

# PROFILING LEARNING PROGRESSION IN CLIL ENVIRONMENTS THROUGH COMPUTER SIMULATIONS – THE PROJECT PROFICOM

---

STEPS-seminar, Tampere  
29.10.2014 / Workshop

Laura Helminen



PROFILING LEARNING PROGRESSION  
IN CLIL ENVIRONMENTS THROUGH  
COMPUTER SIMULATIONS

# Grounds for Research

Formal Language  
Education

CLIL and  
Immersion  
Education



Multimodality of  
Language  
Acquisition and  
Teaching

Language  
Education Policy

Development and  
Use of Innovative  
Solutions for  
Language Education,  
Testing and  
Assessment

# Working with the Simulation Concept

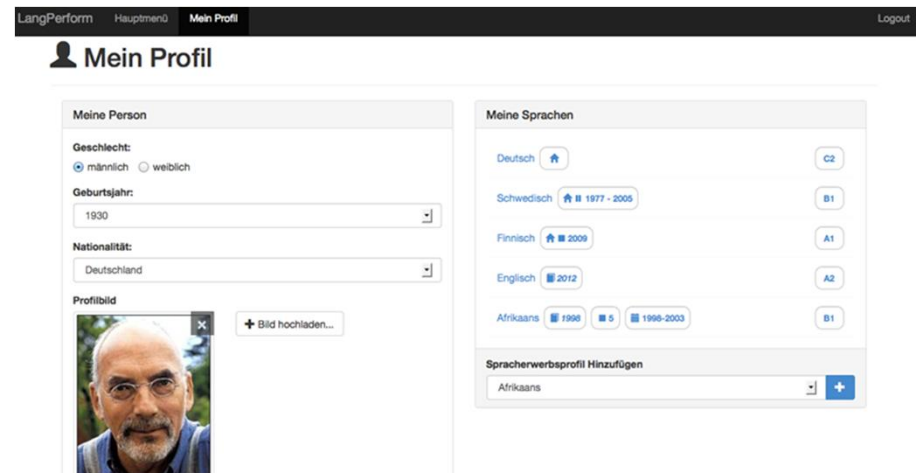
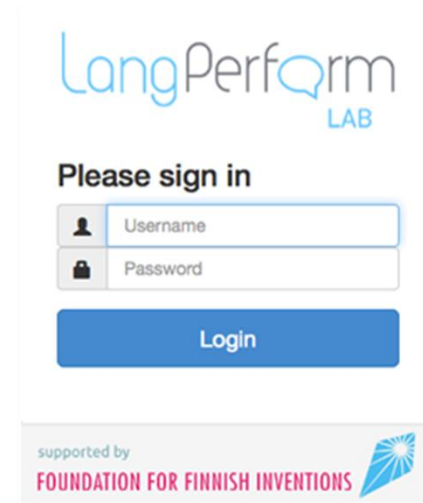
- STEP 1: Individual language acquisition profile
- STEP 2: Target language use in simulative situations
- STEP 3: Web-based self- and peer-assessment
- STEP 4: Web-based external assessment through teacher, trainer etc.

LangPerf<sup>o</sup>rm

PROFILING LANGUAGE PERFORMANCE

# STEP 1: Individual language acquisition profile

- Personal language biography
- Awareness of languages inside and outside of school
- Global (CEFR) self-assessment in language skills
- Documentation of learning events and milestones
- Keeping it "up to date"



## STEP 2: Target language use in simulative situations

- Using a target language in real-life formal and informal situations
- Every aspect of using languages (reading, writing, speaking, listening)
- Language as target and as instrument
- Immersive experience



# STEP 3: Web-based self- and peer-evaluation

- Task-specific assessment of own performance in each simulation
- Independent of time and place
- Supporting skills of self-evaluation as a working method



00:04 00:13

▶ Hello! Did you have a nice trip?

Respond: Have a seat, please.

Respond: I hope you like cupcakes?

Respond: It's nice to have you here.

