

# 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"



- 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 l

## 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 elearning 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

#### HOCHSCHULE DER MEDIEN

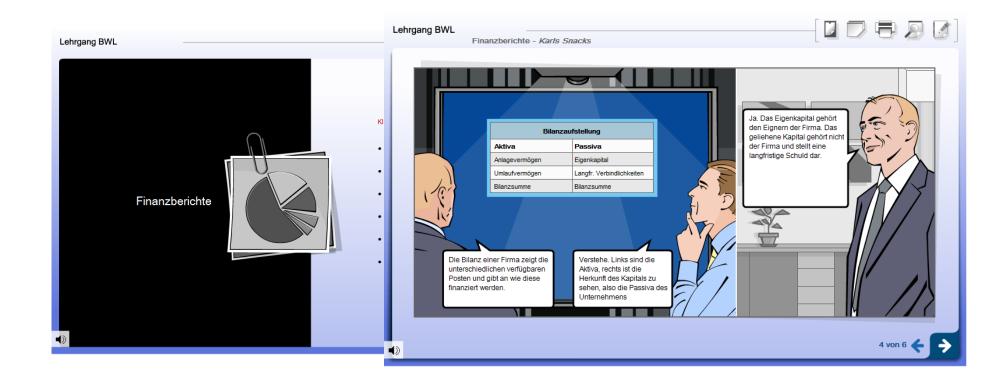
#### Paradigms of eLearning

- 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



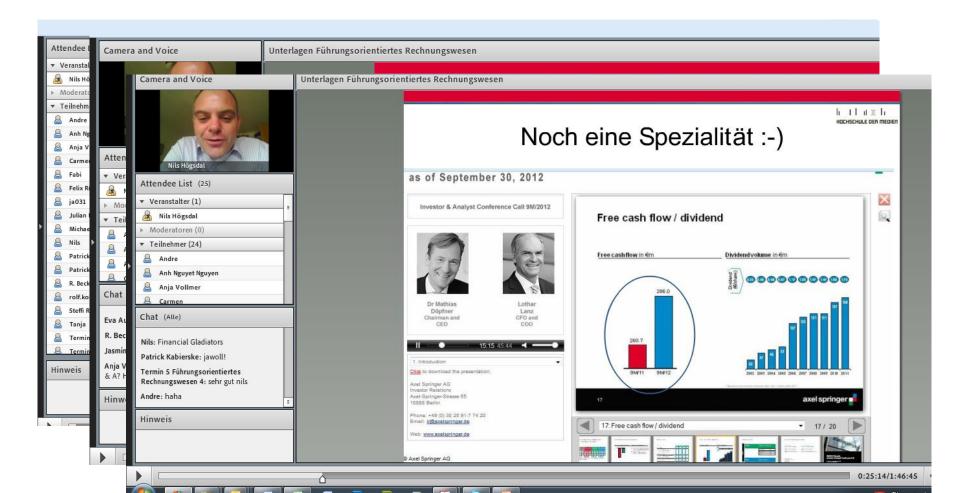
• Example: Online learning modules on basic business studies, available to all teachers and students at the HdM in Moodle



#### Web as lecture hall



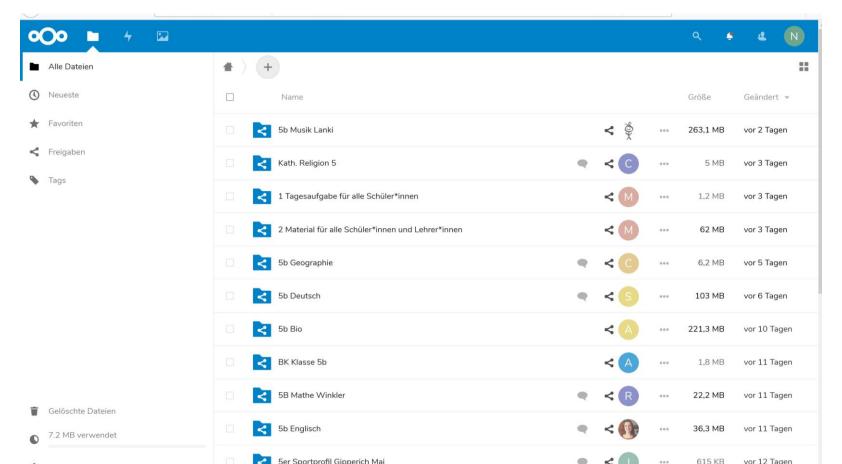
• Example: Adobe Connect, available for free



