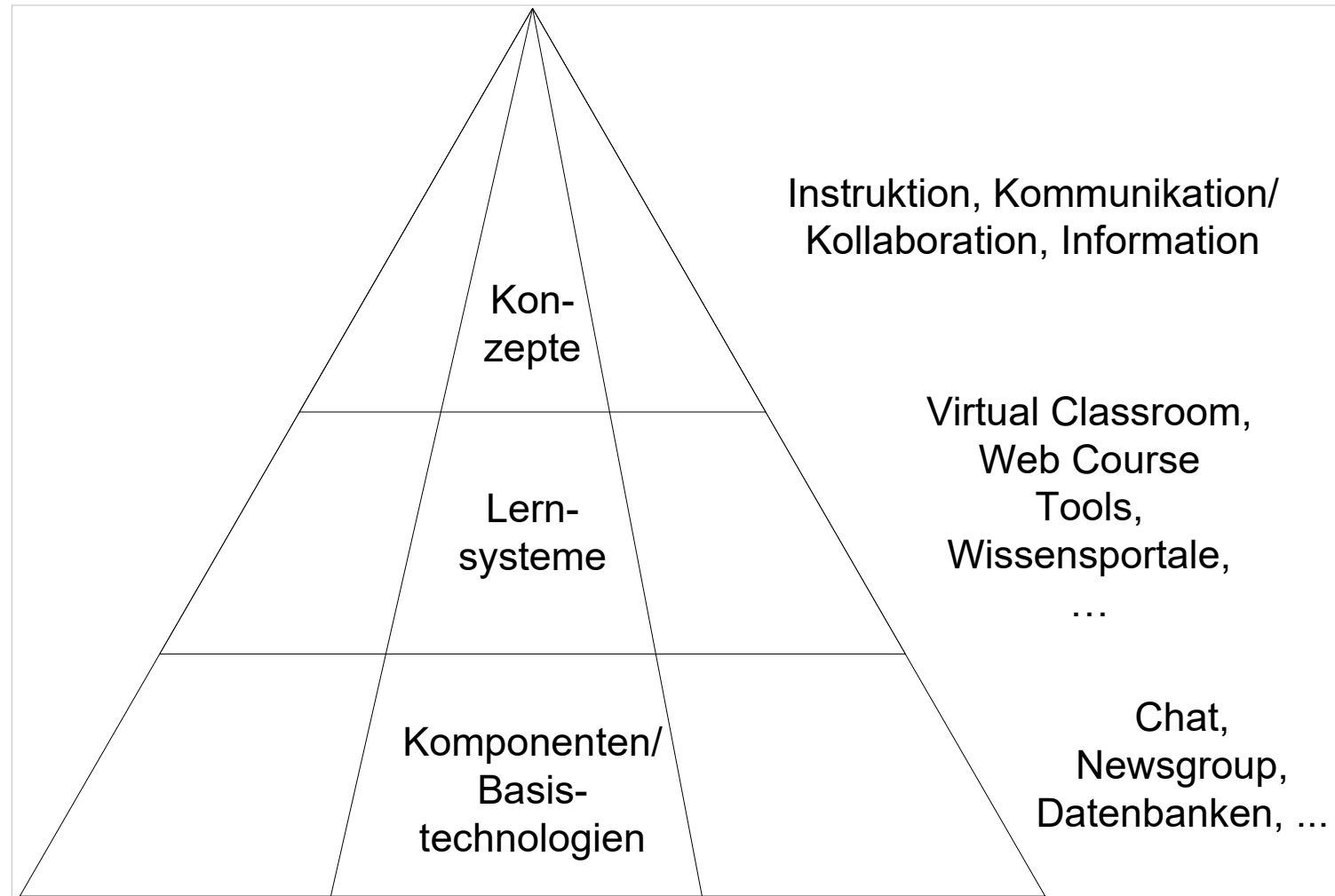
Name	Größe	Geändert
5b Musik Linki	263,1 MB	vor 2 Tagen
Kath. Religion 5	5 MB	vor 3 Tagen
1 Tagesaufgabe für alle Schüler*innen	1,2 MB	vor 3 Tagen
2 Material für alle Schüler*innen und Lehrer*innen	62 MB	vor 3 Tagen
5b Geographie	6,2 MB	vor 5 Tagen
5b Deutsch	103 MB	vor 6 Tagen
5b Bio	221,3 MB	vor 10 Tagen
BK Klasse 5b	1,8 MB	vor 11 Tagen
5B Mathe Winkler	22,2 MB	vor 11 Tagen
5b Englisch	36,3 MB	vor 11 Tagen
5er Sportprofil Gipperich Mai	615 KB	vor 12 Tagen

At the bottom left, it shows 'Gelöschte Dateien' and '7.2 MB verwendet'.

