Opportunities and challenges around collaborative online learning

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COIL – Background & Definition

- Collaborative online international learning (COIL) was coined in 2006 by the State University of New York (SUNY)
- A new teaching and learning paradigm that develops cross-cultural awareness across shared multicultural learning environments
- Usually involves small groups connecting faculty and students from at least two institutions.
- Realizes team-taught learning environments where teachers from different cultures work together to develop a shared syllabus
- Courses provide students with new venues in which to develop their cross-cultural awareness
- More recently, also the term "virtual exchange" is used to describe such endeavors

Source: Rubin, J. (2017). Embedding collaborative online international learning (COIL) at higher education institutions. *Internationalisation of Higher Education*, 2, 27-44.

COIL – Background & Definition

- ## The key components of COIL courses include:

  - Instructors co-create course curriculum, overlapping content during at least four weeks.

  - Learning is highly interactive: students engage in problem solving with international peers.

  - Professors use technology accessible at both institutions.

  - Students remain enrolled at own institution, graded by their own professor.

Source: https://www.uwb.edu/connected-learning/global/coil-initiative/coil-resources

Example for a Virtual Exchange/COIL teaching endeavor

INTERCULTURAL PERSPECTIVES ON ARTIFICIAL INTELLIGENCE

Idea of the teaching endeavor

- To learn about topics related to information literacy and metaliteracy by taking into account transnational perspectives – recently the the focus was on topics related to Artificial Intelligence

- To share the knowledge with the world

Community: Instructors

Joachim Griesbaum (University of Hildesheim)

Stefan Dreisiebner (Carinthia University of Applied Science)

Emina Adilović (University of Sarajevo)

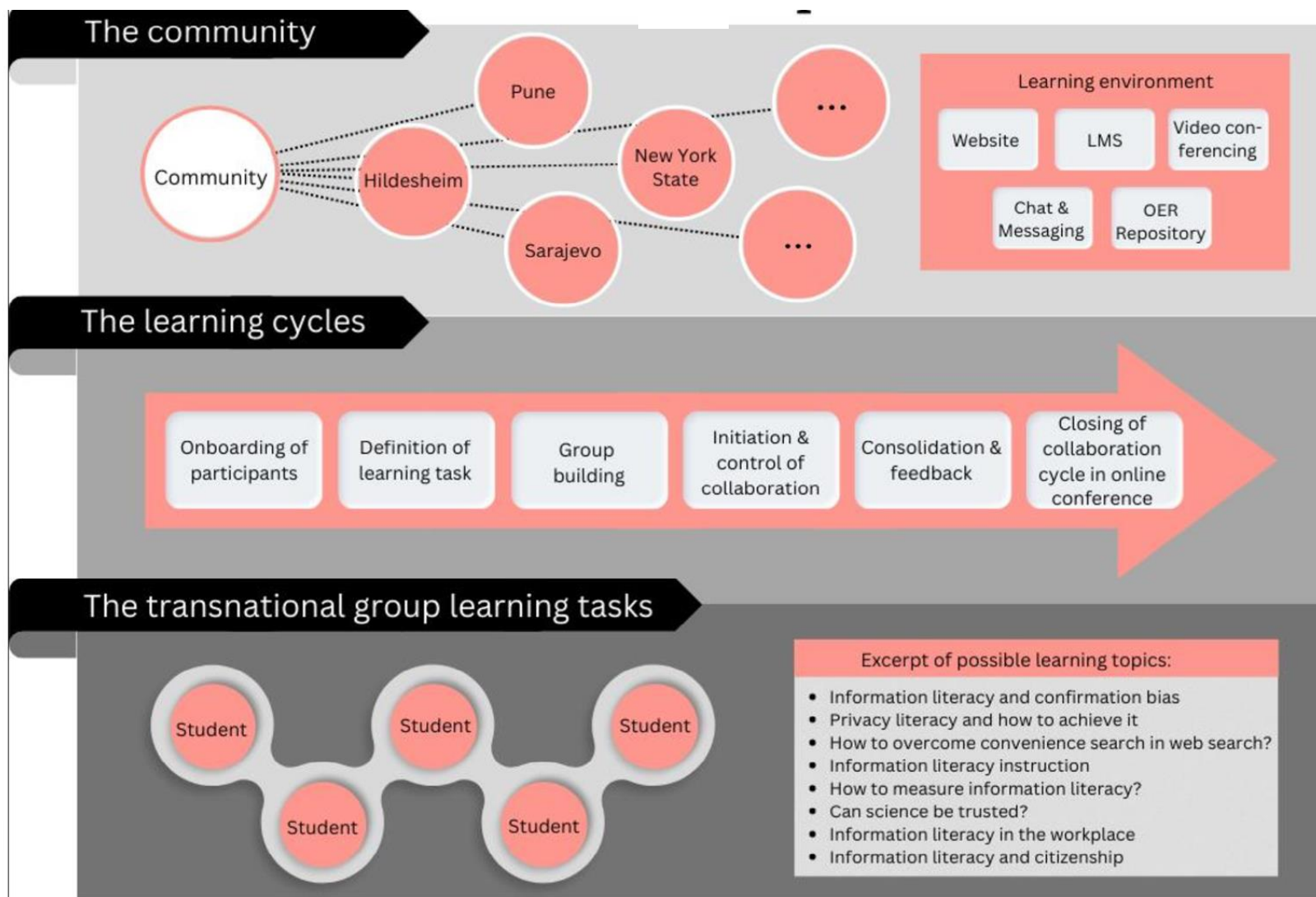Tessy Thadathil, Subarna Bhattacharya (Symbiosis College of Arts & Commerce Pune)

