



QUIS?

ABSTRACT

Language learning is an important part of our culture in Switzerland. However, in the actual education system of our country there is little space for speaking practice and direct exchange with native speaker of the language to learn. I decided to address this issue by taking into account the extremely rich linguistic context of Switzerland.

After various researches and tests, I imagined QUIS, a tool in a mobile application form that would support what student learn at school. It takes the form of a guessing game that connects two native speakers of different languages and helps them improve their language skills by interacting with each other, via text or video. It is a social platform combined with gamification aspect that should help building mutually beneficial relationships and improve the motivation to learn. It offers a playful solution for the lack of direct and spontaneous exchange when learning a language.

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Title: QUIS?
Author: Mélanie Abbet
Matrikel-Nr.: 17-683-228
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© Zurich University of the Arts
Department Design, Interaction Design
Mentors: Joëlle Bitton and Verena Ziegler
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INTRODUCTION

Languages are a part of us, it can be seen as described by Kovach and as the foundation of a nation's identity. Switzerland has acknowledged this importance in the past by establishing some rules in the constitution about its languages. Actually languages are the direct mean of communication through which generations transmit their culture.

« *language matters because it holds within it a people's worldview* »

(KOVACH, 2009, P.59)

Languages have therefore a relational aspect. Learning a new language also means discovering a new way of thinking. Based on this principle, Switzerland, which has four national languages, shows a certain broadness and diversity. This cultural and linguistic diversity concentrated geographically on a single small sized territory is the source of inspiration for this research. This chance Switzerland offers not fully appreciate was back in the years 1990.

« *Switzerland would have all the assets to be a recognised model of language learning. However, this is not the case. The majority of Swiss people are unable to read a newspaper in a national language other than their own. The negative representations that the language communities have of each other hamper learning. They are relayed by our education systems, jealous of their prerogatives and reluctant to exploit the fantastic potential of our linguistic richness.* »

Nowadays the situation has evolved, however regarding my own experience and the feedback of other students, languages are still not a prime concern for everybody. With this research I am looking forward to get to know which actions were taken and how successful they were in order to establish how I as designer can influence the development of this movement of language learning.

(GIANNI, 1998, P. 6, TRAD. M.A)

RESEARCH FIELD

1. THE SWISS CONTEXT

GENERAL POLITICS AND ORGANISATION

Switzerland is composed of 26 different cantons and about 2200 municipalities. Like other countries such as Austria, Germany and the United States, Switzerland is a federal system. The 26 cantons together form a federal state whose political authority is divided into three levels: confederation, cantons and communes.

This superposition of authority and competence makes the Swiss system complex and can consequently be slow at times. Municipalities which are either represented by a parliament or a direct democracy and are in charge of education. Although the cantons have a say in the organisation of schools. Nevertheless, the communes do have a certain amount of freedom in the management of their schools (Vincent Golay, Mix & remix, 2010). For this reason, not all cantons and communes follow the same education system, therefore we can notice regional variations. [See 1, P.9]

EDUCATION SYSTEM AND LANGUAGES

In Switzerland, language teaching has always been of great importance and has always been the subject of many debates. According to the Swiss Conference of Cantonal Ministers of Education (CDPE), discussions on adding a second language to the primary school system began as early as the 1970s. In 1990, most cantons included a second national language in their curricula from the sixth or seventh grade onwards, and then in 2000 English also became compulsory in schools. It was an indispensable tool for the country's international future, but one that was not integrated without concern, as can be seen in a 1989 report by the CDPE. Gianni describe the same concern:

« [...] *the risks to Switzerland's four-language identity linked to the spread of English* »

(GIANNI, 1998, P. 5, TRAD. M.A)

The debate on priority languages was then initiated. Which foreign language should be taught first? In 2004 a compromise and objectives are set at national level. Two additional languages are to be learnt in any order of priority. The level of these two languages at the end of obligatory schooling must be similar. This compromise: the concordat HarmoS, an attempt at standardisation, is gradually being established. The learning of two mandatory foreign languages is part of the curriculum as well as certain defined learning objectives. The optional offer of a second national language is also integrated. However, no precise study plan is defined at national level for languages.