#### Web as library

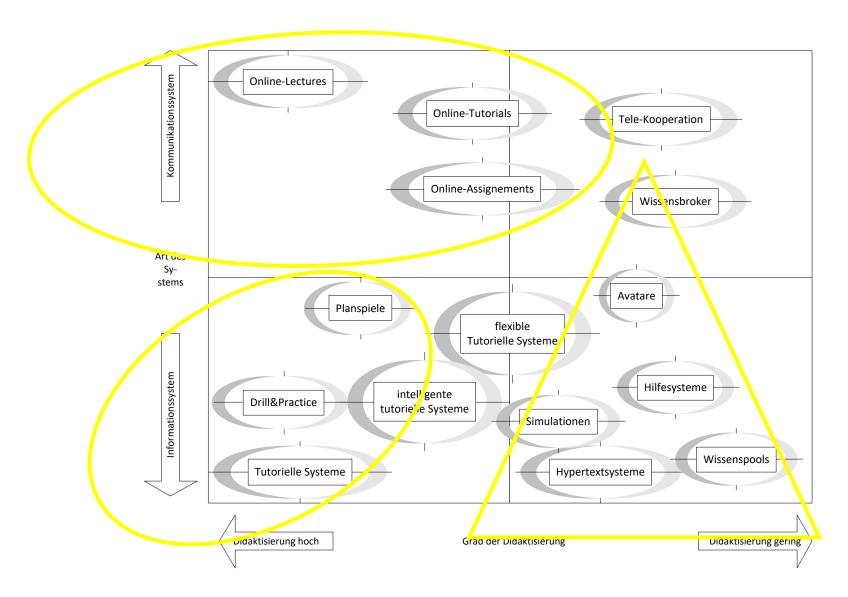


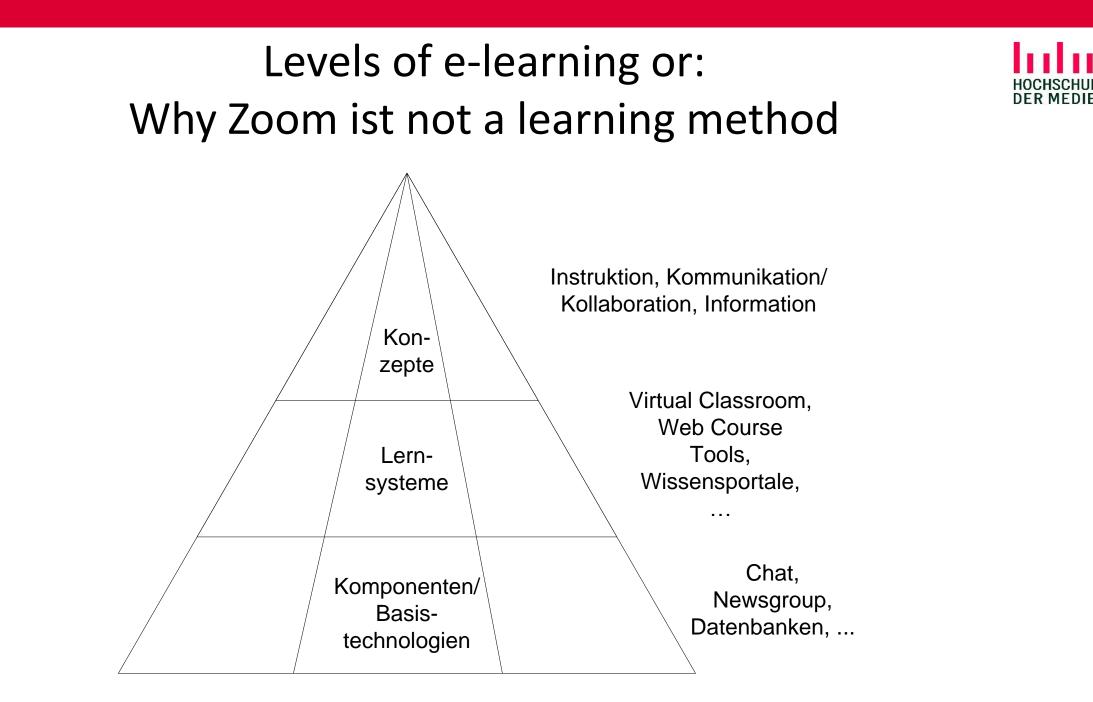
• That's how most people use Moodle





#### Methods of e-learning







Impulse Lecture II

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

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

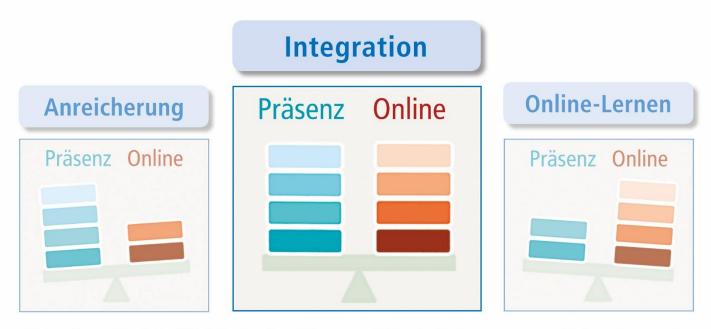


- Upgrading and improvement of e-learning measures through physical attendacs
  - Feedback and presentations
  - Q&A-sessions
- Certain dimensions of conventional educational interventions are only recognised when they are missing:
  - Informal exchange
  - Formation of networks
- Kerres: "Magic of presence"



