

LUCIOLE: a digital game to enhance oral comprehension skills for primary school learners

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& Mathieu Loiseau

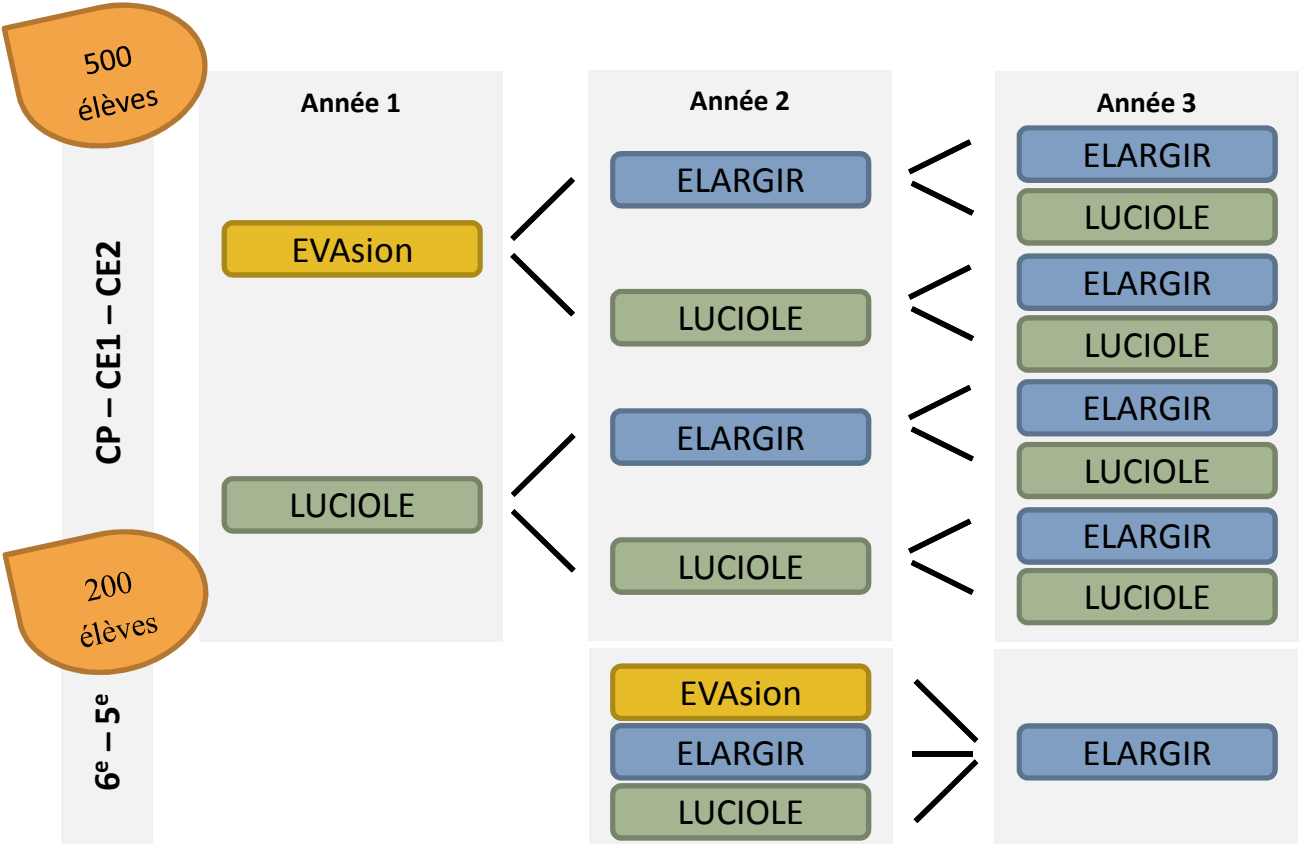
EuroCALL 2017 - Southampton



Context - FLUENCE project

- FLUENCE project funded by Fr Ministry of Ed
- Goal: improve reading fluency in French + oral comprehension in English
- 3 applications developed on iPads:
 - EVAsion: improve rapid processing of (sequences of) letters
 - ELARGIR: improve speed and prosody of reading aloud
 - LUCIOLE (control group): develop listening skills in English FL

Experimental Design FLUENCE



Constraints LUCIOLE

- 3 20-min lessons per week
 - × 10 weeks
 - x 3 years
- Have to use completely different skills from other 2 apps:
 - No reading/writing
 - Not an 'action' game (speed cannot be a factor)
- -> a serious game, ie « *application informatique, dont l'intention initiale est de combiner, avec cohérence, (...) des aspects sérieux (Serious) [...] avec des ressorts ludiques issus du jeu vidéo (Game)* » (Alvarez, 2007).