« [...] *at the Swiss level, educational objectives are harmonised only by defining basic skills; there has been and will be no national curriculum.*»

The cantons are therefore organising between themselves and in 2015 a plan for the French-speaking part of Switzerland (PER) to standardise the school curriculum will be introduced, while the German-speaking regions are considering a similar agreement. As for Ticino, it is the only canton to have introduced three foreign languages into its curriculum and it is developing its own system. (CDPE, 2018).

Romansh is the only national language that has been marginalised. Although the country defends language rights as much as possible for minorities, this language is not integrated at all into the diverse school system. It would be a great challenge to revitalized this language, rediscovering it and integrating it into our current education system, and it is obviously necessary, as it is even reportedly being eroded. (Rouven Gueissaz 2019). As I defined my space of action being the school system, it is possible that I will have to put Romansh aside. However, I will keep in mind this challenge and will not close the possibility to integrate this language to my final project if it is possible and coherent with my findings. In any case and independently of their languages, linking the different cantons in learning is one of my fundamental objectives, thus including Romansh-speaking territory.

Regarding language abilities in Switzerland and their evolution through this period of change, a report by the Federal Statistical Office written on 2014 (FSO) about the current state of languages shows that Swiss people regularly use more than one language, primarily in the professional field. However, it is also becoming increasingly common for the main language of communication to become English when nationals of different language parts interact. (Amélie de Flauger-gues, FSO, 2014). This survey demonstrates that many citizens do not feel comfortable in several national languages. Which is probably one reason although English is absolutely necessary on an international level, why the Swiss are very aware of the importance of national languages.

« English can allow us to exchange all the information we want, but not to know each other [...] »

(GRIN, 2014, P.14)

In 2007, no common exchange strategy was put in place by the cantons. Compromises have already been made. However, languages are a major economic asset and are indispensable in today's society. That why an interest in multilingualism and a wish for more mobility in the country and at the international level is more present recently. In order to maintain its linguistic attractiveness, Switzerland has always been confronted with the challenge of languages, as François Grin describes it:

« Switzerland's special language arrangement requires constant «work». [...] Is this necessity fully understood? Probably not yet. But it is to be hoped that it will be soon. »

It is therefore quite natural that another national movement: exchange and mobility, on domestic and international mobility is set up in 2017.

« There is today a potential for development at all levels of education and in all fields of exchange and mobility. »

(CDPE AND CO, 2017, P.2, TRAD. M.A)

The long-term aim of this recent initiative is to develop and promote exchange strategies at national and international level. In the shorter term up to now, the aim is to strengthen existing measures as well as to test and develop new approaches. This movement for change and this call for initiatives reinforces my choice of thesis. The ground is ready, the desire and the ambition of the country are present but the subject being extremely recent it leaves me a great range of action as a designer.

2. HYPOTHESIS

I hypothesize that the context of Switzerland is a great opportunity in language learning, that this opportunity is not yet fully developed in our education system and that as designer I can possibly help find possibilities or space of action using this unique context by creating non-complex interactions in order to create more exchange when learning.

I hypothesize that there is currently a lack of interest or motivation regarding Swiss languages and that the original Swiss context could help improve the motivation by bringing more connection and interactions through the country between student allowing them to create a stronger bound with the language.

(GRIN, 2010, P.18, TRAD. M.A)

	VAUD	1P = 45 min										
		Cycle 1				Cycle 2				Cycle 3		
		Enfantine		Primaire		Primaire		Transition		VP/VG		
		Année 1	Année 2	Année 3	Année 4	Année 5	Année 6	Année 7	Année 8	Année 9	Année 10	Année 11
Total P		18P	26P	28P	28P	28P	28P	32P	32P	33P	33P	33P
Français		20%	30%	10		9	9	7	7	6	6	6
Math		10%	20%	5		5	5	5	5	5	5	5
Science								2	2	2	2 ou 3	2
Histoire/relig	5%	10%	4		4	4		2	2	2	2	2
Géographie								2	2	2	2	2
Arts visuels			2		3	3		2	2	1 ou 2	1 ou 2	1 ou 2
Musique	13%	13%	2					2	2	1	1	1
AM			2		2	2		2	2	1 ou 2	1 ou 2	1 ou 2
EPS	17%	12%	3		3	3		3	3	3	3	3
Basics	35%	15%										
Allemand					2	2		3	3	3	3	3
Anglais								2	2	3	3	3
Options										4	4	4

