

Comparing Instructors' Approaches to Course Design across Europe

Susanne Neumann, Michael Derntl, Petra Oberhuemer
University of Vienna, Austria



Goal

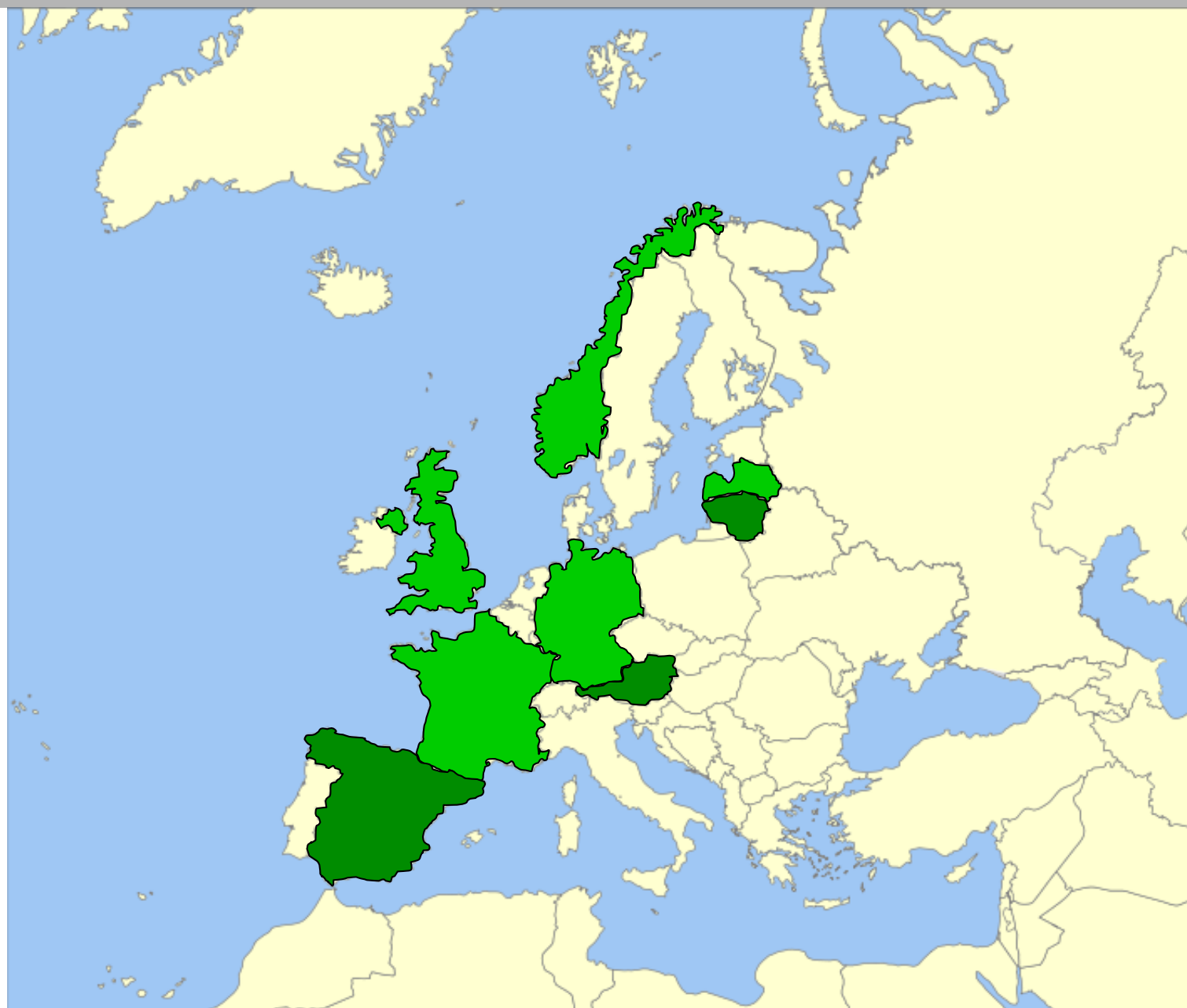
- Identify steps that teachers perform when planning courses

in order to

evaluate how learning design tools (& specification)
support these steps

Teachers' Course Steps: Data Collection

- 57 teachers answered the question:
“How do you proceed when planning your courses? What steps do you take?”
- Two data collection types:
 - 36 participants individually wrote down steps in a questionnaire
 - 21 participants discussed & agreed on steps in groups of three according to subject matter (University of Vienna only)