Listening

- Role of input (Krashen, 1982; Bybee, 2008)
- French students have weak listening skills (Surveylang, 2012)
- Need to learn to make meaning:
 - *Today I'm happy* ≠ *Joyeux anniversaire* (Audin, 2003)
 - Processing instruction (Van Patten, 2002)

Adaptation of Van Patten's PI

- Older learners -> younger learners
- Grammar -> vocabulary/combinations
- Explanations -> establish meaning
- Referential activities -> systematic meaning-based practice (MCQs)
- Affective IP (more incidental)
 - > contextualized activities
 - + recycling in different contexts

Games in language learning

- Motivation (Gee, 2003; Oblinger, 2004):
 - Individualized sequencing
 - (self) evaluation
 - Active learners
- Children's culture:
 - Present in textbooks and resource books
 - Action based approach and TBLT (Shintani, 2012)
- Serious games :
 - First experiments in French schools (2012)
 - Also for SLA (Schmoll et al., 2014)

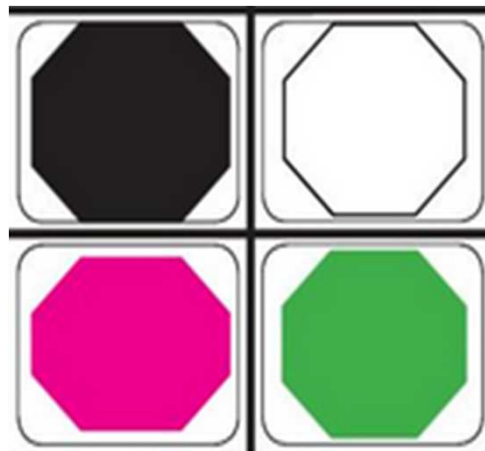
Pre/Post test hypotheses

- after treatment, children will:
 - understand more lexical items (oral comp)
 - understand simple sentences
 - be able to produce a few words/ expressions
- Items will be better acquired if:
 - they are encountered more frequently
 - they have been practiced systematically rather than only encountered in the narrative and dialogues

Pre/ Post test design

- Multiple choice questions: children hear one word/sentence and point to the corresponding picture (1 key and 3 distractors)