	AARGAU	1P = 45 min										
		Cycle 1		Cycle 2				Cycle 3				
		Enfantine		Primaire		Primaire		Transition		sekundarschule optional		
				Année 3	Année 4	Année 5	Année 6	Année 7	Année 8	Année 9	Année 10	Année 11
Total P				20P	22P	27P	28P	28P	31P	33P	32P	29P
Français									4	4	3opt	3opt
Math				4	5	5	5	5	5	5	5	5
Science										2	3	3
Histoire/relig				3.5P		4.5P	5	6	6	3	2	2
Géographie										2	2	3
Arts visuels					2	2	2	2	2	2	2	2
Musique					2	1	1.5P	1.5P	2	2	1	1
AM				3	2	3	3	3	2	2	2	2
EPS				3		3	3	3	3	3	3	3
Basics												
Allemand				4.5P	4.5P	5.5P	5.5P	5.5P	5	5	5	5
Anglais						3	3	2	2	3	3opt	3opt
Options												
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3. RESEARCH QUESTIONS

During this thesis I am going to research about the actual language learning situation in Switzerland in order to define the consistency of my assumptions.

What is the actual situation in language learning in Switzerland, how has this situation evolved during the last few years and what are the actual tendencies?

This should allow me to get an insight about the direction Switzerland has taken and how the Swiss context is used in the education system, if it is optimal and where there is place for improvement. Which follow then with a second question:

What can I as a designer, offer as an improvement to the actual situation that differ from the solutions existing, that will take advantage of the Swiss context and have a positive impact on the education?

4. METHODOLOGY

LITTERATURES

My space of action is Switzerland, and as my wish is to be as close as possible to the reality in the development of my project, my main literature sources are going to be the archive of Swiss organisations and Conferences. Therefore, the CDPE, Swiss Conference of Cantonal Ministers of Education will frequently be mentioned as my topic is closely related to the educational system. Furthermore, the agency Movetia and its representatives will play equitably an important role in this thesis as they represent the exchange and mobility movement in Switzerland. In other words, if I manage to create a connection with them, they could hold the role of expert about the subject. Regarding other sources, I am going to gather different sources and I try as much as possible to found authors and actors from Switzerland or that are closely related to language learning topics and innovation in education.

INTERVIEWS AND TALKS

Interviews in my situation are complicated as the education system can be very closed. The first and easiest category of people I intend to focus on people around 20 years old (5 to 10 people) in order to get their feeling about their own education. Those interview would represent an introduction to the topic.

[1]

Then in order to get an insight on the actual situation I intend to create a questionnaire addressed to the professors teaching foreign national language. As they are expert in the theme of language learning and are whom represent the actual situation the best. My goal is to get, ideally 3-8 answers from each French, German, and Italian speaking regions. Therefore, I need to translate or find a translator to adapt the questionnaire to each region. The second group of person I intend to interview to get a second perspective are students from different regions, however due to privacy constraints it might be a problem and I will consider myself happy with up to 10 students from different schools. In a third step if it is possible I would like to interview personally at least one professor or one student depending on the evolution of my project regarding a concept and get feedbacks regularly about what I am creating.

Finally, I intend to interview what I will describe as well as an expert, the directors or a representative of Movetia and get official information about the actual situation as well as a feedback about the direction I should take to stay coherent.

PROTOTYPES

Through experiments, that could be describe as rapid prototypes I intend to get feedback from teachers and students and experts from Movetia to redirect myself through the process of design making. This loop of prototypes and feedback should allow me to define the form of a coherent project.

5. INTENDED CONTRIBUTION

PERSONAL EXPERIENCE

As described by Wilson in his book «Research is Ceremony» (2008), I believe it is important that I develop and explain my journey a little in order to make my research more understandable. These two authors agree on the fact that a researcher's past, his or her life experiences, serve to signify and influence the research he or she will conduct, that it is all about relationships. Besides I have a special relationship with languages, and this interest in languages grows from my different experiences.

« *Research must use relational accountability* » « *[...] everything needs to be seen within the context of the relationships it represents.* »

(KOVACH, 2009, P.57)

I come from the Romandie, the French-speaking part of Switzerland. I have had difficulties with languages throughout my schooling. Although languages have never been my favourite school subject, learning them has always seemed meaningful and appealing to me, unlike some of my classmates who lacked motivation or interest in learning a new language, especially in the case of German. Unfortunately, the very academic teaching method used during my studies were not very successful in my case.