Justyna Berniak-Woźny (Tischner European University)

Tom Mackey (Empire State University, SUNY)

Course evolvement

- Starting with a bi-literal co-teaching endeavor in 2019/20

- 2021/22: First virtual exchange involving more partners, leading to the development of the „Intercultural Perspectives on Information Literacy and Metaliteracy (IPILM)" course concept

- To make the recent shift to topics related to Artificial Intelligence more visible, the course is currently advertised as „Intercultural Perspectives on Artificial Intelligence" among students

Concept of IPILM

Timeline of a learning cycle

Phase 1

Introduction and Warm up Tasks: Basics on metaliteracy and intercultural information literacy

Week I

- Introduction: Personal self - presentation
- Warm up task: Group formation & start

Week II

- Warm up task: In-class discussion on results.
- Learning task: Group formation & start / Handout of learning tasks

Phase 2

Collaborative knowledge construction on a specific learning task

Week I

- Learning task: Organisation meeting
- Research phase

Week II

- Learning task: Discussion on interim results
- Practical analysis, examples, interviews, knowledge creation

Week III

- Learning task: Discussion on interim results
- Practical analysis, examples, interviews, knowledge creation

Phase 3

Participation in online conference

Week I

- Presenting your work to the world

Time table of previous iteration

	Onboarding into the learning environment
16.11.2023	Self-presentation, basics, topics, and groups
	Collaborative knowledge construction
16.11.2023	Learning task: Organization meeting: Start of collaborative group work. Research phase. Building a solid knowledge foundation
23.11.2023	Optional question and answer session
30.11.2023	Learning task: Discussion of interim results. Practical analysis of use cases, examples, interviews, knowledge creation etc.
07.12.2023	Learning task: Discussion of interim results. Hints for artefact generation
14.12.2023	Concluding live session in the Moodle video conference room
	Online conference
18.01.2024	Presenting your work to the world (organizing and moderation of your conference session)

Outline

- Onboarding

- Collaborative knowledge construction on a specific learning task

- Participation on online conference

Learning environment for all students

- For the transnational collaboration we will use the external Moodle of the University of Hildesheim

