

# Learning experiences in virtual worlds in schools, including formative assessment methods to create feedback for learners and educators with the **NEXT-TELL project**



Klaus Hammermüller, Gerhilde Meissl-Egghart  
Verein Offenes Lernen, Austria [klaus@talkademy.org](mailto:klaus@talkademy.org)

Erika Hummer, Sandra Maria Marolla  
RG Erlgasse, Austria ITS Isernia, Italy

[talkademy.org](http://talkademy.org)

@ e-Didaktik Tag 2012, FH Joanneum Graz



learning by doing.  
the online learning experience.

talkademy.org

Service for



GD Bildung und Kultur  
Programm für lebenslanges Lernen

500+ alumni  
30+ trainer  
20+ charity member  
10 affiliates



>> no lecture active <<

Press ESC to return to World View

connecting people  
in a "flat world"  
providing room to innovate

# Example talkademy Classroom Settings

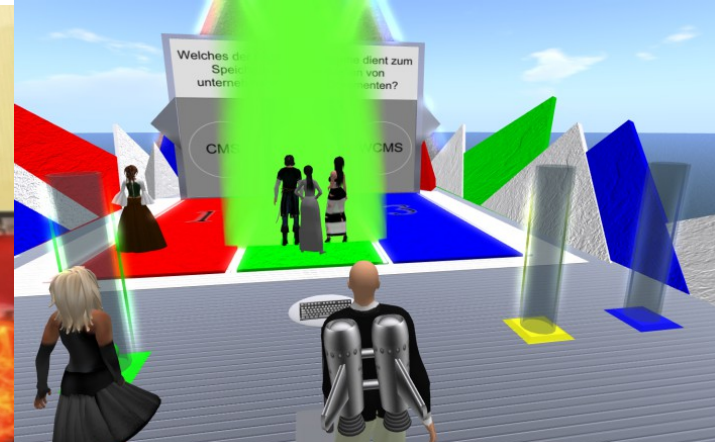
build a museum



meet the Devil's advocate



turn tests into games



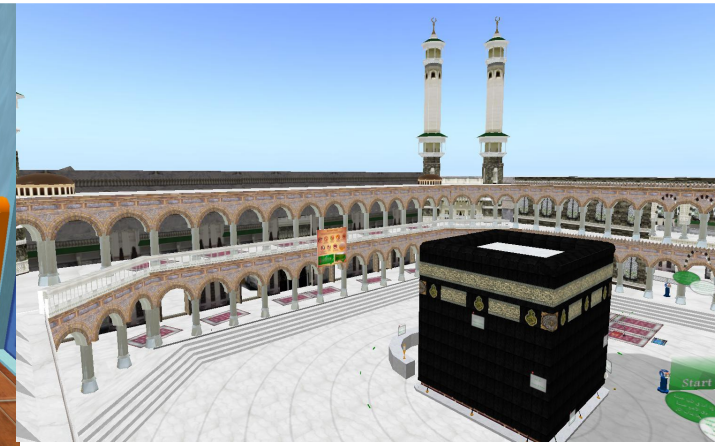
roleplay in Berlin 1920



step inside a van Gogh



visit Mecca



# next-tell.eu goals until 2014



Articulate a conceptual framework for designing and implementing methods that can be used to formatively assess ICT-enhanced learning and to negotiate the assessment process amongst stakeholders.



Provide resources and ICT support for teachers and students to develop learning activities and appraisal methods appropriate for 21st Century learning based on this conceptual framework.



Provide IT support so that teachers and students have available nuanced information in a format that is supportive of decision making, thus optimizing levels of stimulation, challenge, and feedback.



Increase a school's capacity for data-driven decision making by means of leadership development, including ICT support for the strategic planning of teachers' professional development.



Foster in-service teachers' professional development by providing new methods and tools for learning from students' learning and for learning from peers' teaching.

# invitation to join the next-tell project with your pupils in an international project



Connecting 50+ schools during the next 2 years

[talkademy.org](http://talkademy.org)



E-Didaktik Tag 2012, Graz





# Pilot study example: Isernia – Vienna web TV show produced in a 3D studio



**Secondary Language Learning:** Students are meeting with peers from other countries in a virtual world environment. There they collaborate in small project teams producing foreign language collaterals, make new friends and improve their language practice.