I remember always having a hard time keeping up with the pace and finding motivation. The first really stimulating experience I was lucky enough to have thanks to my teacher was a school exchange. This two-week Swiss-German exchange changed my way of apprehending languages. A few years later I completed a bilingual gymnasium, which in my case consisted in going to study for a year in a German gymnasium. After my return to Switzerland I also decided to go and study in the German-speaking part of Switzerland. Finally during my higher education I participated in a new inter-university exchange in Montreal.

These various experiences during my studies reinforced my opinion that any learning of a living language should be intimately linked to direct human relations and personal experiences. Actually my short time in another university definitely activated my interest for languages. More than the relational aspect of languages, in Canada, I learn about the importance languages have for the identity one nation. Thanks to my teacher there I read those two books: «Indigenous methodologies» and «Research is ceremony» from Kovach and Wilson respectively. These books are one main inspiration of this research.

Through their book they approach the subject of indigenous people and the way we should adapt our methodologies of research to the different nations and cultures. For them the language is really important and they open the debate of how the languages that are slowly disappearing could be revitalized. That in respect of those nations culture. I immersed myself in this problematic of re-dissemination of those languages and the action that were or could be taken to avoid their complete disappearance. Therefore, once back in Switzerland I naturally turned my attention to the topics of languages and realised the luck and opportunity we have in this country.

In the case of Switzerland, by its configuration it is a country that is a perfect candidate to make the teaching of living languages more dynamic and tangible. Three of our national languages are taught in a majority of schools. This opportunity that the country offers starts getting attention but seems to be very poorly exploited or not at all, as I could not experiment any use of this opportunity during my school time. However, this opportunity could be the key to a more dynamic, interactive and motivating teaching.

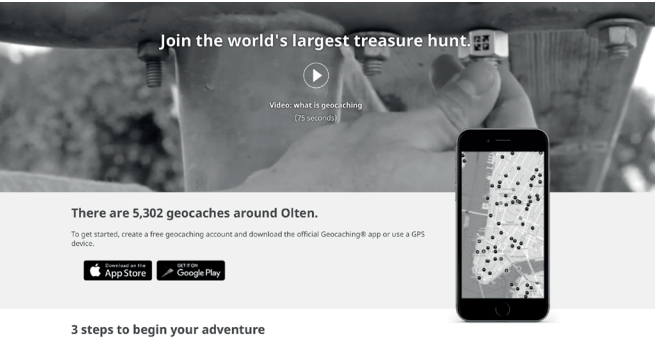
SPACE OF ACTION AND INTENT

My working context will be Switzerland, and more precisely the Swiss educational system. Switzerland is very proud of its multilin-gualism and cultural diversity, but there are countless differences between regions and cultural aspect that we don't share. The communication between the different region is also a problem due to the complexity of our system.


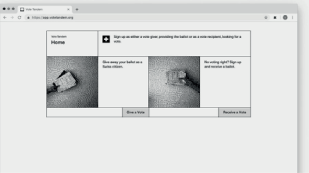
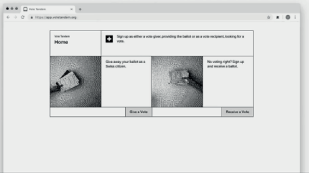

Languages are a fundamental aspect of our country and identity and my objective is to promote this idea between the generations via the education system. I chose this closed space for a variety of reasons but mainly because each Swiss child has to go through this system, which allows me to reach a wide range of the population. The context of learning and the mediums existing in this space are two others determining factors in my decision. I would like to help find new ways to promote languages and culture at school in order to inspire and motivate the students. Similar to the Geocaching Application that promotes adventure, creates a community and motivates people to go out by playing with the desire of searching, discovering and accomplishing some kind of challenge. With my project I wish to achieve a similar feeling of motivation implemented in my case with an encouragement of communication between the different part of Switzerland. Those communications between regions could give language learning more signification. To summarize my design should globally affect Switzerland, make people think about the current education system and the system of communication between different schools and cantons in a more general way.