#### Blended Learning: online and classroom?

#### Klassifizierung von Blended Learning-Szenarien



Kriterien: Verbindlichkeit der Phasen / Digitalisierungsgrad der Szenarien

https://www.zq.uni-mainz.de/files/2018/04/BL-Motiv\_Waage.jpg

#### 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



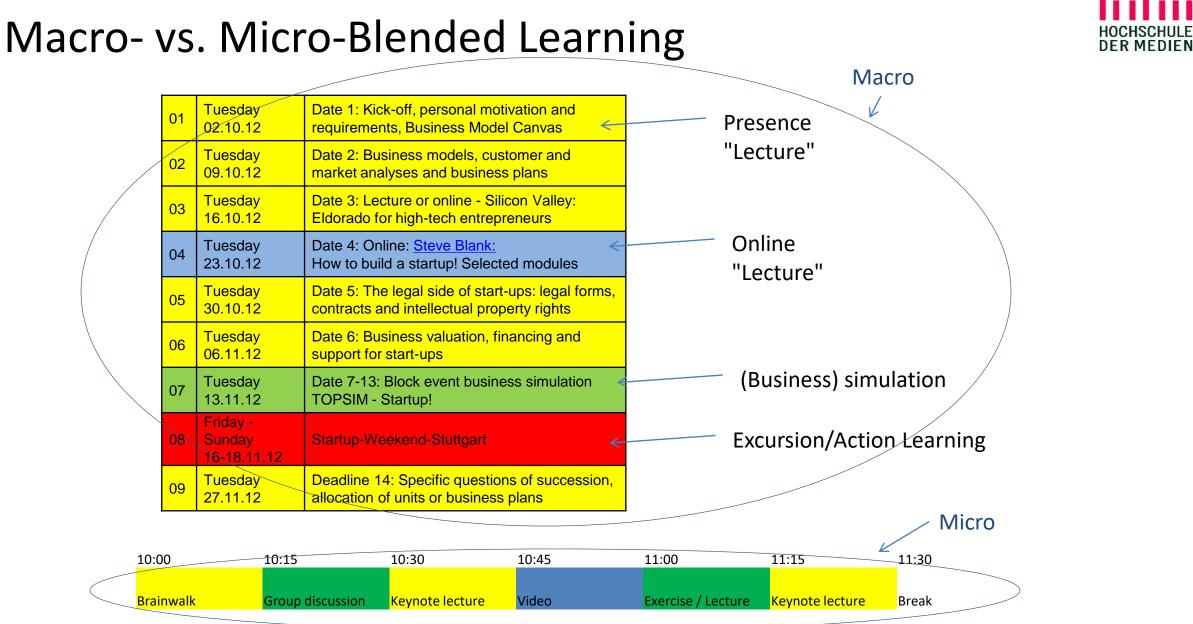
#### Suitability of methods

	Legende:		1)				stung	ion			
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Methode	Einsatzempfehlung (typische Kompetenzziele)	Lernziele				Weitere Aspekte					
Lehrvortrag	Behandlung größerer Themenbereiche in geschlossener Form. Deklaratives und prozedurales Wissen für Lernende ohne Vorkenntnisse		0								
Lehrgespräch	Unterscheidung vom Lehrvortrag durch eine stärkere Einbeziehung der Lernenden. Höhere Aktivierung der Lernenden und implizite Lernkontrollen	$\checkmark$				0			Ο		
Workshop/ Gruppenarbeit	Vermittlung von Problemlösungs- und Sozialkompetenz Unternehmenskultur. Teilweise intensive gruppendynamische Prozesse		0	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$		
Selbststudium	Aneignung von Faktenwissen, eigenständiges Üben und Wiederholen bereits behandelter Lehreinheiten. Schulung von Selbstorganisationsvermögen		0			0					
Rollenspiel	Kommunikation, Wahrnehmung von Situationen (insb. Konflikte), Interkulturelle Kompetenz (Abbau von Vorurteilen, Entwicklung von Lösungen (Prozesse)		0			$\checkmark$	0	$\checkmark$	0		



#### Suitability of methods II

	Legende:	e	ve	<i>r</i> e			Iandlunsorientierung	stion			
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Methode	Einsatzempfehlung (typische Kompetenzziele)	Lei	Lernziele				Weitere Aspekte				