Majority of teachers: ■

- Austria
- Lithuania
- Spain

Other countries: ■

- Estonia
- France
- Germany
- Norway
- UK

Tag cloud of course steps



Top 5 Course Planning Steps (n=57)

- Design/select materials for learning and teaching (52)
- Define content-oriented structure of course (45)
- Learning outcome definition; needs analysis (37)
- Design teaching method/learning activities/task (36)
- Set up learning management system (31)

Top 6 – 10 Course Planning Steps (n=57)

- Define time structure of course (29)
- Design assessment method/assessment resources (27)
- Choose course topic(s) (21)
- Look at course description in curriculum (15)
- Provide administrative course data (institutional course database etc.) (12)

Course Planning Steps with <10 nominations (n=57)

- (Plan to) Collect student feedback
- Deal with admin/org issues (rooms, technology)
- Consult with fellow teachers/colleagues who taught the same course before
- Modify course structure and/or materials after delivery
- Choose delivery form
- Read up on subject/topic to inform oneself
- Reflect on teaching
- Implement/run course

Limitations of Methodology

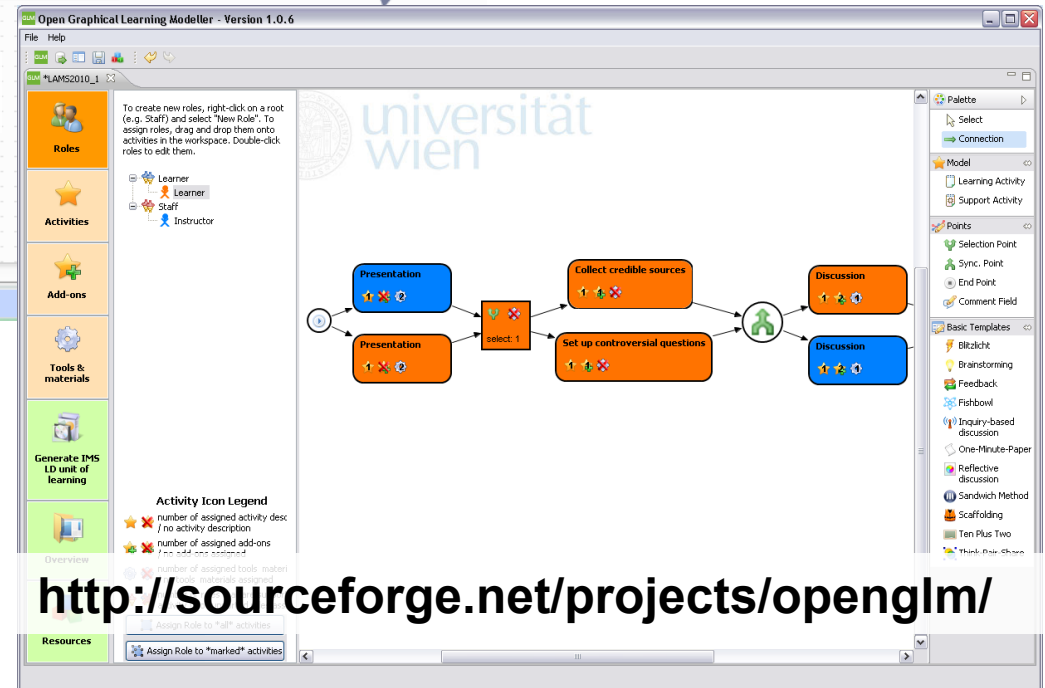
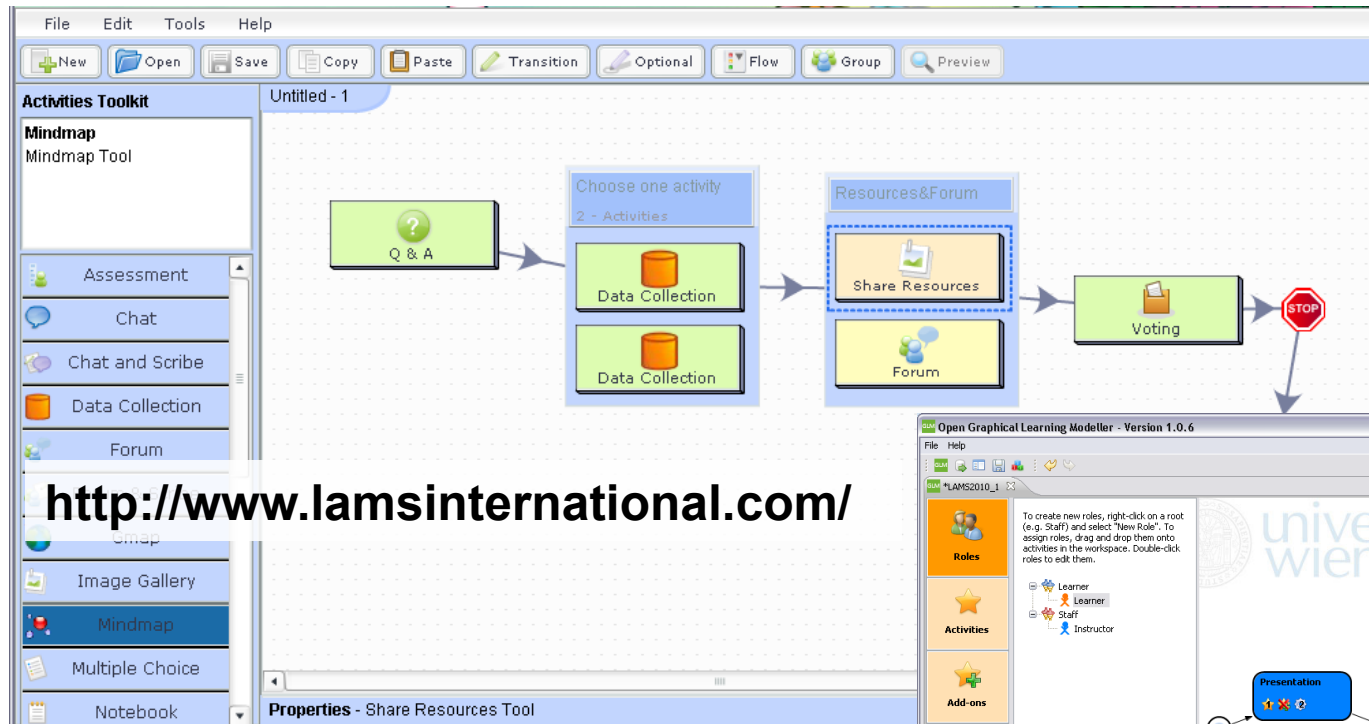
- **Few, coarse steps** from participants who wrote individually in questionnaire
- **Detailed steps** from participants from group interviews