Methods of e-learning



Levels of e-learning or: Why Zoom ist not a learning method



Impulse Lecture II

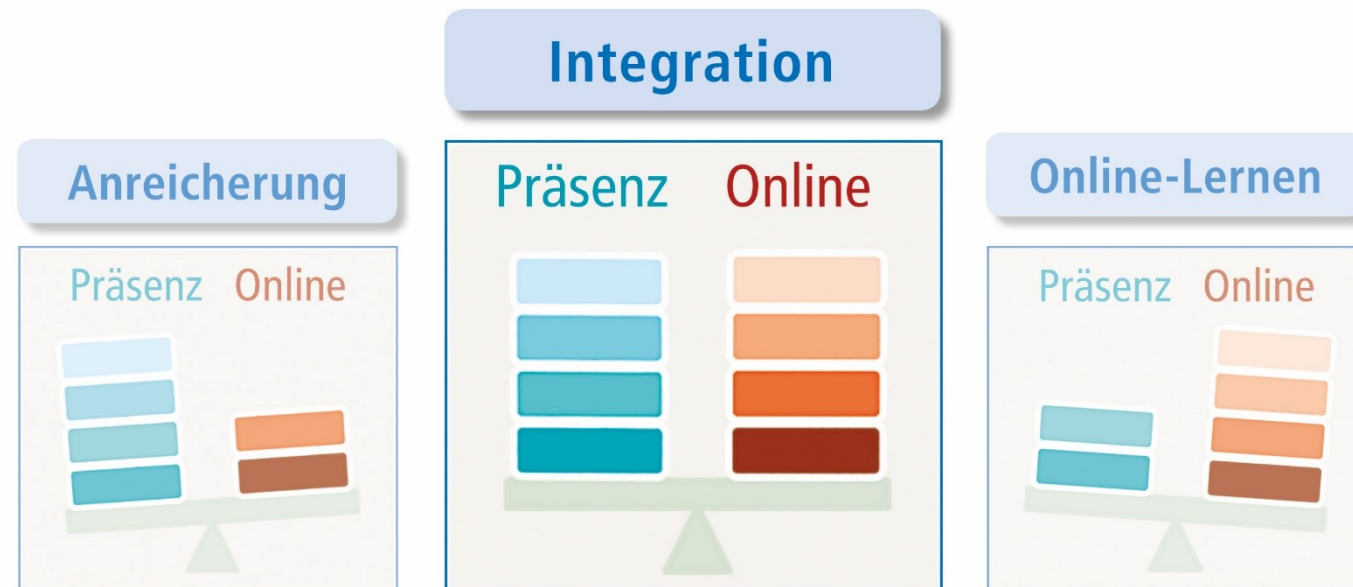
3. BLENDED LEARNING - OR WAS A GOOD WHISKEY AND A CURRICULUM SHARING

Perspectives on Blended Learning I: "Rescue Attempt for eLearning"

- Upgrading and improvement of e-learning measures through physical attendacs
 - Feedback and presentations
 - Q&A-sessions
- Certain dimensions of conventional educational interventions are only recognised when they are missing:
 - Informal exchange
 - Formation of networks
- Kerres: "Magic of presence"

Blended Learning: online and classroom?

Klassifizierung von Blended Learning-Szenarien



Kriterien: Verbindlichkeit der Phasen / Digitalisierungsgrad der Szenarien

Perspectives on Blended Learning II

Integrated Learning

- Neither is e-learning a substitute for classroom teaching, nor are classroom days the salvation of e-learning
 - Individually and carefully coordinated curricula
 - Combination of different learning and social forms in "hybrid learning arrangements"
- Goal: sensible combination of methods from effectiveness and efficiency considerations

Features of blended learning

- Primary mix of methods, secondary Media or technology mix
- Method mix usually requires multi-phase concepts
 - Self-study
 - Physical Presence
 - Transfer and application
- Practically always combination of e-learning with traditional teaching and learning concepts
- However: No mandatory integration of elements of e-learning:
 - English: "blending of training strategies"
 - To blend: "harmoniously connect, merge, merge into each other"