- All students and instructors are registered prior the course

- All information and files are provided in this Moodle course
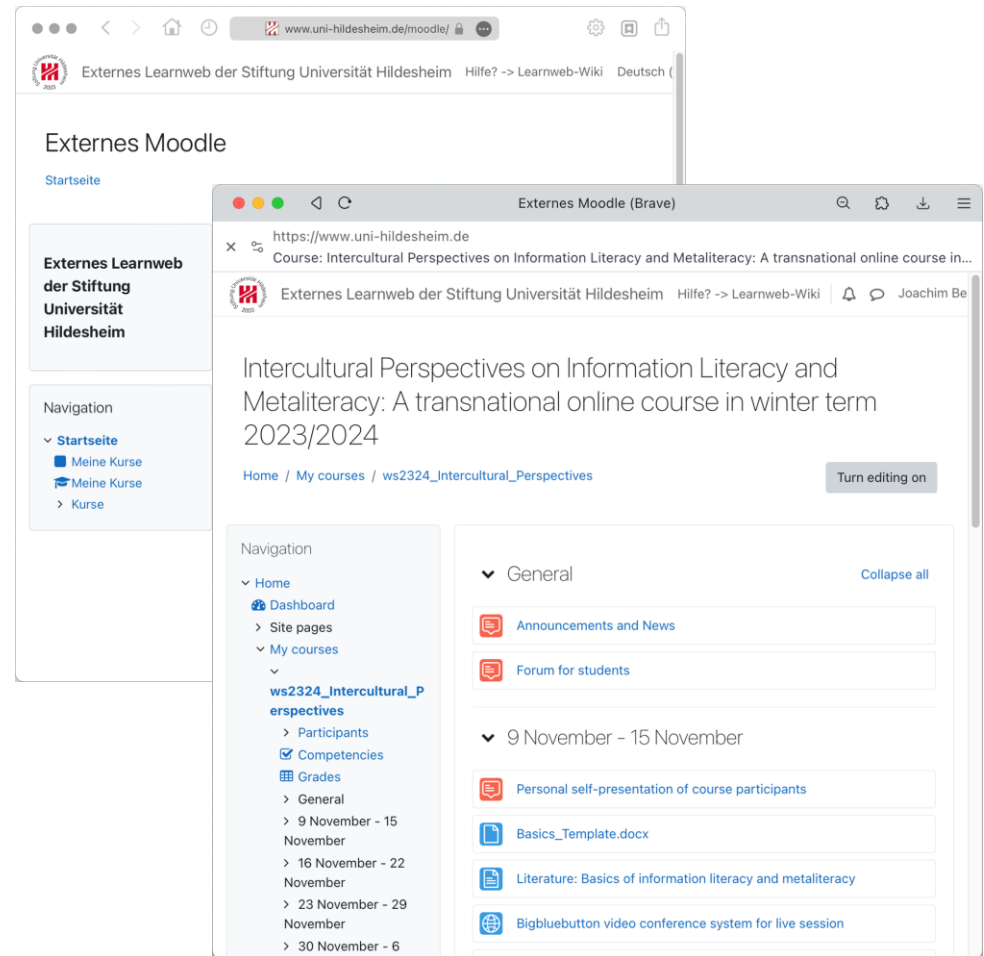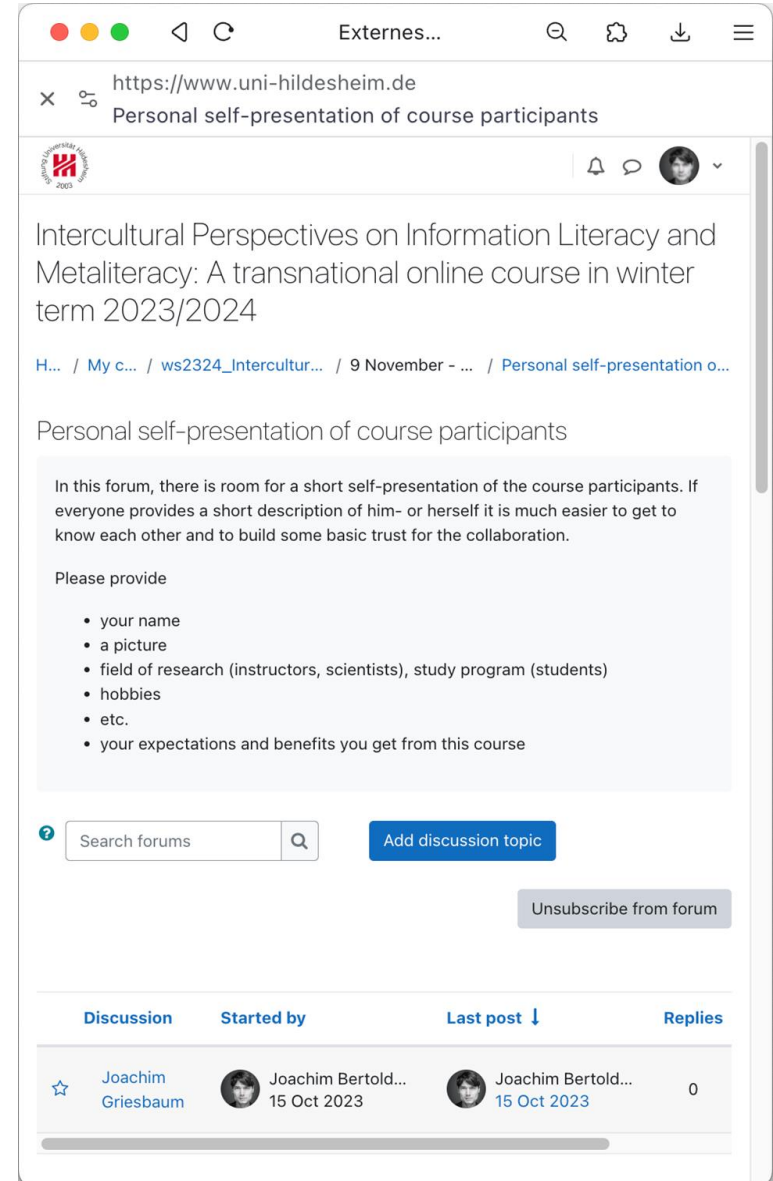
Video conference system for live sessions