Summary

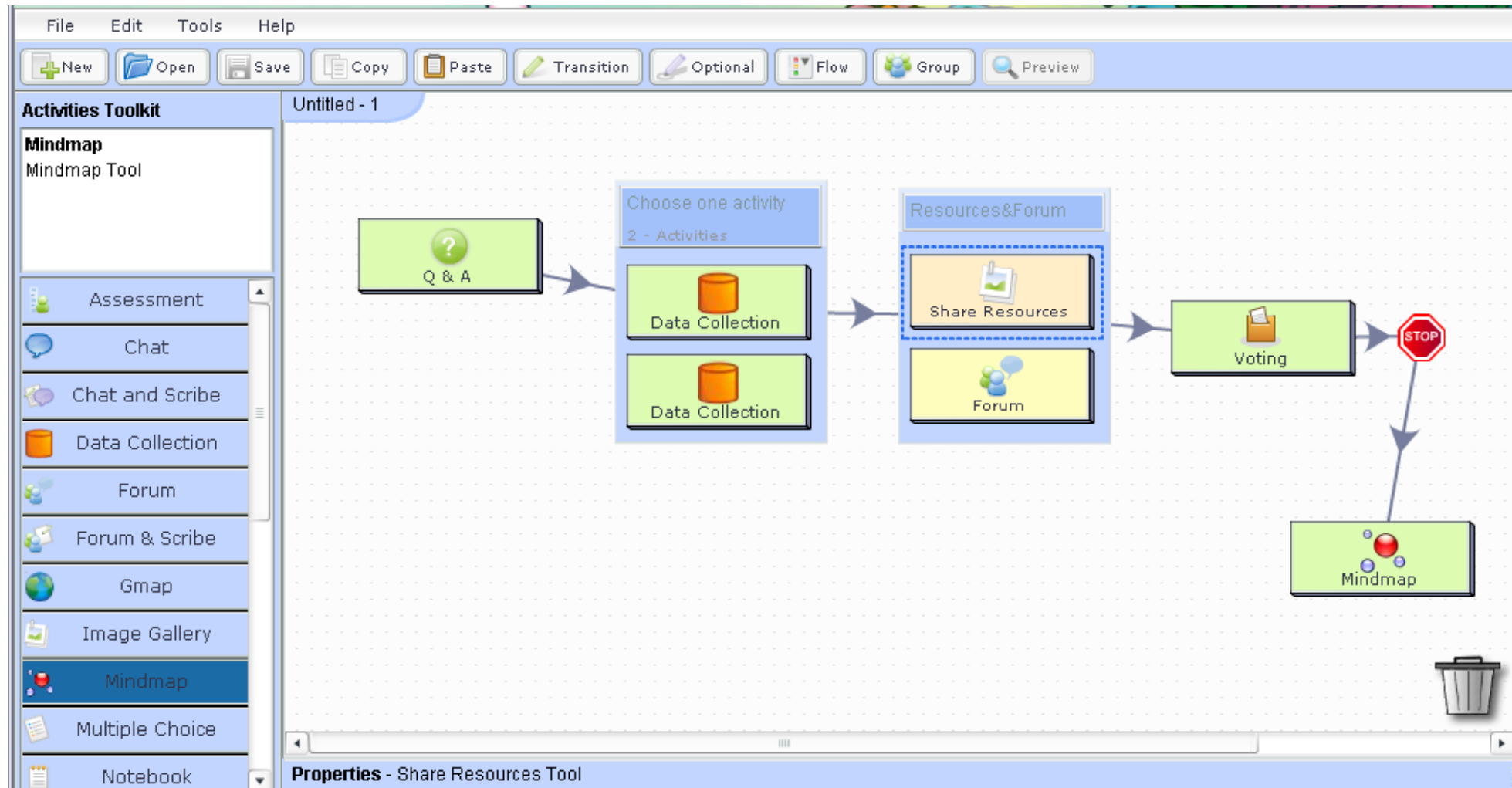
- Differences between countries? Not really.
- Attempted to get a true procedure (1,2,3...) but more than linearly, teachers proceed iteratively (group interviews)
- Little to no documentation of learning designs (group interviews)
- Teachers informally exchange about teaching approaches (group interviews)

Learning Design tools: Do they support teachers' course planning steps?