Suitability of individual Methods I

- **Lecture:** Treatment of larger topics in closed form. Declarative and procedural knowledge for learners without previous knowledge
- **Teaching talk:** Differentiation from the teaching talk by a stronger involvement of the learners. Higher learner activation and implicit learning controls
- **Workshop/group work:** imparting problem-solving and social skills, corporate culture. Partially intensive group dynamic processes
- **Self-study:** Acquisition of factual knowledge, independent practice and repetition of already treated teaching units. Training of self-organisation skills
- **Role play:** communication, perception of situations (especially conflicts), intercultural competence (breaking down prejudices, developing solutions (processes))
- **Case study:** Application and deepening of factual knowledge, acquisition of application and problem-solving knowledge. Acquisition of action competence.

Suitability of individual Methods II

- **Business game:** Entrepreneurial and problem-solving skills, showing how things relate to each other as decision training, in groups also social skills
- **Coaching:** Social competences, behavioural changes, better achievement of goals indicate an increased problem-solving competence of the learners.
- **Outdoor training:** development of social and personal skills, team building, sometimes problem-solving skills (as a metaphor for work situations)
- **Mentoring:** Similar to coaching, more emphasis on the implementation of expertise and problem solving, business knowledge and culture through internal partners
- **Project work:** entrepreneurial and problem-solving skills, social skills, working techniques, only limited planning, special case "Action Learning"

View on e-Learning: Roles in Blended Learning

- **Lecture:** Tele-teaching, online lectures with the possibility of asynchronous use (recorded sessions)
- **Teaching talk: similar,** transition to tele-tutoring possible, a simple feedback channel or virtual classroom system required
- **Workshop/group work:** Groupware tools can improve result assurance
- **Self-study:** various instructional and information-oriented approaches
- **Simulation:** Internet-supported business game as a special case of simulations, hybrid forms common (i.e. start in presence mode, continuation via Internet)
- **Project work:** Support of the project work by groupware tools makes sense

Suitability of methods

Legende:

Lernziele

O: geeignet

√: gut geeignet

Weitere Aspekte

O: vorhanden

√: ausgeprägt

Methode	Einsatzempfehlung (typische Kompetenzziele)	Lernziele				Weitere Aspekte			
		untere kognitive	mittlere kognitive	höhere kognitive	affektive	Aktivierung	Handlungsorientierung	Gruppeninteraktion	Feedback
Lehrvortrag	Behandlung größerer Themenbereiche in geschlossener Form. Deklaratives und prozedurales Wissen für Lernende ohne Vorkenntnisse	√	O						
Lehrgespräch	Unterscheidung vom Lehrvortrag durch eine stärkere Einbeziehung der Lernenden. Höhere Aktivierung der Lernenden und implizite Lernkontrollen	√	√			O			O
Workshop/ Gruppenarbeit	Vermittlung von Problemlösungs- und Sozialkompetenz, Unternehmenskultur. Teilweise intensive gruppendynamische Prozesse		O	√	√	√	√	√	√
Selbststudium	Aneignung von Faktenwissen, eigenständiges Üben und Wiederholen bereits behandelter Lehreinheiten. Schulung von Selbstorganisationsvermögen	√	O			O			
Rollenspiel	Kommunikation, Wahrnehmung von Situationen (insb. Konflikte), Interkulturelle Kompetenz (Abbau von Vorurteilen, Entwicklung von Lösungen (Prozesse)		O		√	√	O	√	O

Suitability of methods II

Legende:

Lernziele

O: geeignet

√: gut geeignet

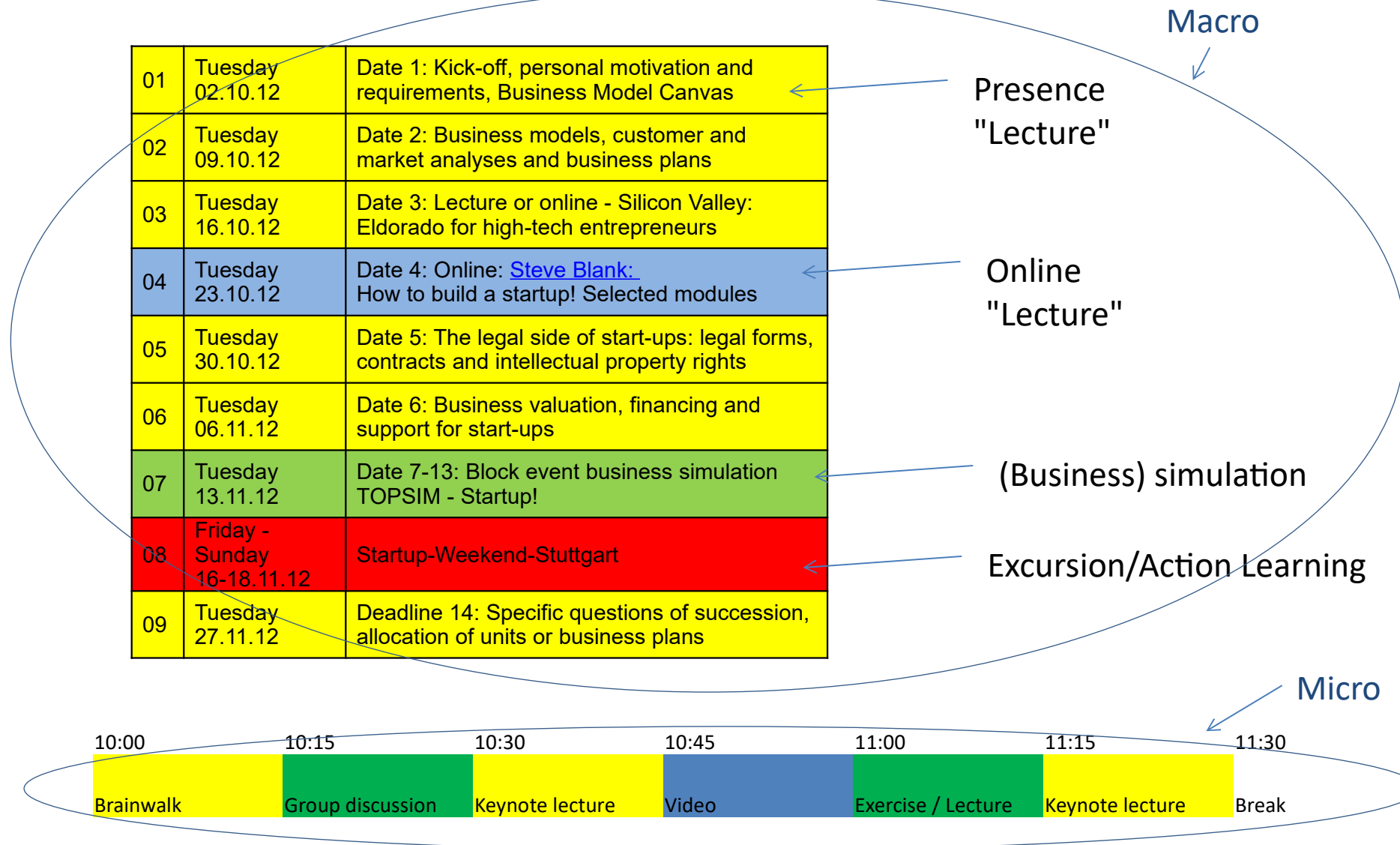
Weitere Aspekte

O: vorhanden

√: ausgeprägt

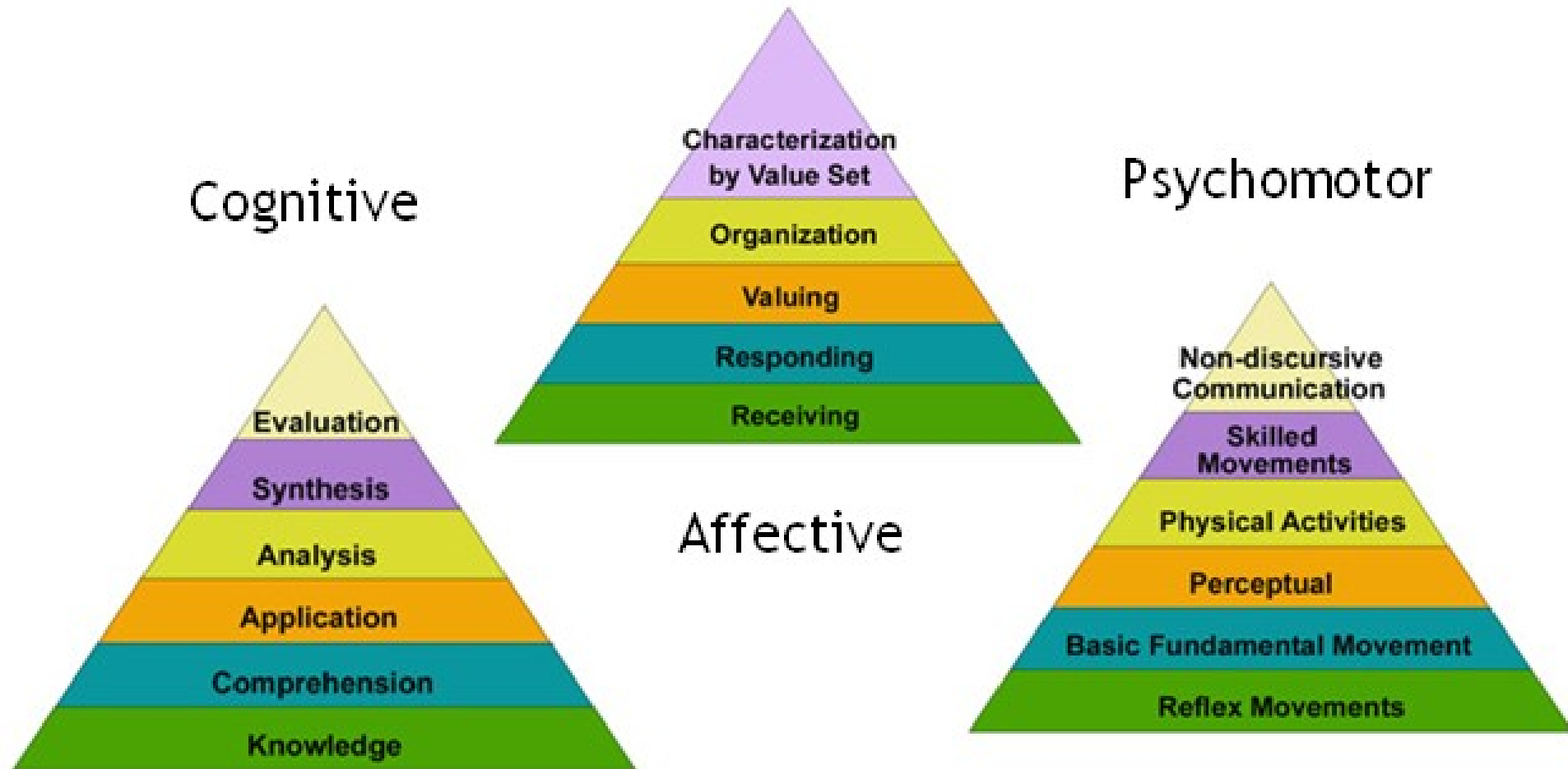
Methode	Einsatzempfehlung (typische Kompetenzziele)	Lernziele				Weitere Aspekte			
		untere kognitive	mittlere kognitive	höhere kognitive	affektive	Aktivierung	Handlungsorientierung	Gruppeninteraktion	Feedback
Planspiel	Unternehmerische- und Problemlösungskompetenzen, Aufzeigen vom Zusammenhängen als Entscheidungstraining, in Gruppen auch Sozialkompetenz		√	√	√	√	√	√	√
Coaching	Soziale Kompetenzen, Verhaltensänderungen, besseres Erreichen von Zielen lässt auf eine gestiegene Problemlösungskompetenz der Lernenden schließen.			O	√	√	√		√
Outdoor-training	Entwicklung von Sozial- und Persönlichkeitskompetenz, Teambildung, manchmal Problemlösungskompetenz (als Metapher für Arbeitsituationen)		O		√	√		√	√
Mentoring	Ähnlich wie das Coaching, stärkerer Bezug zur Umsetzung von Fachwissen und Problemlösung, Unternehmenswissen und Kultur durch interne Partner		O	O	O	√	√		√
Projektarbeit	Unternehmerische- und Problemlösungskompetenzen, Sozialkompetenzen, Arbeitstechniken, nur bedingt planbar, Sonderfall „Action Learning“		√	√	O	√	√	√	O

Macro- vs. Micro-Blended Learning



4. APPLYING IT FOR FUTURE COMEPETENCES

Bloom's taxonomy: what is our goal?