Onboarding

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ATHENA International Week, 28.05.2024
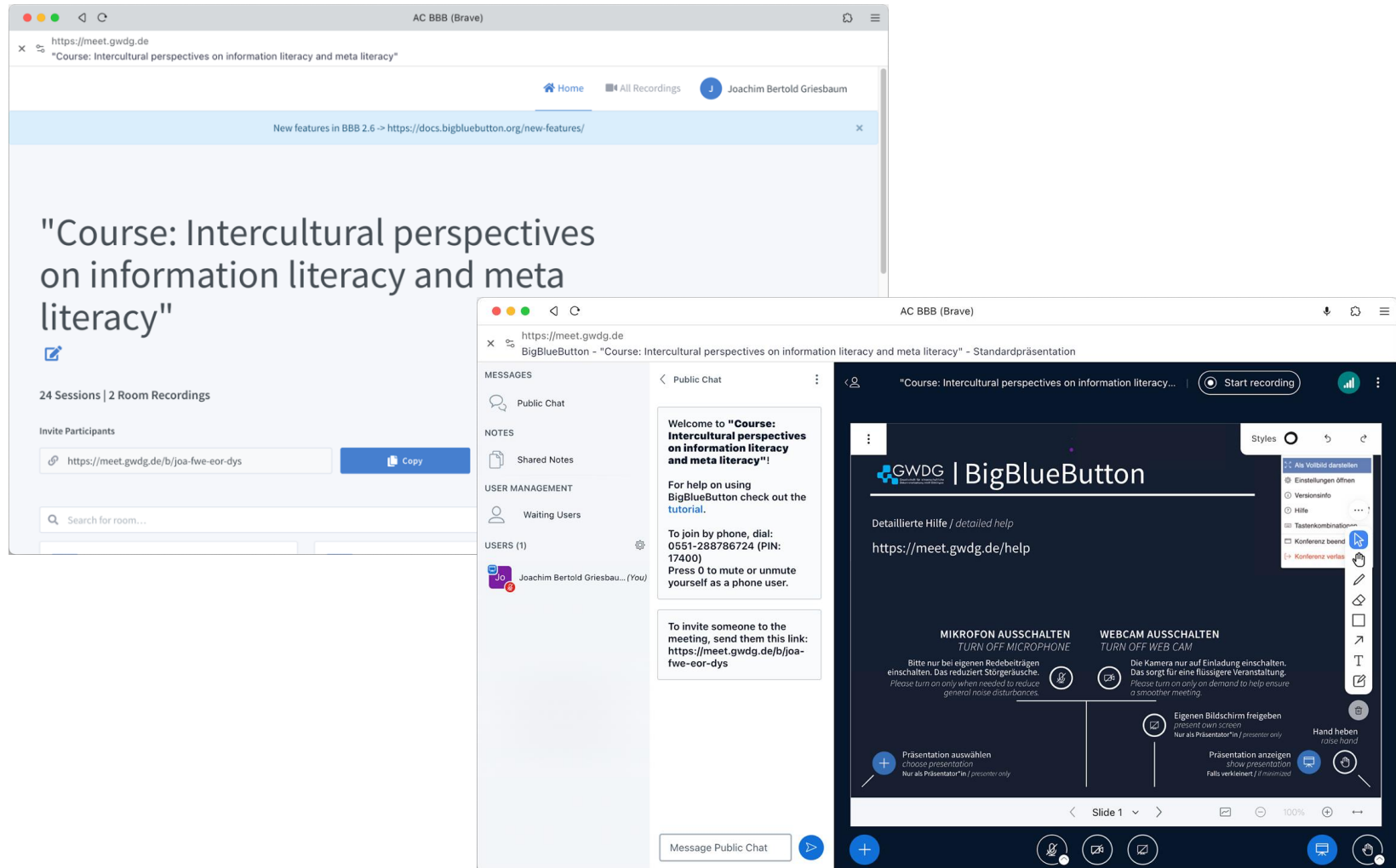
Self-presentation