Would you like to introduce yourself?

Could you please tell more?

What's the name of your school and what grade are you in?

**Arviointi**

**Accuracy**

0 A1 A2 B1 B2 C1 C2

**Coherence**

0 A1 A2 B1 B2 C1 C2

**Fluency**

0 A1 A2 B1 B2 C1 C2

**Range**

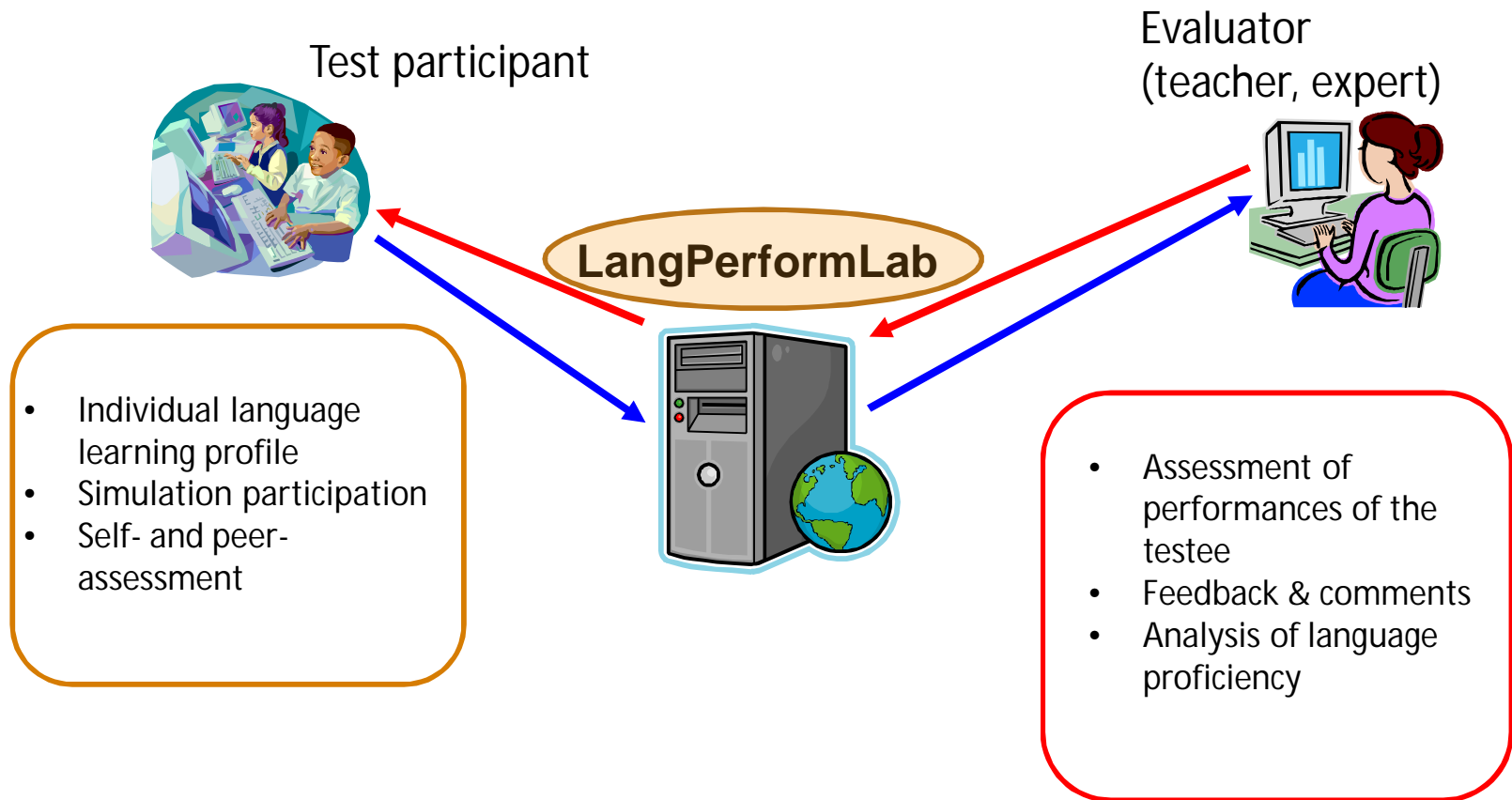
0 A1 A2 B1 B2 C1 C2

**Interaction**

0 A1 A2 B1 B2 C1 C2

**Lisätiedot**

# STEP 4: External assessment through teacher, trainer ect.



# The project PROFICOM (Profiling Learning Progression in CLIL Environments through Computer Simulations)

- Designed to utilize LangPerform-Lab services for training, testing and assessment of cross-curricular knowledge and skills.
- To support the acquisition and teaching of linguistic and cultural competences in interdisciplinary settings by putting simulation applications into practice in different affiliate schools.
- 3 simulation-units designed and implemented.

<http://rule.uta.fi/proficom>



PROFILING LEARNING PROGRESSION  
IN CLIL ENVIRONMENTS THROUGH  
COMPUTER SIMULATIONS



Respond.

Respond.



- School
- When did you learn how to read?
- Who taught you?



00:07



00:25

Respond. Tell Amy the rules of the game.

Respond.



- For example:
- Capture the flag
  - Jumprope
  - Rock, paper, scissors
  - Simon says
  - Wall ball
  - Ball games

- Describe an average meal at home or school.