Stimulus:
black

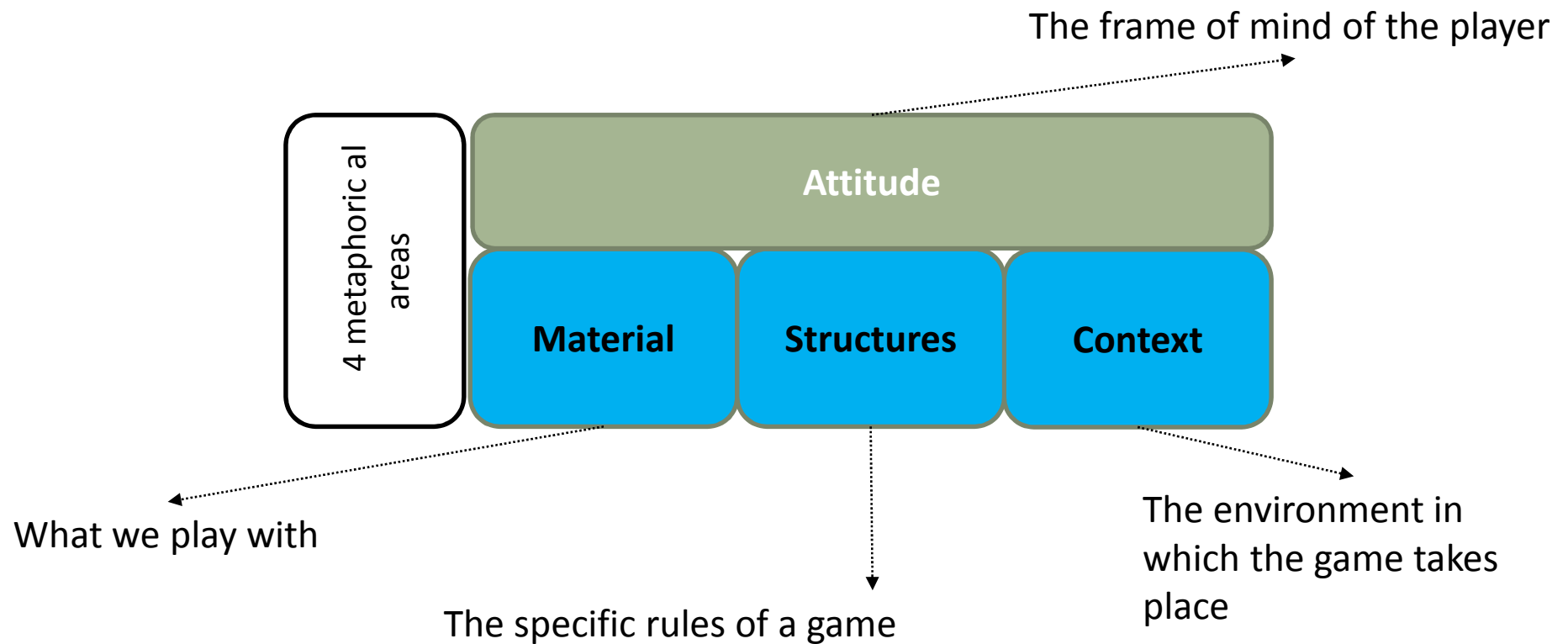


Stimulus:
the cat is
eating



Game characteristics - LUCIOLE

- The 4 metaphorical areas of game and play (Silva, 2008)



The context

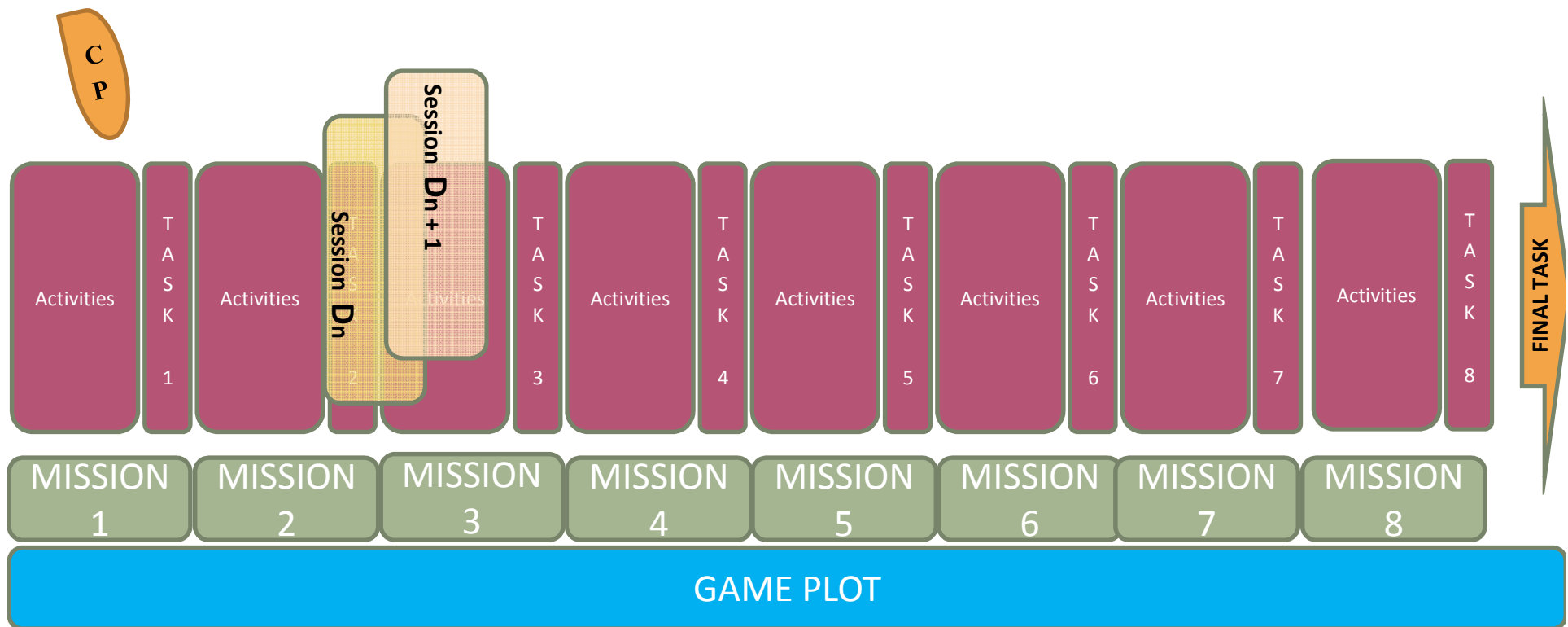
- Flexible use of the game in the classroom
=> Used differently depending on the school:
 - Teachers' support: integration into the English lesson;
 - No teachers' support: LUCIOLE is considered as a separate tool.
- No prerequisites: absolute beginners
- Frequency of use
- Strong integration of the child player into the storyline