To get to know each other and to support social presence as a learning community, students provide a short profile in the forum "Personal self-presentation of course participants"

Moodle Forum

Onboarding

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ATHENA International Week, 28.05.2024

Basics of information literacy and Metaliteracy

Students prepare a short document on Basics of intercultural aspects of information literacy and Metaliteracy. In the document they explain

1. Their role as a meta-literate learner
   (ca. 100 words)

2. Their knowledge on information literacy (ca. 100 words)

3. Their experiences with regard to Information literacy in the age of algorithms (ca. 100 words)

4. Their standards and expectations of scientific work (ca. 150 words)

5. Self-assessment of their information literacy, Metaliteracy and intercultural competency (ca. 150 words) Deadline: One day before the course starts.

Onboarding

Stefan Dreisiebner **ATHENA International Week, 28.05.2024**
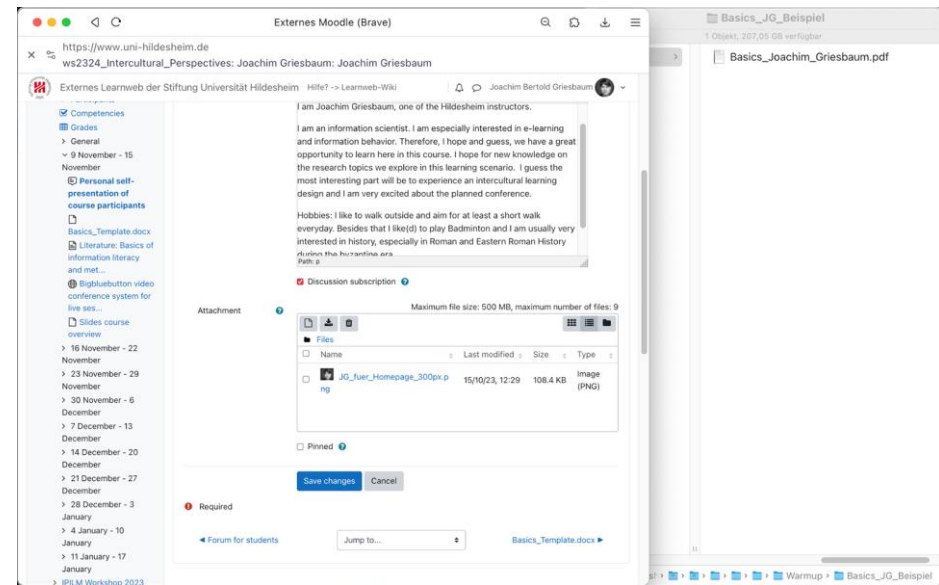
Learning topics

1. The influence of AI on climate change (solutions)

2. The influence of AI on international conflicts

3. AI and digital rights

4. AI and data surveillance/ AI and online privacy

5. Adapting Information Literacy frameworks for AI

6. AI and cross language communication

7. AI and finance

8. AI and digital media arts.

Onboarding

Group formation

Each group consists of up to 6 students with a maximum of 1-2 students per location. Students select topics in the Moodle wiki (first come, first serve). Deadline is two hours before the course starts.

Onboarding

Group Formation

Learning task topic	Moodle video conference room for group	Students Hildesheim (max. 1)	Students Pune (max. 2)	Students Sarajevo (max. 1)	Students Kraków (max.2)	Students Carinthia	Students New York
1.The influence of AI on climate change (solutions)	Group 1 video room						
2. The influence of AI on the Ukraine war	Group 2 video room						
3. AI and digital rights	Group 3 video room						
4. AI and datasurveillance/ AI and online privacy	Group 4 video room						
5. Adapting Information Literacy frameworks for AI	Group 5 video room						
6. AI and cross language communication	Group 6 video room						
7. AI and finance	Group 7 video room						
8: AI and digital media arts	Group 8 video room						

Outline

- Onboarding

- ## Collaborative knowledge construction on a specific learning task

- Participation on online conference

16.11.2023: Live session. First meeting

1) Greetings and introduction (15 minutes)

2) Group members get to know each other: Introduction game (20 minutes)

3) Overview of the course (Moodle) and learning task (15 minutes)

4) Group organisation: Goal of the learning task tools, roles and responsibilities (30 minutes)

5) Groups report in the plenum (10 Minutes)

6) Presentation research phase (10 Minutes)

Collaborative knowledge construction

16.11.-29.11.2023 Independent group work. Research

In the research phase, the goal is to build a solid knowledge foundation on each topic. For that purpose, students research the best available knowledge on the topic.

Some hints on how to conduct research for scientific literature are given in class.