In order to achieve that there are different paths I could take: Critical design or Future scenario for example. However, my desire is to offer a service that can be really applicable and not just hypothetical. The project votetandem created in 2019 by Daniel Holter & Vinzenz Leutenegger about voting in Switzerland is a good example of the type of challenge I wish to take on. Their work is definitely provocative but is not limited to something critical, it offers a new well-defined possibility. In my case, I will probably not be as critical as it is a reconsideration of an existing subject, which already have some existing solutions. However, to an extend I wish it to bring a new approach and to bring as a working solution.

[GEOCATCHING]



[VOTETANDEM]

votetandem.org	Une plateforme qui permet aux personnes politiquement exclues en Suisse de participer au vote - Simple à utiliser, sociale et destinée à perdurer.	Inscri- toi
Intégrer tous les citoyens à la politique  En Suisse, de nombreux habitants sont exclus des élections, la plupart d'entre eux étant étrangers et représentant 25 % de la population. Votetandem.org permet une possibilité directe de voter en rencontrant les Suisses qui fournissent leur vote pour l'échange. La plate-forme est basée sur la technologie Blockchain pour un fonctionnement sécurisé et indépendant.		
Comment cela fonctionne		
Le donneur de vote		Le receveur de vote
		
1a. Inscris un vote Le donneur de vote inscrit son bulletin de vote et indique le lieu, l'heure et la date sur la plate-forme pour le rendre disponible.		1b. Sélectionne un vote Le receveur de vote cherche un des bulletins de vote listés sur la plate-forme et fixe ainsi la rencontre.
2. Rendez-vous		 Tous deux se réunissent à l'endroit établi, discutent et le donneur de vote remplit

CONCEPT

1. INTRODUCTION

In order to establish a concept that responds to a real need or opportunity, the advice of experts such as professors and researchers as well as an analyse of existing projects are indispensable. In this chapter I question my first ideas on the subject and I establish the necessary bases for the definition of more tangible ideas for the creation of the first prototypes.

2. DESK RESEARCH

LANGUAGE LEARNING AND MOTIVATION

Firstly, motivation to learn a language is an important part, or should be an important part, of education. The first challenge is to understand the existing preconceptions about Swiss languages, how they are perceived, their beauty or their usefulness. These prejudices on languages, such as the complexity of a language or so-called rough dialects, are very common and can have a negative impact on the way in which they are perceived and learned. (Schwarz, Shahidi and Cuonz, 2006). Exchanges are a good way to break the wall of the culture and to clear the misunderstandings and stereotypes than can exists according to Stefan Brunner (an author that analyse the benefit of some exchange programs existing). In the school context, the question of usefulness or uselessness is also frequently raised. The challenge in this case is to make the learning of these languages desirable and understandable to the child outside the theoretical framework in order to avoid discouragement or misunderstanding of the subject. Contacts are therefore the best way to present a language in an authentic situation and reflect directly its usability, making the learning process more engaging. This challenge of authenticity and reality fits with my opinion of the cultural aspect of the language: the knowledge about a domain or a region should also serve to awaken interest in learning a language. After all, languages are of oral origines and communication is the fundamental goal of languages.

« *The teaching of foreign languages also includes the development of intercultural skills as well as adaptability.* »

(HEINZMANN AND AL. 2015)

« *[...] a desire to make contacts with others is the basis of all language and cultural learning.* »

(WANG-SZILAS, 2016, P.4, TRAD. M.A)

According to Heinzman and al, contacts between speakers of different languages is considered. as a source of motivation and are ideal to influence positively a feeling about a culture or a defined language. Also, having the same kind of group participating, same age and same social status are criteria that influences the benefit of a contact.

Secondly, learning a language is a challenge for any individual. Since the basis of a language has many different theoretical aspects to memorize, such as grammar and lexicon, the task can be arduous and quickly discouraging. Various studies concerning the memorization of language lexicons have already been conducted, for example in relation to singing and music by Camille Bourne in 2019, who defended emotions and feelings as the basis of all language learning. The trick is probably to find a good balance between theory, games, efficiency and interactivity in order to keep a constant motivation. The paper of Malin Aas Berg and Sobah Abbas Petersen about a mobile game describes one aspect of gamification that could be worth more investigation for my project. The creation of content by the users themselves is one facet of motivation. This aspect of self-experimenting is also discussed

in the text of Wang-Szilas and the learning process that involves learners themselves is definitely something I will try to implement in my concept.