- Food you like to eat.








00:20



00:43

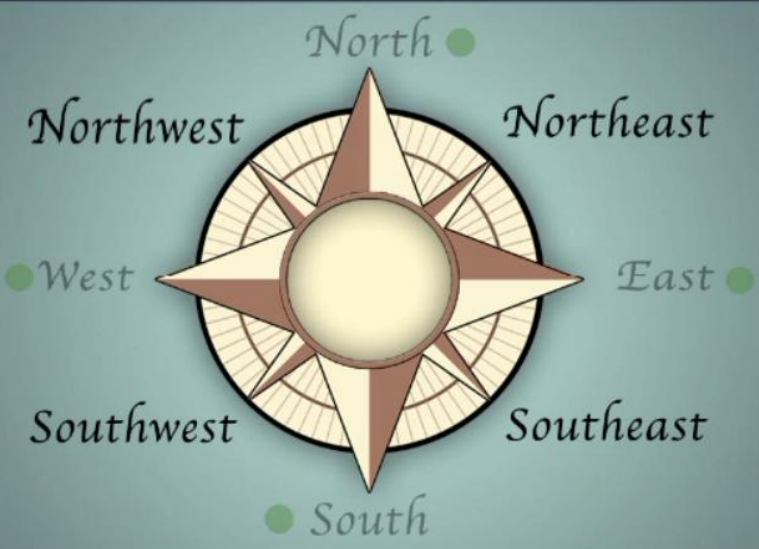
Match the correct picture and word by using your mouse. Check your answers!

- Continent
- Ocean
- Forest
- Currency
- Peninsula
- Coast
- Lake
- Industry

			
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
			
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

00:50

Choose an intermediate point by clicking it.



Get ready to tell Kenny how this all happened.

Make notes here:



Write an abstract in English or in Finnish.

Abstract = a short summary of main ideas of a text

**The Black Death**

In the Middle Ages (in mid-14th century, around 1350) Europe suffered from a horrible disease, the plague. It spread from Asia through the Silk Road to Europe and then to Africa. The plague killed millions of people, almost a third of the whole population in Europe.

People started to call it the Black Death because the disease produced black spots on people's skin. The victims also developed a high fever, became even more ill and finally died within two to seven days from the infection. Whole families and villages were killed, and people panicked. Medieval towns, where there lived lots of people close to each other, suffered the most casualties. The hygiene level was not as high as it is today, and domestic animals such as pigs and goats were living among people.