KEY COMPETENCES FOR LIFELONG LEARNING

European Reference Framework

Key competences

1. Communication in the mother tongue
2. Communication in foreign languages
3. Mathematical competence and basic competences in science and technology
4. Digital competence
5. Learning to learn
6. Social and civic competences
7. Sense of initiative and entrepreneurship
8. Cultural awareness and expression

7. Sense of initiative and entrepreneurship

Definition:

Sense of initiative and entrepreneurship refers to an individual's ability to turn ideas into action. It includes creativity, innovation and risk-taking, as well as the ability to plan and manage projects in order to achieve objectives. This supports individuals, not only in their everyday lives at home and in society, but also in the workplace in being aware of the context of their work and being able to seize opportunities, and is a foundation for more specific skills and knowledge needed by those establishing or contributing to social or commercial activity. This should include awareness of ethical values and promote good governance.

Essential knowledge, skills and



Skills relate to proactive project management (involving, for example the ability to plan, organise, manage, lead and delegate, analyse, communicate, debrief, evaluate and record), effective representation and negotiation, and the ability to work both as an individual and collaboratively in teams. The ability to judge and identify one's strengths and weaknesses, and to assess and take risks as and when warranted, is essential.



An entrepreneurial **attitude** is characterised by initiative, pro-activity, independence and innovation in personal and social life, as much as at work. It also includes motivation and determination to meet objectives, whether personal

Cultural awareness and expression competence

Competence in cultural awareness and expression involves having an understanding of and respect for how ideas and meaning are creatively expressed and communicated in different cultures and through a range of arts and other cultural forms. It involves being engaged in understanding, developing and expressing one's own ideas and sense of place or role in society in a variety of ways and contexts.

Essential knowledge, skills and attitudes related to this competence

Knowledge

This competence requires knowledge of local, national, regional, European and global cultures and expressions, including their languages, heritage and traditions, and cultural products, and an understanding of how these expressions can influence each other as well as the ideas of the individual. It includes understanding the different ways of communicating ideas between creator, participant and audience within written, printed and digital texts, theatre, film, dance, games, art and design, music, rituals, and architecture, as well as hybrid forms. It requires an understanding of one's own developing identity and cultural heritage within a world of cultural diversity and how arts and other cultural forms can be a way to both view and shape the world.

Skills

Skills include the ability to express and interpret figurative and abstract ideas, experiences and emotions with empathy, and the ability to do so in a range of arts and other cultural forms. Skills also include the ability to identify and realise opportunities for personal, social or commercial value through the arts and other cultural forms and the ability to engage in creative processes, both as an individual and collectively.

Attitudes

It is important to have an open attitude towards, and respect for, diversity of cultural expression together with an ethical and responsible approach to intellectual and cultural ownership. A positive attitude also includes a curiosity about the world, an openness to imagine new possibilities, and a willingness to participate in cultural experiences.