16.11.-29.11. Independent group work. Research

1. **Research bibliography**: Groups should identify at least 10 relevant resources, read them and select the 2 best resources

   - They should prepare a short bibliography of their 10 relevant resources and the selected 2 best resources

   - For each resource, they should state why it is relevant (in one sentence)

   - For the two best resources, they should argue their selection (in a line or two)

Collaborative knowledge construction

16.11.-29.11. Independent group work. Research

2. **Research summary**: Students summarize the main points they encountered in research

- What is known about the topic?

- What are the important questions?

- What did the two best resources investigate?

- What was their method of investigation?

- What is their scientific value?

- What are the most important results?

- What is the groups overall summary?

- Students prepare a short presentation (no longer than 10 slides) and upload it to Moodle

Collaborative knowledge construction

30.11.2023: Live session. Research results and acquiring practical insights

1) Greetings and introduction (5 minutes)

2) Groups present their research summaries (55 minutes)

3) Information on practical insights phase (10 minutes)

4) Groups discuss practical insights phase (10 minutes)

5) Questions and answers on insights phase (10 minutes)

Collaborative knowledge construction

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30.11.-06 12.2023 Independent group work. Practical insights

- In the practical insights phase, the goal is to acquire practical insights by applying the knowledge compiled in the research phase.

- Students might analyze case studies, conduct interviews, prepare an survey etc.

- Students should decide what they think is best to acquire a good experience. This is an opportunity to be creative.

- Students prepare a short presentation (no longer than 10 slides) and upload it to Moodle

Collaborative knowledge construction

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07.12.2023: Live session. Practical insights and artifact generation

1) Greetings and introduction (5 minutes)

2) Groups present their practical insights (55 minutes)

3) Information on artifact generation (10 minutes)

4) Groups discuss artifact generation (10 minutes)

5) Questions and answers on artifact generation (10 minutes)

Collaborative knowledge construction

07.12.-13.12.2023 Independent group work. Artifact generation

- Students create an artifact that can be used by others to learn about the topic of their learning task

- They prepare a presentation and produce a screencast to present their knowledge and insights of the research topic.

- Includes both A) The scientific perspective they gained from the resources and B) The practical insights they researched by applying the knowledge compiled in the research phase.

- The artifact is used and discussed in the concluding course session and presented in the final online conference.

Collaborative knowledge construction

07.12.-13.12.2023 Independent group work. Artifact generation

Collaborative knowledge construction

- Our aim is to provide the screencast as open educational resources. Therefore students should think about an appropriate license, e.g. https://creativecommons.org/licenses/by-nc-sa/2.0/.

- Students can freely choose the software they will use for screencast preparation.

- The length of the video should be 10 minutes

- Every group member should be involved in the generation of the artifact

- The content and quality should correspond to scientific standards.

07.12.-13.12.2024 Independent group work. Artifact generation

- Students are only allowed to include material in their screencast for which they have the proper authorization and which are not protected by copyright

- Appropriate videos are published to YouTube

- In some iterations, instead of screencasts also infographics were produced

Collaborative knowledge construction

07.12.-13.12. Independent group work. Artifact generation

Evaluation criteria for the screencast

- Scholarly quality: validity (is is true?), state of the art (building on the current state of knowledge, completeness (important aspects included or missing?), argumentation (is it coherent?)

- Media Quality: comprehensibility, clarity

- Legal quality: is it original work, no plagiarism (which would lead to failure)

Collaborative knowledge construction

14.12.2023: Live session. Artifact generation, conference information, in class farewell

1) Greetings and introduction (5 minutes)

2) Feedback on artifacts (55 minutes)

3) Information on conference (10 minutes)

4) Questions and answers on conference (10 minutes)

5) Farewell in-class (10 minutes)

Collaborative knowledge construction

11.01.2024: Optional live session for Q&A on conference and improved screencasts

Depending on the feedback some groups need to improve their screencast

They can upload an inproved version and get feedback in an optional live session for Q&A and conference preparation

Collaborative knowledge construction

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ATHENA International Week, 28.05.2024

Outline

- Onboarding

- Collaborative knowledge construction on a specific learning task

- Participation on online conference

Phase 3: Online conference

- The course finishes with an online conference. In the online conference students present and discuss their work and insights with the world