There was no cure for plague, and people had no idea how to protect themselves. Locking the doors or carrying pouches of dried herbs or flowers did not help. People thought the disease was a punishment of God: they believed that the infected people had committed sins and bad deeds. Others believed that bad air caused the plague.

It is likely that a bacterium called *Yersinia Pestis* caused the epidemic. The bacteria was in the blood-eating little fleas which carried the disease and lived in the fur of rats, and the infected rats passed the

# Testing and studying

- Wewer 2013 & 2014
  - Simulation as a valuable assessment tool:
    - helps students to put their language skills into proper use in a short amount of time
    - opportunities to step out of the classroom contexts and encounter native speakers of the target language
    - makes demonstration of the language skills students possess meaningful by bringing quasi-authentic experiences



Your turn. Tell about yourself.

For example:  
 - Name  
 - Age  
 - Hometown  
 - Hobbies

00:26

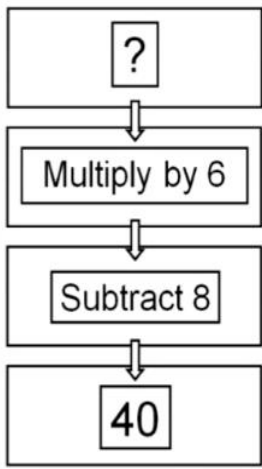
Tell about your country. The pictures will help you.

For example:  
 - Nature and animals  
 - Population  
 - Languages  
 - Capital  
 - Sights  
 - Food  
 - Sports

01:17

Explain the calculation to Fred.

FIGURE OUT THE MISSING STARTING NUMBER



Tell Fred how to do this.

	1	6	3
x			6

1. Meeting the family (Reacting in a situation)

2. USA and Michigan (Reading the text out loud)

3. Drag and Drop (Matching the correct picture and word by using the mouse)

4. Introducing Finland (Picture-based narrative)

5. Black Bears (Reading comprehension and translating the following words in Finnish: bear species, male, senses, omnivore, den, hibernation, mammal, cub, female, home range)

6. Mathematics (Solving the problem and invoicing the calculation)

7. Writing a Postcard (Written assignment)

# Application of the simulations and EFL

- EFL-learners lacked central subject-specific vocabulary in some exercises
- Time
- Dependency on speech partner
  
- The overall impression of working with simulation positive
- Motivation
- Applicable with minor adjustments

Kaisa: Niin, kyl se tuntu siltä et nekin olis niinku nähny mut ja oltais oltu ihan suoranaises yhteydes. *(Yeah, it felt like they also could see me and we would have been in direct contact.)*

Nella: Oli se mun mielestä kiva ja mä tykkäsin siitä, kun se toi sellasen uuden kokemuksen ja täällä Suomessa ei silleen oikeen puhu kenenkään kanssa niinku englantia silleen, niinku kieliopillisesti ja tolleen, niin sitten siina puhuu niinku englantia, niin sit se oli mun mielestä silleen tosi kiva juttu ja tahtoisin tehdä uudelleen. *(I thought it was nice and I liked it, 'cause it brought a new experience and here in Finland you like never speak English with anybody, with like grammar and all, so it was like a really nice thing and I'd like to do it again.)*

Reetta: Nyt mä tajuun, miks ihmiset haluu oppii kieliä. *(Now I get why people want to learn languages.)*

# Developing simulations

Pete: Kyl tekisin uudelleen, jos se olis vähän erilainen, eri paikoissa tai tälleen. *(I'd do it again, if there were happenings in different places and something like that.)*

Mikko: Joku semmonen, et menis vaikka johonkin ravintolaan tai kahvipaikkaan vaikka ja tilais listalta tai jotain tällasta näin. *(Something like you could go to some restaurant or a café and order something from the list and stuff like that.)*

Risto: Tai silleen et siinä voisi te ohjata sitä heppuu, et mihin se menee. *(Or like you could direct the guy where it goes.)*



# Further information



Research on and with  
LangPerformLab & simulation tools

[kim.haataja@uta.fi](mailto:kim.haataja@uta.fi)