**Setting:** full term, in-class preparation + asynchronous collaborative tools (mail, moodle, facebook) + virtual world + video

**Results:** Students are engaged, motivated to overcome obstacles, interact and active also outside the classroom. They benefit by doing more and request more.



| <i>class</i> | <i>level</i> | <i>female</i> | <i>male</i> | <i>total</i> |
|--------------|--------------|---------------|-------------|--------------|
| 6.           | 10           | 7             | 5           | 12           |
| 3.           | 11           | 18            |             | 18           |



# pilot study: Bergen – Purkersdorf Chatterdale mystery quest



**Secondary Language Learning:** Students follow quest assignments in small local or international teamy. They need to apply second language skills to solve the mystery.

**Setting:** in-class preparation + virtual world setting

**Results:** Students are engaged, motivated to overcome obstacles, interact and active. They request more and want to come back.



| class | level | female | male | total |
|-------|-------|--------|------|-------|
| 3.    | 7     | 14     | 33   | 47    |
| 3.    | 7     | 20     | 21   | 41    |

# learning scenario design

curriculum based aims / competencies

detailed assesment measure

captured metadata

| OLM: curriculum aims / CEFR / 21st Century Skills                                  | assessment measurement   | evidence provided by   |
|--|--|--|
| Student understands the assignment (reading B1 CEFR#109, AT#3)                     | Students start looking for the right place / person (time for start moving / arriving)                 | automated locator/greeter script (triggered when entering target area) |
|  | Main point was identified and addressed in conversation with NPCs (NPC feedback)                       | NPC's feedback dialog prompted when student leaves                     |
| Approach and Ask NPCs for help (speaking A1 or more CEFR#116ff, AT#4+#19, AT#63)   | Is student approaching NPCs and talk to them? (Location sensor A after B)                              | automated locator/greeter script, chat time statistics                 |
|  | Who is talking how much? (timing)  | chat time statistics   |
|  | Level of language used?  | NPC's feedback dialog prompted when student leaves                     |
|  | Which vocabulary was used? (Chatlog analysis; ask NPCs to key in important vocabulary)                 | chat log/recording analysis  |
| Approach and Ask NPCs for help (speaking A1 or more CEFR#116ff, AT#4+#19, AT#63)   | logged gestures triggered by NPC (e.g. via additional textchat)  | n / a currently  |
| Articulation ( )   | Assess the speaking? (Audio recording, teacher assessment & feedback)                                  | recording, to be analyzed/tagged in EVA tool or soundcloud             |
| Understand the content of the glue/artefact (reading B1 CEFR#109, listen AT#2+#17) | Did the student react/answer to the said appropriately? (NPC feedback)                                 | NPC's feedback dialog prompted when student leaves                     |
|  | Did the student move to the right place given the directions by NPC (Location sensor X + Y, timing)    | automated locator/greeter script (triggered when entering target area) |
|  | Did the student find the right item (Touch sensor after NPC interaction, timing)                       | “ Like” Button variation: glues / artefacts have been found            |
| Understand the content of the glue/artefact (reading B1 CEFR#109, listen AT#2+#17) | puzzle has been solved (Location / Touch sensor, timing, event sequence)                               | automated locator/greeter script; “Like” Button variation              |
|  | Who is talking how much to whom? (timing when puzzle is resolved)                                      | chat log/recording analysis  |
|  | The one bringing in the right glue might be awarded by vote (peer feedback asked after solving puzzle) | “ Like” Button   |
| Collaboration (21st skill#39, AT#7+8, AT#39ff, AT#60)                              | Interaction sequence (chat, talk, etc. approximate timing and intensity)                               | analysis on all interaction data (movements, chat)                     |



# Findings

**Pro:** Students love it, they are engaged, go the extra mile, overcome obstacles, interact more, want more, thrive

Teachers have „hands off“ time during class, able to focus to support individuals, metadata analysis provides overview who did/achieved what

Enablement of individualized education

**Cons:** organizational demanding finding peers, setting up and maintaining a working configuration

**Next Steps:** need for simplification, improvement of usability, more exploration to find new organizational formats for formal learning – e.g. tracking of inversed teaching



**Recommendations:** full term scenarios which utilizing different media seem to work better than isolated single lesson scenarios

asynchronous involvement seem to work better than uniform engagement of students

# Thank you!

## Contact

klaus.hammermueller.at  
klaus@talkademy.org

www.talkademy.org  
www.next-tell.eu



talkademy.org



E-Didaktik Tag 2012, Graz