Putting it together: Teaching and learning approaches and environments

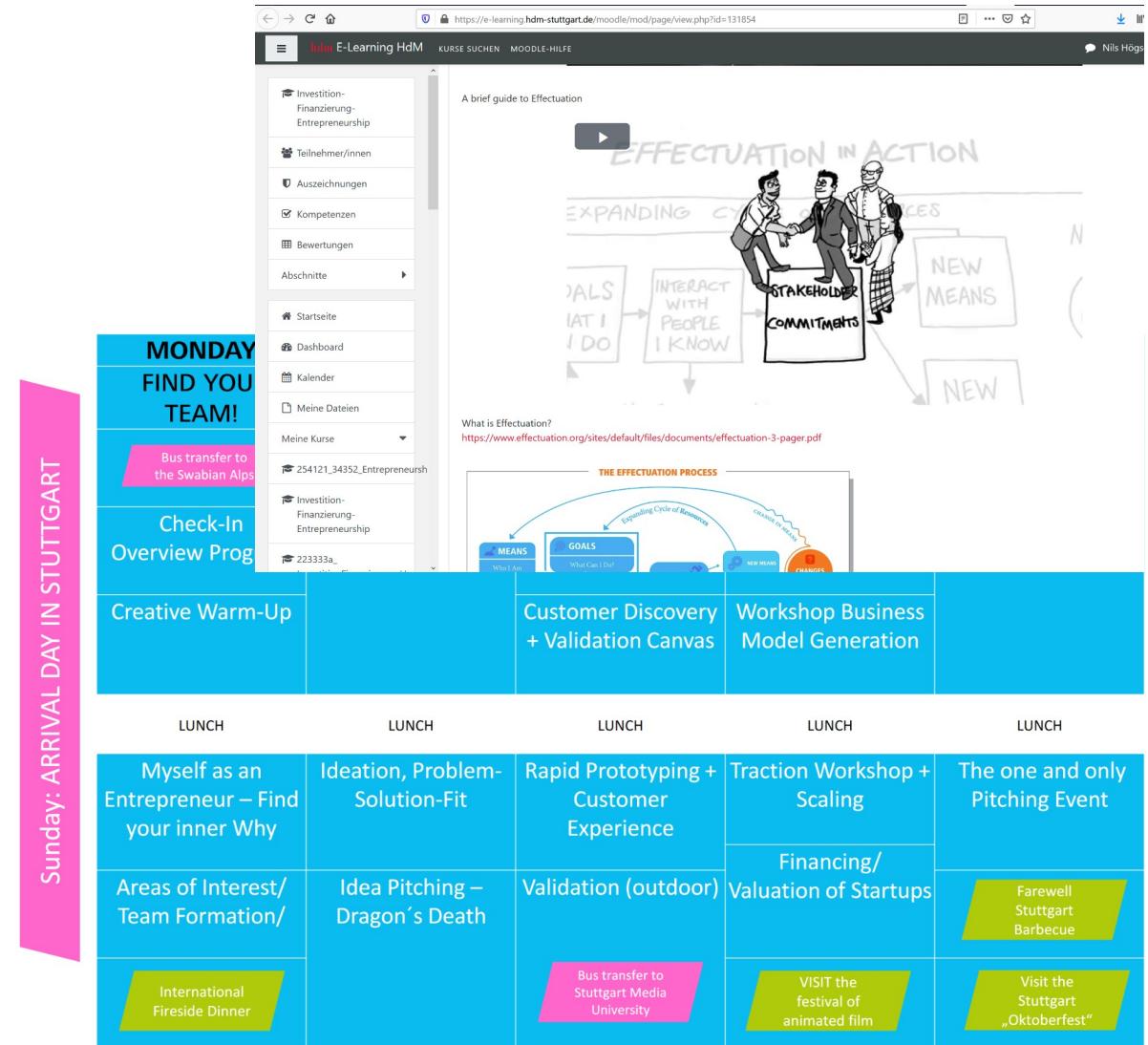
Competence oriented approaches such as project based, arts based, inquiry based, experiential or work based learning, improve learning outcomes and learner engagement. At the same time, they offer opportunities for innovation, collaboration and cross-discipline learning; they put learners at the centre and ask for their active participation. Digital technologies used in project based learning, for example, improve the studying process and support the development of digital competences. When combined with social and emotional learning and health-enhancing physical activities, competence oriented approaches increase the overall learners' motivation, performance and active participation.

Source: KEY COMPETENCES FOR LIFELONG LEARNING

Putting it together: Entrepreneurship in an intercultural setting

- Aspects:
 - From teaching to learning
 - Effectuation vs. Causation
 - Digital media and tools like videos, (serious= games and simulations
 - Agile problem solving competence instead of knowledge
 - Technology-enabled vs. Technology-enriched