- The last online conference took place on 18th January 2024

- Around 100 participants

Participation on online conference

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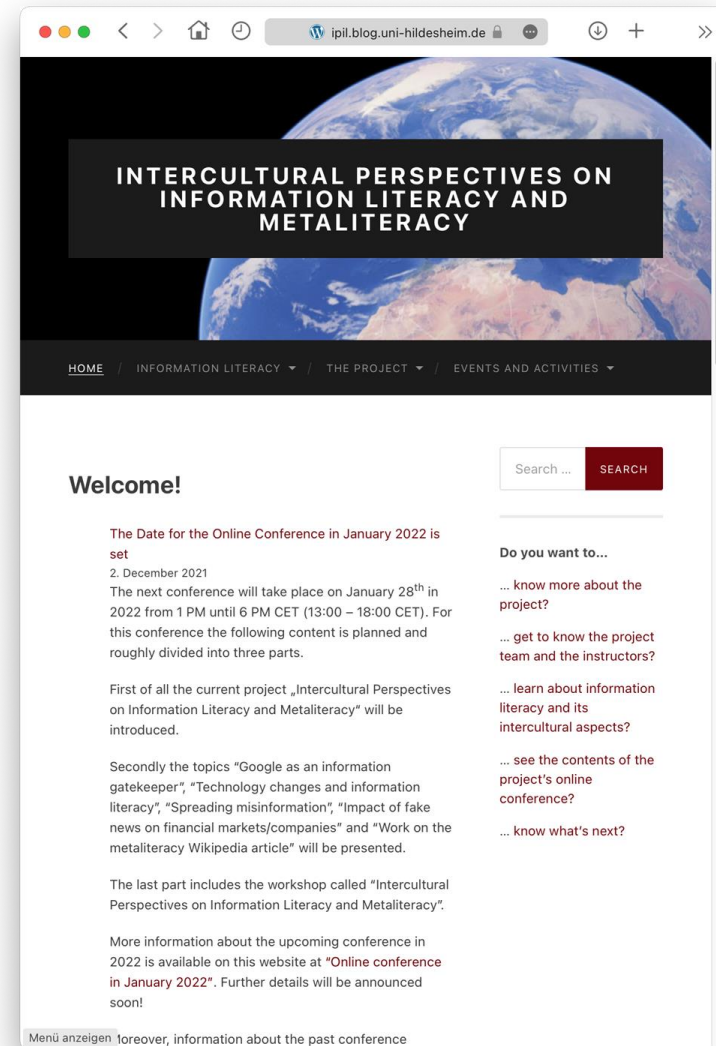
Conference program

Student work from previous conferences can be found at

https://www.youtube.com/@interculturalperspectiveso2656/playlists

Conference Program: "Intercultural Perspectives on Information Literacy and Metaliteracy" 2024	
14:00	Welcome
14:15	Keynote: Pavel Stefanovič (Vilnius Gediminas Technical University): AI learning without programming
14:40	The influence of AI on climate change (solutions)
15:00	The influence of AI in ongoing conflicts
15:20	AI and digital rights
15:40	Pause
16:00	AI and datasurveillance/ AI and online privacy
16:20	AI and cross language communication
16:40	Pause
17:00	AI and finance
17:20	AI and digital media arts
17:40	Closing

Online Conference

REFLECTION ON OPPORTUNITIES AND CHALLENGES OF VIRTUAL EXCHANGE

Feasibility

- Learning scenario is feasible in terms of a) the execution and b) the sustainability

- Challenges that are to be considered:

  – Different term schedules and different time zones – require early coordination; classes currently always at 14:00 CET

  – Depending on how the course is embedded in local teaching, student numbers might differ and marketing efforts might be needed (e.g. for a free elective offer)

  – Suitable technical infrastructure is necessary which is open to students from different institutions and compliant with the EU-GDPR regulations

Engagement

- Learner engagement in previous iterations was effectively sustained throughout the course.
  - E.g. in winter term 2023/24, out of the 35 registered students, 32 participated in the course and all of them also successfully completed the course.

- Groups determined individually means of communication (e.g. via WhatsApp) and managed meetings despite time zone differences (actually this was positively mentioned by many students as important learning)

- The conference and the possibility to present their work to a wider audience was perceived very motivational by students

- The possibility to act as expert and answer viewers questions also showed the students how much they learned during the class

- Biggest sources of frustration: Unequal motivation, involvement, and participation in some groups; occasionally with for for more guidance from the instructors during the group work

Learning Outcomes

- Student feedback indicates several learning outcomes on an individual and personal level, including but not limited to the improvement of soft skills and benefits to enhance their own perspectives (also with regard to information literacy) by working in a team with diverse cultural backgrounds

- Even though many students already had experience in intercultural settings, such as a semester abroad, the intensive work with peers from different countries online helped them to deepen and practice collaboration on an intercultural level.