Material

- Narration:
 - Storyline « spy-to-be »
 - Young French child who has to communicate in English
 - Starts in French but gradually switches to English
- Linguistic and cultural skills (MEN, 2015)
- Action-oriented approach:
 - Solve different missions to achieve the final task
 - Missions become + and + complex

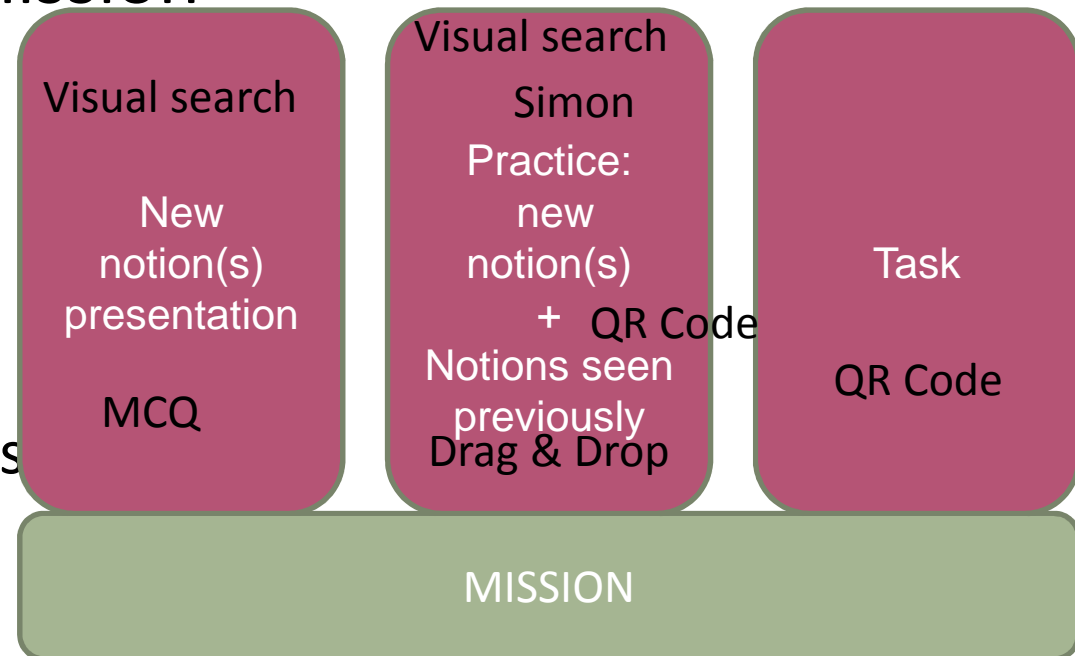
Structures (1)

Gradual progression of the game



The structures (2)

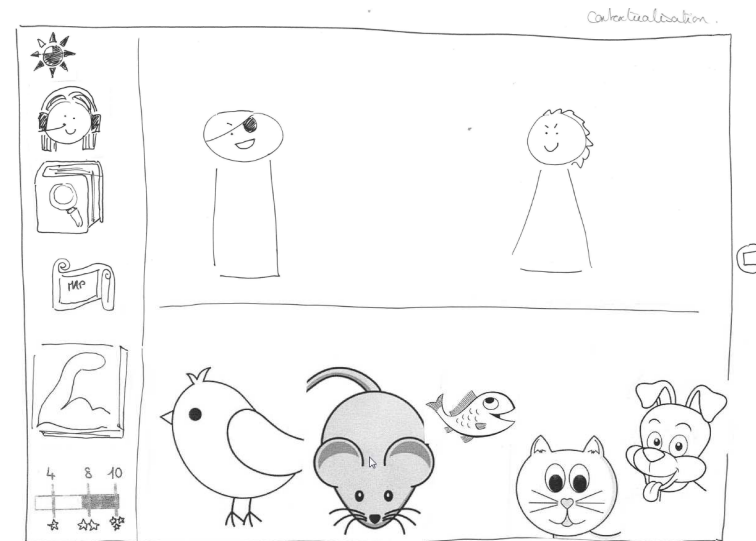
- Progress/design of a mission



- Type of activities:
 - Multiple-choice questions
 - Drag and drop
 - Visual search
 - ‘Simon’ game
 - QR Code