Sunday: ARRIVAL DAY IN STUTTGART



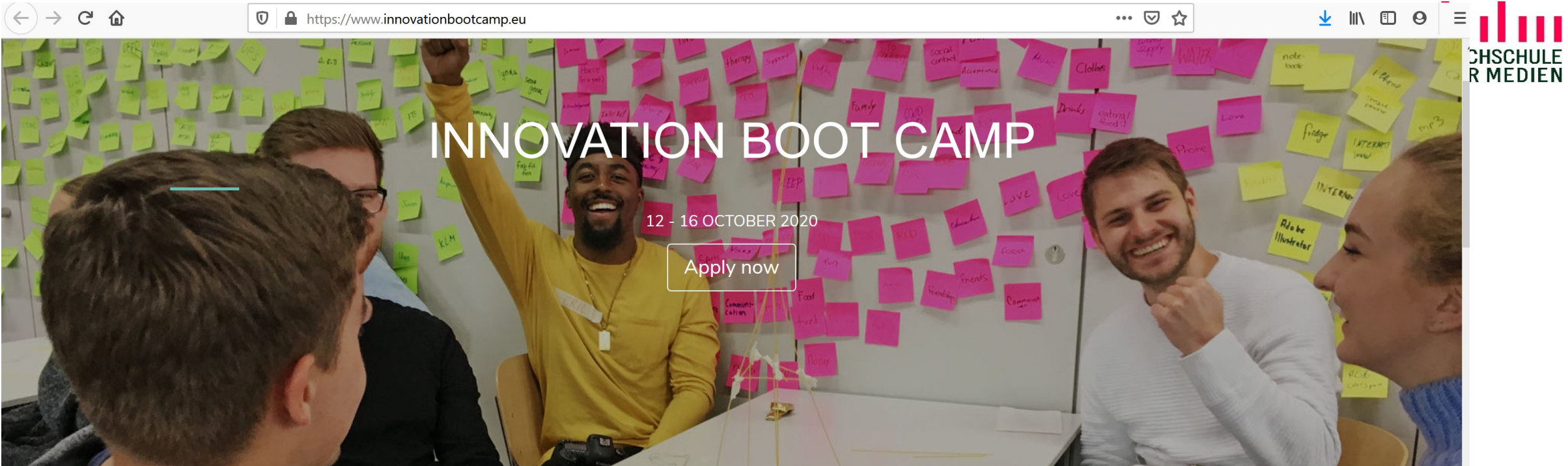
The screenshot displays the E-Learning HdM interface. On the left, a sidebar lists course elements: 'Investition-Finanzierung-Entrepreneurship', 'Teilnehmer/innen', 'Auszeichnungen', 'Kompetenzen', 'Bewertungen', and 'Abschnitte'. The main content area shows a 'Brief guide to Effectuation' with a video player and a diagram titled 'EFFECTUATION IN ACTION'. The diagram illustrates the process of expanding capabilities through interaction with stakeholders and commitments, leading to new means and new goals. Below the diagram, a link to 'What is Effectuation?' is provided.

The schedule for Monday, 'Find Your Team!', is as follows:

Activity	Time
Creative Warm-Up	9:00 - 10:00
Customer Discovery + Validation Canvas	10:30 - 12:00
Workshop Business Model Generation	13:30 - 15:00
Myself as an Entrepreneur – Find your inner Why	15:30 - 17:00
Ideation, Problem-Solution-Fit	17:30 - 19:00
Rapid Prototyping + Customer Experience	19:30 - 21:00
Traction Workshop + Scaling	21:30 - 23:00
The one and only Pitching Event	23:30 - 25:00

Additional activities and events include:

- Bus transfer to the Swabian Alps
- Check-In Overview Program
- LUNCH (multiple times)
- Areas of Interest/ Team Formation/
- Idea Pitching – Dragon's Death
- Validation (outdoor)
- Financing/ Valuation of Startups
- Farewell Stuttgart Barbecue
- International Fireside Dinner
- Bus transfer to Stuttgart Media University
- VISIT the festival of animated film
- Visit the Stuttgart „Oktoberfest“



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5. CONCLUSION

Conclusion

- Blended Learning is in the perfect way a didactically meaningful combination of learning media and methods
 - Macro: the overall event
 - Micro: the single session
- Competencies should stand above convenience
 - Time and space constraints
 - Key competences (intercultural collaboration, initiative and entrepreneurship etc.)
- The current crisis surfaces as a catalyst for the developments

Literature

Myrach T., Montandon C. (2007) Blended Learning. In: Thom N., Zaugg R.J. (eds) Moderne Personalentwicklung, verfügbar unter: https://link.springer.com/chapter/10.1007/978-3-8349-9318-2_11

Comment: in German, the classical, rather technology-focussed view

Erpenbeck, J., Sauter, S-, Sauter, W. (2015): E-Learning und Blended Learning. Selbstgesteuerte Lernprozesse zum Wissensaufbau und zur Qualifizierung, verfügbar unter: <https://www.springer.com/de/book/9783658101749>

Comment: in German, a short overview about the terminology and the methods.

Hrastinski, S. (2019): What Do We Mean by Blended Learning?, in TechTrends volume 63, pages 564–569 (2019), verfügbar unter: <https://link.springer.com/article/10.1007/s11528-019-00375-5>

Comment: a comprehensive way of approaching the various aspects of Blended Learning

European Commission: Directorate-General for Education, Youth, Sport and Culture (2019): Key competences for lifelong learning, verfügbar unter: <https://op.europa.eu/en/publication-detail/-/publication/297a33c8-a1f3-11e9-9d01-01aa75ed71a1/language-en>

Comment: an overview of the 8 competencies for life-long learning by the European Union.