Planspiel	Unternehmerische- und Problemlösungskompetenzen, Aufzeigen vom Zusammenhängen als Entschei- dungstraining, in Gruppen auch Sozialkompetenz		$\checkmark$			$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$		
Coaching	Soziale Kompetenzen, Verhaltensänderungen, besseres Erreichen von Zielen lässt auf eine gestiegene Problemlösungskompetenz der Lernenden schließen.			Ο	$\checkmark$	$\checkmark$	$\checkmark$		$\checkmark$		
Outdoor- training	Entwicklung von Sozial- und Persönlichkeits- kompetenz, Teambildung, manchmal Problem- lösungskompetenz (als Metapher für Arbeitsituationen)		0		$\checkmark$	$\checkmark$		$\checkmark$	$\checkmark$		
Mentoring	Ähnlich wie das Coaching, stärkerer Bezug zur Umsetzung von Fachwissen und Problemlösung, Unternehmenswissen und Kultur durch interne Partner		0	0	0	$\checkmark$	$\checkmark$				
Projektarbeit	Unternehmerische- und Problemlösungskompetenzen, Sozialkompetenzen, Arbeitstechniken, nur bedingt planbar, Sonderfall "Action Learning"		$\checkmark$	$\checkmark$	0	$\checkmark$	$\checkmark$	$\checkmark$	0		

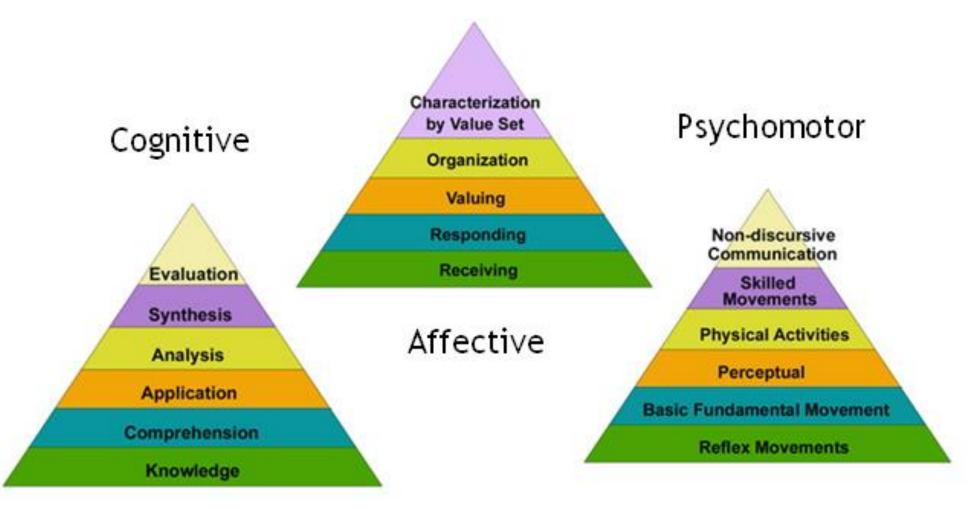




## 4. APPLYING IT FOR FUTURE COMEPETENCES



#### Bloom's taxonomy: what is our goal?



http://hacktheclassroom.ca/wp-content/uploads/2014/11/three-different-taxonomies-bloom.png



KEY COMPETENCES FOR LIFELONG LEAKNING

- European Reference Framework 1. Communication in the mother tongue
  - 2. Communication in foreign languages
  - 3. Mathematical competence and basic competences in science and technology

- 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.