« *Learning is a collaborative activity where the learners themselves play an active role in constructing meaning and creating the knowledge through various activities.* »

APPROACH TO LANGUAGES AND TECHNOLOGIES

Language learning has been evolving over the years with the development of the Internet and with the new technologies made available to the various institutions. In addition to the eternal combination of blackboard and chalk, most schools have integrated computers or interactive whiteboards. Some German-speaking schools in Switzerland have integrated iPads in some of their schools as course material and support. Technology and computers are present in many ways in schools. These drastic changes in teaching aids opens the door to new learning methods and new interests such as learning programming languages for example. (Zünd, 2018). However most of the schools are still sceptic and have not yet invested a lot of time thinking about how technologies can be implemented more consistently during classes.

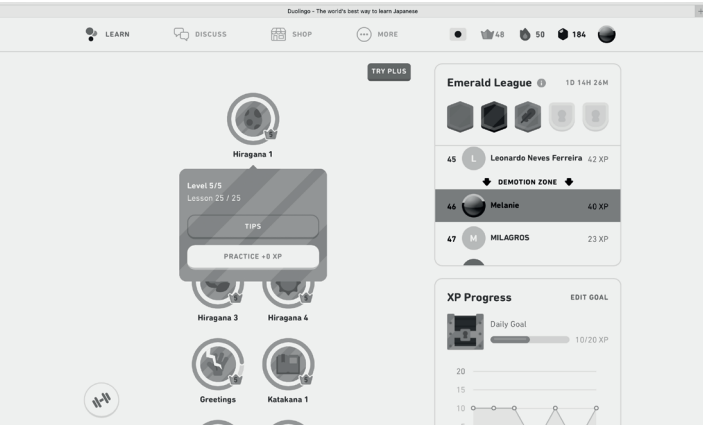
Regarding languages, nowadays it can be self-taught at home thanks to applications, such as Duolingo or Babbel, without travelling. These applications can offer vocabulary, recorded examples and little exercises sometimes. It is only efficient to a certain point however; because they do not offer real communication or live spelling corrections. In other words it does not test the student's capacity to communicate, and the user doesn't feel part of a community. The aspect of relation is missing sometimes in such application.

However, other applications exist: networking applications which connect people and allow them to learn by video conferences, to discuss and maintain the aspect of real contacts which are the essence of language learning. These applications like Tandem mostly support the wish of independent people motivated to improve their language skills. According to statistics, about one fifth of adults over 25 years of age are personally involved in learning a new language. (Flaugergues, OFS, 2016) This is showing that people miss or feel necessary to acquire this kind of knowledge.

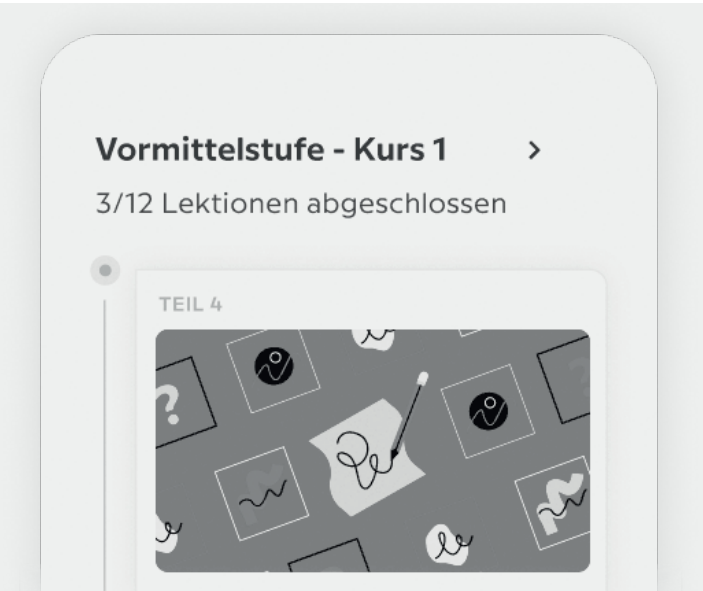
In schools there is the question of integrating technologies in the language learning process, as support for connection like Move-tia or as medium like the research of Wang-Szilas (2016) about integrating video conference partners and challenge to fulfil together as part of the lesson. That way technologies could support this aspect of relation in language learning. IA are mentioned in the text of Silva with the Robot Nao, a robot of human form that is programmable and could be used in an educational environment. Depending on the programme it could be able to respond to the need of the student and allow them to practice speaking skill in a different environment than usual. The use of robotics is also further mentioned with the project Ludibot, a research more specific about language learning. A project that sees robotics as a new medium that could work jointly with teachers and liberate them from repetitive and time consuming tasks. It also visualises the robot as envisioning a tutor that is present and ready to interact and discuss with learners at any given time. However, it arises the question of the relation with IA and robots, and if it really can replace or be similar to human contacts in the context of language learning.