[laura.helminen@uta.fi](mailto:laura.helminen@uta.fi)



Development, production and  
distribution of LangPerform-simulations  
and online-services incl. training &  
consulting activities

[info@crealang.com](mailto:info@crealang.com)

# References

- Haataja, K. (2005), Integriert, intensiviert oder nach „altbewährten Rezepten“? Auswirkungen der Lernumgebung und Unterrichtsmethodik auf den Lernerfolg beim schulischen Fremdsprachenerwerb. Univ. Diss. Heidelberg. Marburg, Tectum.
- Haataja, K (2009), Das Konzept LangPerform: Computersimulationen zur Einübung, Überprüfung und Dokumentierung von (fremd-)sprachlichen Kommunikationsfertigkeiten - über die Hintergründe, den Ersteinsatz des Prototyps für Deutsch als Fremdsprache und die Weiterentwicklung des Konzepts. In: Deutsche Lehrer im Ausland. 4/2009, Jahrgang 56. 356-364. Münster, Aschendorff.
- Haataja, K. (2010). Das Konzept LangPerform. Entwicklung und Einsatz von Simulationsinstrumenten zur computermedialen Dokumentierung von (fremd-)sprachlichen Kompetenzen – innovativ und integrativ. *Jahrbuch Deutsch als Fremdsprache*, 36. (pp. 183–199).
- Haataja, K. (2011) Der Ansatz des integrierten Sprachen- und Fachlernens (CLIL) aus der Perspektive des Deutschen als Fremdsprache (DaF) – Hintergründe, Ergebnisse und Folgen einer europäischen Bestandsaufnahme zum integrierten Sprachen- und Fachlernen auf Deutsch (CLILiG). In Barkowski, H., Demmig, S., Funk, H., & Würz, S. (Eds.). (2011). *Deutsch Bewegt – Entwicklungen in der Auslandsgermanistik und Deutsch als Fremd- und Zweitsprache*. Schneider Hohengehren. 1st Edition. (pp. 149–163).

Haataja, K. & Wewer, T. (2013) Elokuvapohjaisia tietokonesimulaatioita kokonaisvaltaisen kieli- ja kulttuurikasvatuksen tueksi – mutta miksi? In Pirkkalainen, L. & Lounaskorpi, P. (Eds.) (2013). *Löytöretkillä toisessa maailmassa, Vol 1*. Konneveden lukion verkkojulkaisu. Retrieved August 13, 2014 from

<http://konnevedenlukio.onedu.fi/verkkojulkaisut/zine/33/article-365>.

Haataja, K. & R.E. Wicke (2014), Deutschsprachige Immersionsprogramme in den USA und Kanada. Eine bedeutende Variante des Content and Language Integrated Learning in German (CLILiG). In: *Deutsche Lehrer im Ausland*. 3/2014. Jahrgang 61. 216-223. Münster, Aschendorff.

Helminen, L. (2014) Developing language proficiency through multimodal learning environments. University of Tampere.

PROFICOM 2013. Profiling learner progression in CLIL environments through computer simulations. [rule.uta.fi/proficom/proficom-in-brief/](http://rule.uta.fi/proficom/proficom-in-brief/).

Wewer, T. (2014). Assessment of Young Learners' English Proficiency in Bilingual Content Instruction CLIL. University of Turku.

Wewer, T. (2013). *English language assessment in bilingual CLIL instruction at the primary level in Finland: Search for updated and valid assessment methods*. In *Zeitschrift für Interkulturellen Fremdsprachenunterricht – Didaktik und Methodik im Bereich Deutsch als Fremdsprache*. Jahrgang 18, Nummer 2, Oktober. (pp. 76–85.)

# Learning Café



- 5 stations (cafés), 5 minutes

## 1) ICT-tools in learning

- How do you use ICT-tools in your teaching? Possibilities, experiences, obstacles / challenges?