    – As one student put it: *"I thought I knew about Information Literacy before, but finally learned a lot about Information Literacy. I gained presentation and collaboration skills. I was meeting cool people from all over the world. I am looking forward to more such courses."*

Outlook

- We are open to further partners

- Natural limitations:
  - Time zones so distant that no common time slots for synchronous teaching during daytime are possible any more
  - Number of students: We currently work with a relatively low no of students per partner – this allows compact co-teaching with all students and co-facilitators present
  - Higher number of students and (many more) partners would require adaptations, e.g. less synchronous sessions, parallel teaching and conferences sessions,…

What is needed for a successful Virtual Exchange?

- Good coordination (on many levels – organizational, timewise, on formalities, etc.)

- Be open and flexible for the organizational requirements by other institutions, e.g. very early scheduling of classes for next iteration

- Trust, good working atmosphere and understanding between co-facilitators, reliability of co-facilitators – needs to be developed e.g. by starting with existing collaborators, regular meetings and also in-person meetings

- Preparedness of co-facilitators to spontaneously co-moderate or address technical issues (or to even take over completely, e.g. in case of connection loss with the moderator)

- Helpful: Mix of strengths and skills within the team

- Communicate as a team and discuss potential disagreements outside of class within the team; in general: make important decisions that affect the whole class (e.g. if certain student behavior should bear specific consequences) together

- Regular reflection on teaching approach & adaptations where needed, e.g. planning meetings and meetings to reflect before and after each iteration

Organization of the joint-teaching

- ## Google Drive as central document repository

Example: Session Plan

- Before each session, a session plan is prepared and sent out to all the other teachers. Who is moderating and any comments on student work are collected there.

16.11.2023 Live session. First meeting

1) Greetings and introduction (20 minutes)

Slides 1-9 (Joachim) (10 minutes)
- Introduction instructors (everyone)
- Project and course overview
- Group Building: Groups 2, 5 relatively empty: 34 students are participating
Pre- survey (Stefan) (10 minutes)

2) Group members get to know each other: Introduction game (20 minutes)
- Tessy? Explaining introduction game. Something proud of and to truths and a lie & Joachim prepares breakout rooms (5 minutes)
- Students go into breakout rooms and come back after 15 minutes

3) Overview of the course (Moodle) and learning task (15 minutes)
- Slides 10-24 (Stefan)
- Showing the Moodle learning environment (Joachim)

4) Group organisation: Goal of the learning task tools, roles and responsibilities (30 minutes, after 15 minutes Mentors join the group)

As a the group should specify
• the goal of the learning task

Example of a more elaborated session plan form another Virtual Exchange – Global Case Study Challenge

Possible roles while co-facilitating

- Presenter/Co-Presenter

- Technical Producer

- Timekeeper

- Note Taker

- Vibes Watcher

Source: Global Case Study Challenge

How to find existing COILs?

- The SUNY COIL Global Network (behind paywall): https://coil.suny.edu/global-network/

- Virtual Exchange Networks within European University Alliances as opportunity?

Discussion

Publication:
Teaching Internationally, Learning Collaboratively: Intercultural Perspectives on Information Literacy and Metaliteracy (IPILM), Communications in Information Literacy, 17(1), https://doi.org/10.15760/comminfolit.2023.17.1.4

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Metaliteracy?

- Metaliteracy reframed information literacy as a comprehensive approach to learning for engaging with emerging technologies and social environments (Mackey & Jacobson, 2011).

- It is a holistic model that encompasses four domains of learning (affective, behavioral, cognitive and metacognitive), learner roles (from producer to publisher) and associated characteristics (from adaptable to civic-minded) (Mackey & Jacobson, 2022).

The readings we use on basics of information literacy and metaliteracy

A. Jacobson, T., Mackey, T., O'Brien, K., Forte, M., & O'Keeffe, E. (2018). 2018 metaliteracy goals and learning objectives. Metaliteracy. https://metaliteracy.org/learning-objectives/2018-metaliteracy-goals-and-learning-objectives/

B. UNESCO (2013). Global media and information literacy (MIL) assessment framework: country readiness and competencies. Paris: UNESCO. https://unesdoc.unesco.org/ark:/48223/pf0000224655 (p. 29-33)

C. Head, A. J., Fister, B., & MacMillan, M. (2020). Information literacy in the age of algorithms. Project Information Literacy, 15. (only the first 13 pages of the report are mandatory) https://projectinfolit.org/publications/algorithm-study/