(N.D, P.261)

[DUOLINGO]



[BABBEL]



3. RELATED PROJECT

WANG-SZILAS

Wang-Szilas, J. (2016). *Les enjeux de l'intégration de l'eTandem en didactique des langues-culturels étrangères : interaction entre apprenants et dynamique institutionnelle dans un dispositif universitaire sino-francophone.* Linguistique. Université Sorbonne Paris cité.

Wang-Szilas' thesis focuses on eTandem language learning in the context of university. She concretized his thesis by launching a Chinese-French eTandem project. He set out a theoretical framework for language learning, the place of culture and interactions in learning, and various acquisition strategies. She then developed the notion of eTandem and the implications and problems that derive from it before considering the results of her project from the point of view of institutions and students. In a sense, the approach of Wang-Szilas in her thesis is similar to the approach I chose myself. She is convinced that learning a language is based on the desire to exchange with others, and she wants to integrate more interactions and contacts between two people speaking different languages into the learning process. In his case, she achieved it through the eTandem. This aspect of real exchange between culture and learner is an aspect that I would like to integrate into my project as well. When carrying out her project, she takes into account the complexity that a partnership between different institutions can create. This complexity, which I have also briefly experienced by analysing the different Swiss systems, is a significant factor in my project. Wang-Szilas takes into account all these different factors.

(WANG-SZILAS, 2016, P.14, TRAD. M.A)

« *We try to discover the dynamics of the institutional integration of the eTandem by taking into account the interdependence of multiple factors: the learner, his/her partner, the teachers and the environment (institutional contexts, materials and computer supports).* »

In my research project the same factors will be taken into account, such as the teachers and their work methods, the different course subjects and objectives. However, in contrast to this study, my project is not only about a compromise between two specific institutions, it is about offering an adjustable and malleable support in order to ideally cover all Swiss institutions. It will therefore be difficult for me to establish very specific links between teachers of different institutions, links that he describes in his text as necessary for the smooth running of such a project. Part of my challenge will therefore be to overcome this problem. From reading this thesis however, I am still convinced that my project must be adapted to the Swiss education system. The great success of this innovative eTandem project is, as described by Wang-Szilas after observing the tests carried out, to mix formal and informal learning. In other words, leave a part of improvisation and self-doing to the student. That something I will also look to include into my project.

(WANG-SZILAS, 2016, P.40, TRAD. M.A)

«*The class offers a traditional organized course, but limits authentic communication and cultural contact. Formal learning requires more pedagogical constraints, more respect for the didactic contract and the tasks are often highly structured. Communication in an authentic environment, on the other hand, optimizes contact with native speakers and requires maximum performance, but the learner develops few language and cultural skills because he receives little feedback and/or coaching. Informal acquisition requires more willpower, motivation and management, as it is easily distanced from learning. The ideal is to find situations that combine the advantages of both contexts.* »

MALIN AAS BERG AND SOBAH ABBAS PETERSEN

Malin Aas Berg, Sobah Abbas Petersen. (n.d) Exploiting Psychological Needs to increase Motivation for Learning, In B.B (Minhua MA, Manuel Fradinho Oliveira, Sobah Petersen and Jannicke Baalsrud Hauge), Serious Game Development and Applications (pp.260-265). Nordway: Springer

Berg and Petersen are both from the University of Science and Technology of Norway, in this paper they present a game that supports language learning. Their main goal was to define if the creation of the user's own content affect in a positive way the motivation to learn. In order to achieve that they create a game that offers possibilities of creation, collaboration and competition. The main reason of those various possibilities is because they defined that learners are all different and have therefore different needs.