## 2) Authenticity / interaction in the classroom

- How do you bring authenticity in your teaching? How do you apply (natural) encounters / interaction in or outside of the classroom? Possibilities, challenges?

## 3) Simulation story / exercises

- Develop/ create new simulation stories? Which kind of exercises would you use? Which contents? Why? Be creative! 😊

## 4) Assessment of (oral) language proficiency

- How have you assessed language skills of your learners in CLIL-contexts? What are the difficulties? Especially in assessing oral language skills? New ideas?

## 5) Documenting language learning / skills

- What kind of tools do you use in documenting language skills? Any ICT? Discuss options, also LangPerform-ideas, as presented, in the assessment.

# Summary of discussions (Station 1)

- i-Pads (Audio & video recording)
- Cellphones
- Apps: e.g. Socrative, Kahoot, Puppet Pals
- QR-codes
- Videos from YouTube
- Computers
- E-books, book creator
- Skype
- Blogging
- Repetition and snacks e.g. iPod-games
- Animations
- Showbie project
- Motivating!
- Photographing by using tablets

# Stations 1 continues...

## Problems & Challenges

- Endless possibilities, too much information
- Often technical problems
- Too little time – finding and creating materials time consuming
- Municipal policies on what schools should use/develop: pedanet, Microsoft, frontier vs. Google
- Installing software difficulties
- Hardware incompatibilities after upgrades
- Who is responsible for the equipment and their updating etc?
- Usernames, age limits, planning etc.

# Station 2

- Interaction with teachers/students: Greetings, using English in every encounter in the classroom, “forcing” kids to use the language (also incentives, rewards)
- Peer teaching
- Clips from YouTube
- Be yourself!
- How to get students to speak with each other in English?
- Native students/teachers/trainees very helpful
- English games
- Sharing: holiday trips, weekends, interesting things
- Making of own videos – peer pressure motivating
- English news websites and learning tools, BBC, KS3, KS4
- Skype
- International collaborations – Erasmus partner school (shared topics/projects)
- Drama + plays
- Social media (foreign contacts)
- Write ordinary letters
- Literature, music

# Station 3

- Shopping
- Going to the doctor & school nurse
- Problem solving (lost luggage)
- Manners
- Travel situations (asking the way for a place)
- Restaurant / café
- School cafeteria (choosing food, allergies etc.)
- Skateboarding park
- Job interview
- Meeting a celebrity
- Buying a pet
- Coming to a new school
- Hobbies & sports
- Subway and choosing fillings



# Station 3 continues...

- A theme day/week upon certain topics (e.g. different authors, a country, food, habits...)
- Shopping exercise: integrate math (How much together? How much do you get back?)
- KiVa-school themes: asking everyone to join in a game → ethic problem solving etc.
- Role play in make-belief/fairytale world → could be a familiar story like Ugly Duckling, Snowwhite
- Moving abroad
  - Getting into a new school
  - Meeting new class mates
  - Joining a school club
  - Going to movies (choosing the film with a friend, buying the tickets, buying pop corn, presenting the ticket for the guy at the door)
  - Visiting new friends home, meeting the parents etc.

# Station 4

- Observations
- Less formal interview about the subject
- Story telling about specific subject
- (Oral) theme tests, e.g. you have to buy a cup of coffee “kahvilakoe”
- Continuous assessment more important than tests
- Vocabulary proficiency tests
- No tests (for oral language skills)
- Recording (conversations & dialogues)
- Self-assessment: short recording of own voice which can be played back and practiced

# Station 4 continues...

- Challenges:
  - large group of students
  - What to assess?
  - How to assess intonation?
  - Special vocabulary (also in subject teaching?)
  - Difficult to assess pronunciation and intonation

# Station 5

- Videos: Job interview, tell about home country, cultural differences → students can use mobiles to make videos & record voice (story telling, poem, reading, retelling stories)
- In subject lessons, also e.g. physics experiments
- Audio recording
- Journals (multimediajournals, blogs)
- Written texts
- Apps like socrative for tests and then teacher documents results