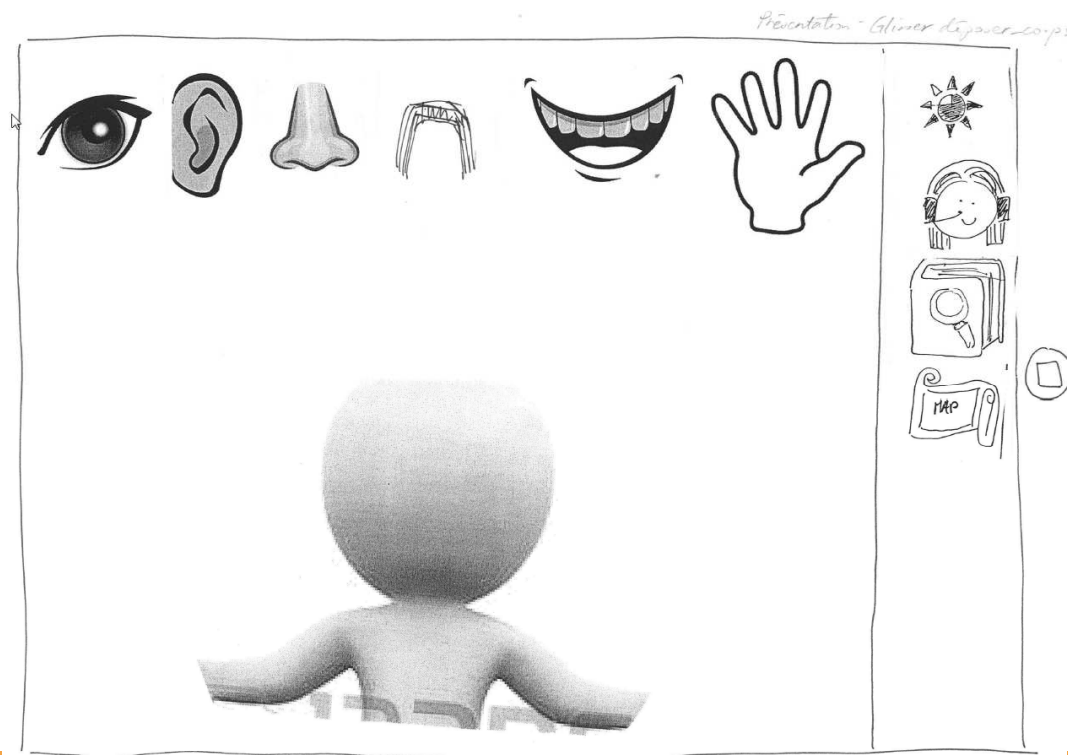
MCQ

- With graphics and oral stimuli
- Example: animals mentioned in a conversation between 2 'bad guys'



Drag and drop

- Example:
 - Language focus: parts of the face vocabulary



Visual search

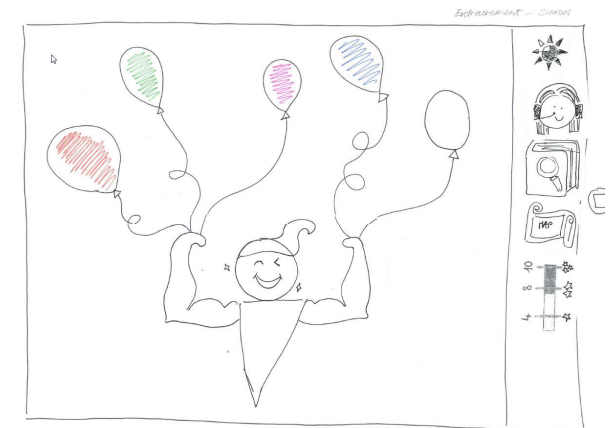
- A type of perceptual task requiring attention
 - Exploratory activities: introduce target language
 - Practice stage: use target language
- Example:
 - Language focus: animals



The 'Simon' game



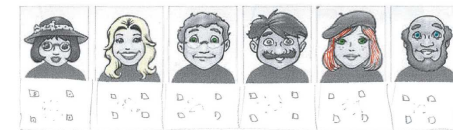
- Electronic memory game
- The player listens to a series of English words and must reproduce the order by clicking on the corresponding pictures
- Example:
 - Language focus: colours



QR Code



- Incorporation of QR codes into the story and as gameplay elements
- Uses:
 - Link the virtual world to the real world (classroom)
 - Unlock content inside the game
 - Checking answers