Two learning design tools: LAMS, openGLM



LAMS authoring



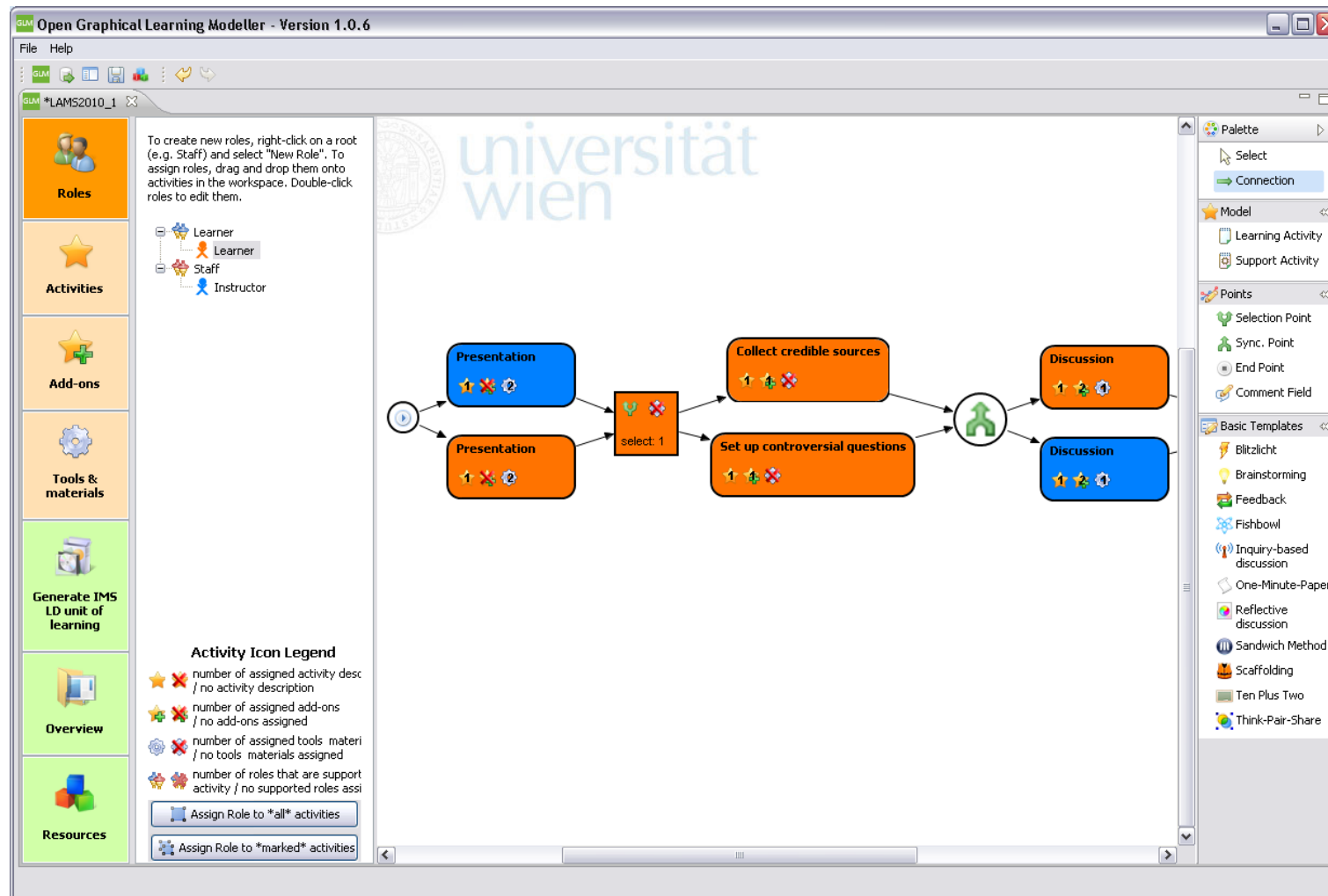
LAMS 1/2

Top 5 nominations	Matched authoring step in LAMS
Design/select materials	Referencing/uploading possible; design not possible.
Define content-oriented course structure	Not possible. Activities are always titled according to activity type.
Learning outcome definition; needs analysis	Not possible.
Design teaching method/ learning activities/task	Set up LAMS activities
Set up learning management system	Export/publish LAMS sequence to LMS

LAMS 2/2

Top 6-10	Matched authoring step in LAMS
Define time structure of course	Not possible.
Design assessment (method/ resources)	Create Assessment activity
Choose course topic(s)	Outside LAMS; file title may represent course topic
Look at course description in curriculum	Outside LAMS
Provide administrative course data (institution's course data base etc.)	Outside LAMS

openGLM



openGLM 1/2

Top 5 nominations	Matched authoring step in openGLM
Design/select materials	Learning object creation, import & management
Define content-oriented course structure	Titling is up to user, may define content structure in activities
Learning outcome definition; needs analysis	At learning design level and activity level. Prerequisites can be included.
Design teaching method/ learning activities/task	Define activities.
Set up learning management system	Export of IMS LD compliant package.

openGLM 2/2

Top 6-10	Matched authoring step in openGLM
Define time structure of course	Not possible.
Design assessment method/ assessment resources	As part of regular activities and add-on functions
Choose course topic(s)	Outside openGLM; file name may represent course topic.
Look at course description in curriculum	Outside openGLM
Provide administrative course data (institution's course data base etc.)	Outside openGLM

Compare LAMS & openGLM to course planning steps

Top 10 Steps	LAMS	openGLM
Design/select learning materials	✗ / ✓	✓
Define content-oriented course structure	✗	(✓)
*Learning outcome definition	✗	✓
Teaching method/ learning activities/ tasks	✓	✓
**Set up LMS	✓	✗
**Define time structure of course	✗	✗
Design assessment method/resources	✓	(✓)
Choose course topic(s)	✗	✗
Look at course description in curriculum	✗	✗
Enter info in institution's course data base	✗	✗

Conclusion: How do we want to support teachers with our tools?

- Hypothesis 1: Must support all 10 steps
- Hypothesis 2: Must support design steps, not administrative steps.
 - Direct interface with learning management system
 - European perspective (Bologna): Learning outcome definition, should be supported

Thank you.

Susanne Neumann, Michael Derntl, Petra Oberhuemer
University of Vienna, Austria