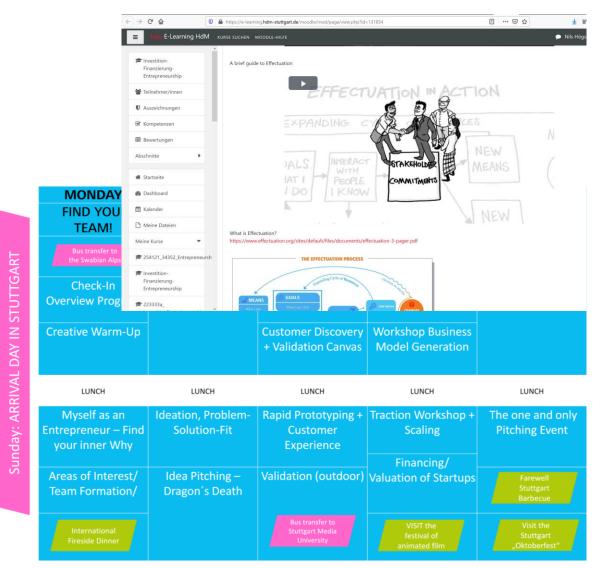
# Putting it together: Teaching and learning approaches and environments

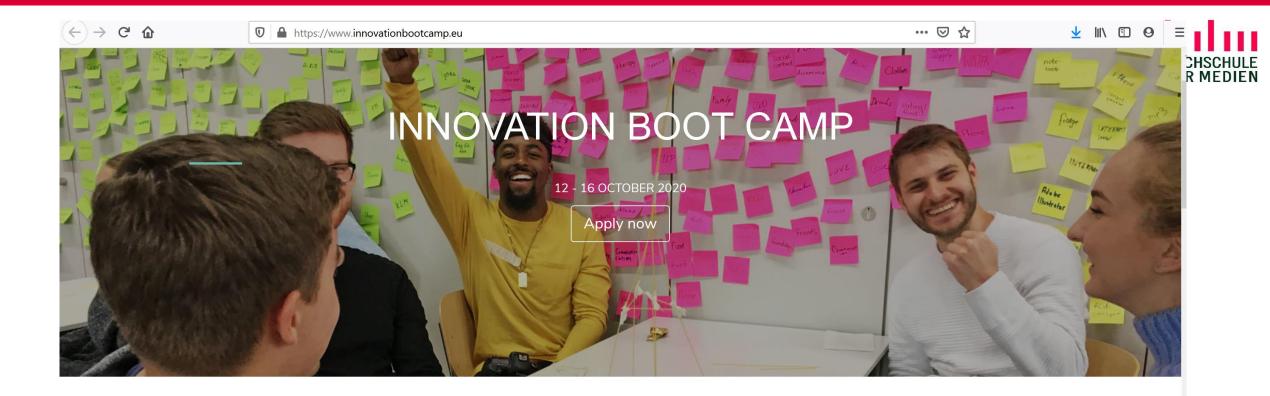


Competence oriented approaches such as project based, arts based, inquiry based, experiential or work based learning, improve learning outcomes and learner engagement. At the same time, they offer opportunities for innovation, collaboration and cross-discipline learning; they put learners at the centre and ask for their active participation. Digitaltechnologies 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





#### IN ANTWERP, BELGIUM & AMSTERDAM, THE NETHERLANDS



#### INNOVATION

Techniques that you will learn to master: Brainstorm & Ideation Techniques, Team Exercices & Energizers, Design Thinking, Rapid Prototyping. User Testing, Presenting & Dragons' Den.



#### ENTREPRENEURSHIP

Learn how to sell your new ideas: The Perfect Pitch, Emerging Trends in Technology, Business Models, Finfing Funding, Discovering the Market, Sustainability.



#### INTERNATIONAL

Work within an international context: During one week, distinguished lecturers from Belgium, the Netherlands and Germany will take students from around the world through an intensive study and cultural program.



## 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, initivative 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: <u>https://link.springer.com/chapter/10.1007/978-3-8349-9318-2\_11</u>

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: <u>https://www.springer.com/de/book/9783658101749</u>

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: <a href="https://link.springer.com/article/10.1007/s11528-019-00375-5">https://link.springer.com/article/10.1007/s11528-019-00375-5</a>

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: <u>https://op.europa.eu/en/publication-detail/-/publication/297a33c8-a1f3-11e9-9d01-01aa75ed71a1/language-en</u>

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