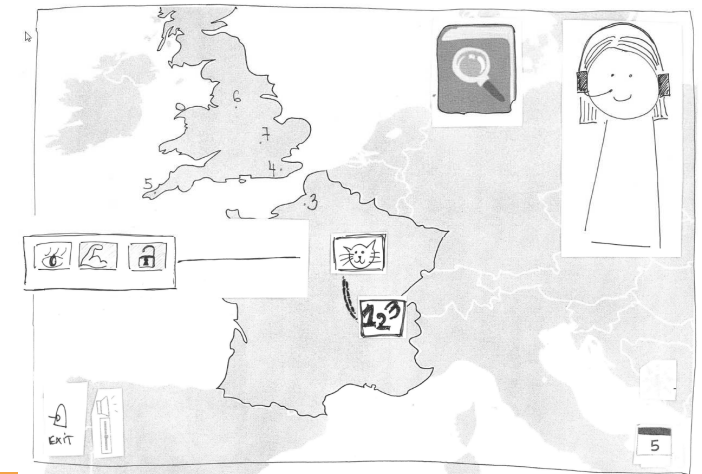
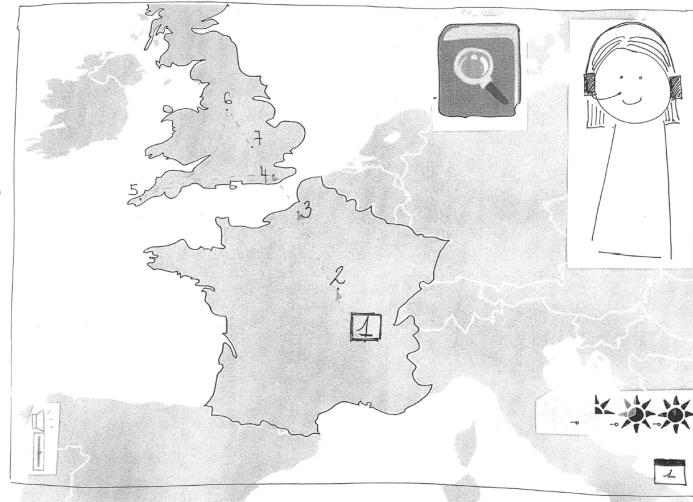
Ex : “Your pet is with a woman with red hair and green eyes.”

The structures (4)

- User interface tools/monitoring tools
 - Game map
 - Log book

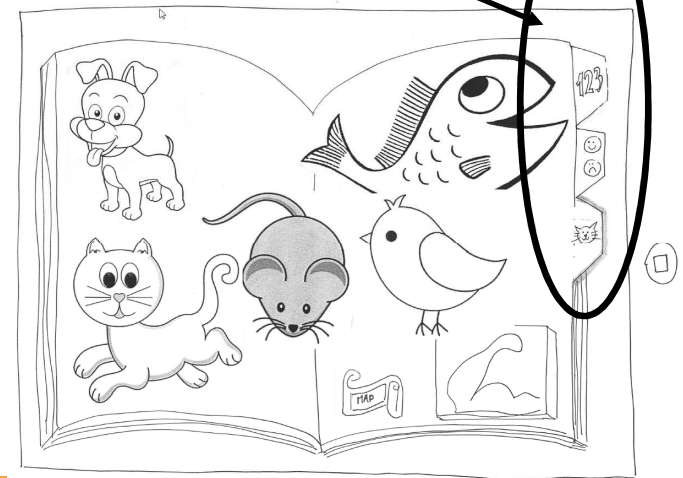
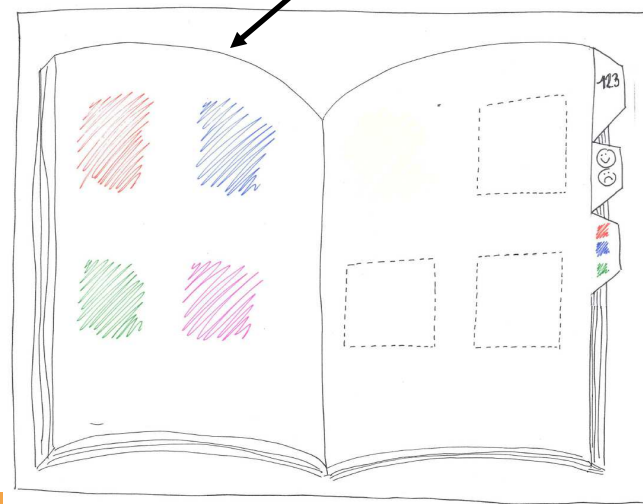
The map

- Mentor
- Elapsed time in the game
- Icons of the unlocked missions
- Logbook



Log book

- Has different tabs containing the terms encountered by the player
- Organized by themes
- Always available via the *Help* button
- Updated



Fluence

Thank you for your attention 😊



References

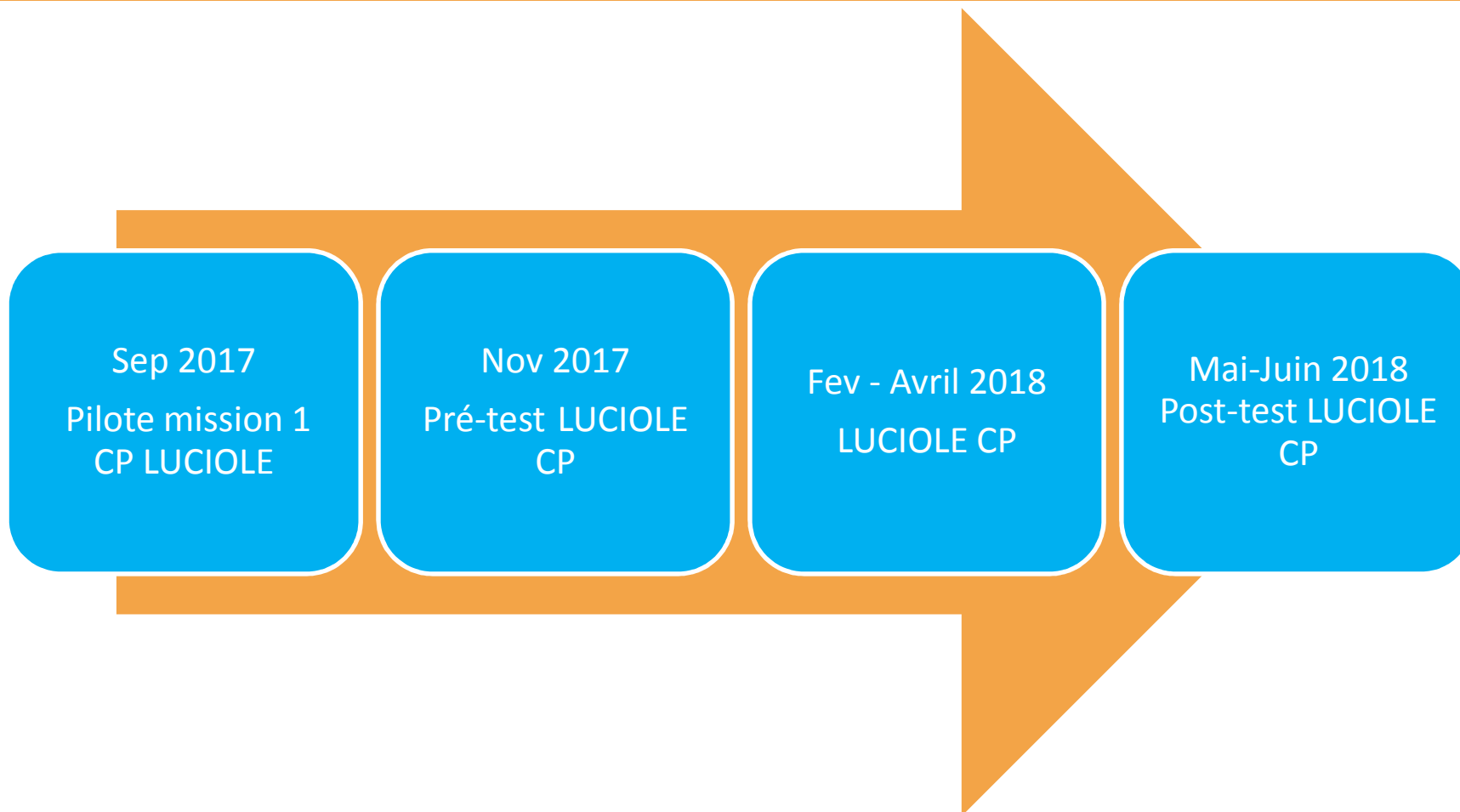
- Audin, L. (2003). L'apprentissage d'une langue étrangère à l'école primaire : quel(s) enseignement(s) en tirer ? Les Langues Modernes n°3, 2003, pp 10-19.
- Bybee, J. (2008). Usage-based grammar and second language acquisition. In P. Robinson and N. Ellis (eds.). Handbook of Cognitive Linguistics and Second Language Acquisition. New York: Routledge. pp 216-236.
- European Commission (2012). First European Survey on Language Competences. Final Report, April 2012. http://ec.europa.eu/languages/eslc/docs/en/final-report-escl_en.pdf
- Gee, J. P. (2003). What video games have to teach us about learning and literacy. Computers in Entertainment, 1(1), 20–20.
- Krashen, S. 1982. Principles and Practice in Second Language Acquisition. New York: Pergamon Press.
- Oblinger, D. G. (2004). The Next Generation of Educational Engagement. Journal of Interactive Media in Education. (1), 1–16.
- Ministère de l'éducation nationale (2015). Programmes d'enseignement de l'école élémentaire et du collège. Bulletin Officiel spécial du 26 novembre, <http://www.education.gouv.fr/cid95812/au-bo-special-du-26-novembre-2015-programmes-d-enseignement-de-l-ecole-elementaire-et-du-college.html>.
- Shintani, N. (2016). Input-based Tasks in Foreign Language Instruction for Young Learners. John Benjamins Publishing Company.
- Silva, H. (2008). Le jeu en classe de langue. Techniques et pratiques de classe. Paris: CLE International.
- Schmoll, L. et al. (2014). Serious game et apprentissage en réalité virtuelle : résultats d'une étude préliminaire sur la mémorisation en langue étrangère. Synergies pays germanophones n° 7, p. 77-88.
- Van Patten, B. (2002). Processing Instruction: An Update. *Language Learning* 52:4, December 2002, pp. 755–803.

The Luciole team

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- Anne Blavot (project manager)
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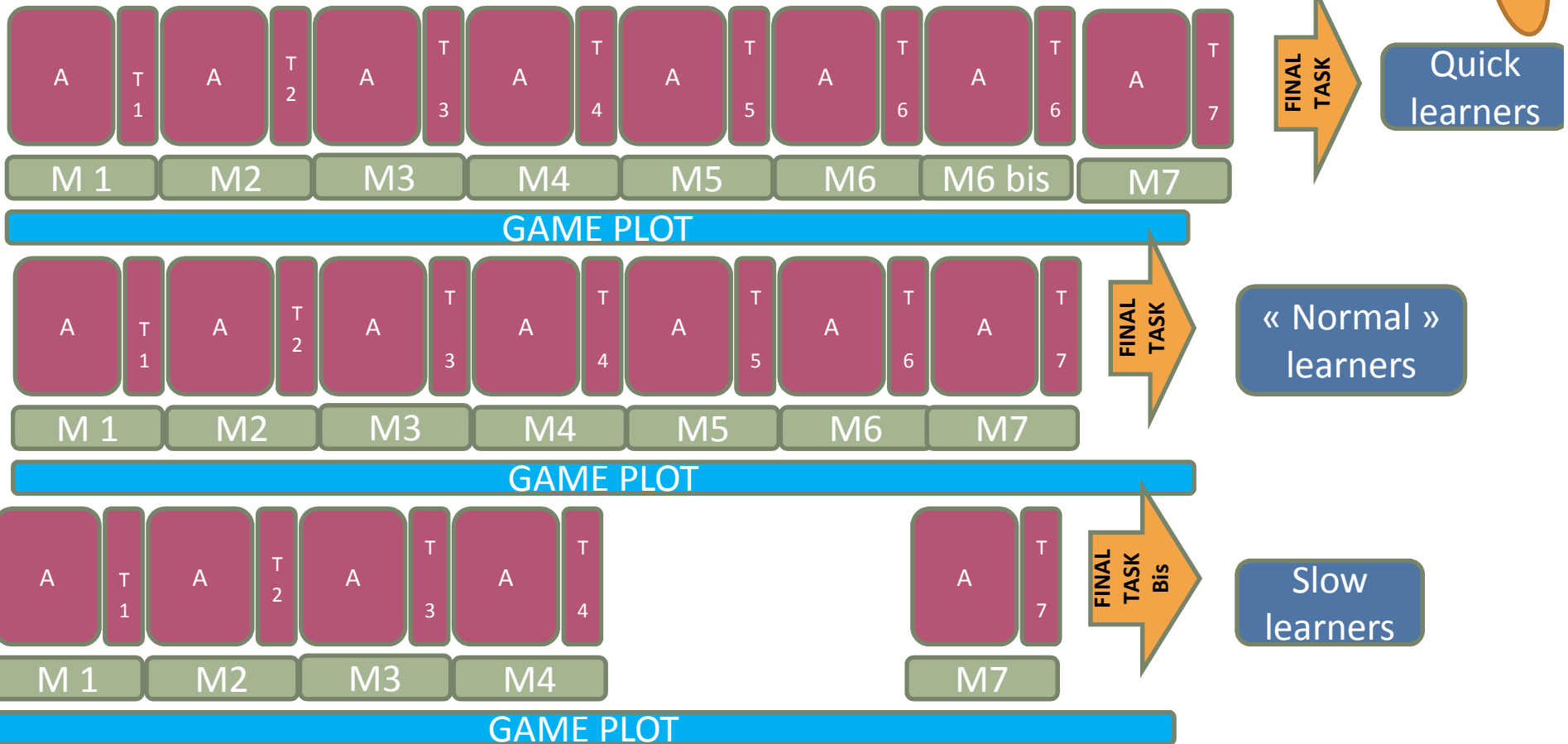
Calendrier 2017 - 2018

Année 1



The structures (2)

3 different paths => adaptability to learners' diversity





Fluence

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