The first need “creation” is represented by the possibility to create quizzes or puzzles. This need is based on the fact that constructing, and organizing materials that could be named your own is a source of motivation. The second need “collaboration” brings the feeling of accomplishment, and usefulness to the user. This aspect is represented in their game by sharing content and collaborative creations. In other word: creating something that other could use, enjoy and modify as they wish. The last need “competition” would play with the ambition of the users. Users are more motivated if they can achieve a certain success and get recognition for their achievements.

These needs are also reflected in other projects to a certain extend and are good material for my concept as the two author successfully attest that being aware of those needs could improve motivation.

« User studies conducted indicate that learners are motivated by the fact that they can create their own content and their motivation increases significantly as they create the quizzes and play the games. This indicates that addressing the psychological needs of learners do affect their motivation and learning»

LUDIBOT

The project Ludibot by Alejandro Ojeda, Haydée Silva and Alberto Soria, (2016). Silva, H- (2019). Apprentissage des langues, jeu et robotique: Le projet Ludibot. Alsic [en ligne], 22(1).

The project Ludibot is part of a research about the actual growing complexity of language learning. In this text, Haydée Silva examines the Ludibot project about the new technologies and the possibilities they bring in the field of education. More specifically, he explores the place that robotics can have in the field of linguistics and culture. The text also also approaches the theme of games in language learning.

«Make teaching more playful, strengthen the role of digital tools, encourage the values of participation, exploration and valorisation of error: These are all paths that the members of the Ludibot project wish to follow by associating robotics with DLC (didactics of languages and culture) and games. »

Several issues are addressed in the development of this project such as the need for a theoretical framework and a specific environment for learning, the possibility to create new teaching tools or the possibility of verbal and non-verbal interaction that can characterize language learning.

The first prototype is a mobile robot use for a classroom or a media library that does not have human form and is composed of control means such as cameras and motors but also of a game: From head to toe. A game that would be for a collective or individual use and consisting of an exercise to identify and learn body parts by naming and designating them. The robot thus plays the role of partner and master of the game.

This project seems relevant to me because it demonstrates the possibilities that current technology can offer. I think that technology can be a playful medium that awakens curiosity and the desire for discovery. However, I am also aware of the disadvantages of this kind of technology, whether in terms of budget or flexibility

« When learning a language, language interaction, game and robotics, used to good purpose, are also able to provide learners with opportunities to be amazed and to learn better. »

(SILVA, 2019, P.12, TRAD. M.A)

(BERG, PETERSEN, N.D, P.265)

(SILVA, 2019, P.4, TRAD. M.A)

MOVETIA

Movetia.ch is a web platform managed by Movetia, an official Swiss agency in charge of promoting exchanges and mobility throughout the country. Supported by the federation and the recent FPEM foundation (Swiss Foundation for the Promotion of Exchanges and Mobility), it is part of a common strategy to strengthen and improve exchanges and mobility in Switzerland.

« Exchanges and mobility raise awareness of other cultures and encourage interaction with them, they stimulate the acquisition of language skills as well as the motivation to learn languages [...]. »

With this new foundation, the cantons and the confederation have committed themselves to a progressive development in the field of exchange and mobility. This will be mainly achieved by gradually releasing financial aid of greater consequence (they project to release about 10 million for national program in the years 2021-2024) and by the improvement of the monitoring of this field of activity or in other words: by collecting more data. (Movetia, 2018)

Movetia.ch offers various functions for school teachers, individual exchanges and classes. It functions as a portal with the Match & Move function for teachers looking to find classes to correspond or exchange with. On one hand users can create an entry with an explanation about what kind of exchange they are looking for and about what characteristics they have, like the number of students and the level of the class. On the other hand, users can search through the map with a possibility to add filters in order to see if an entry that fulfils their wish is already existing. If it is the case, they can then get in touch. On the platform there is actually around 160 entries, but less that 10% concerns Italian classes or wish a relation with this language.

This platform of matching is nowadays not known from a lot of teachers as my research, interview and questionnaire will demonstrate. however according to their presentation in November 2019 and to the head of division school and adult education. They plan to promote it with more efficiency through 2020.

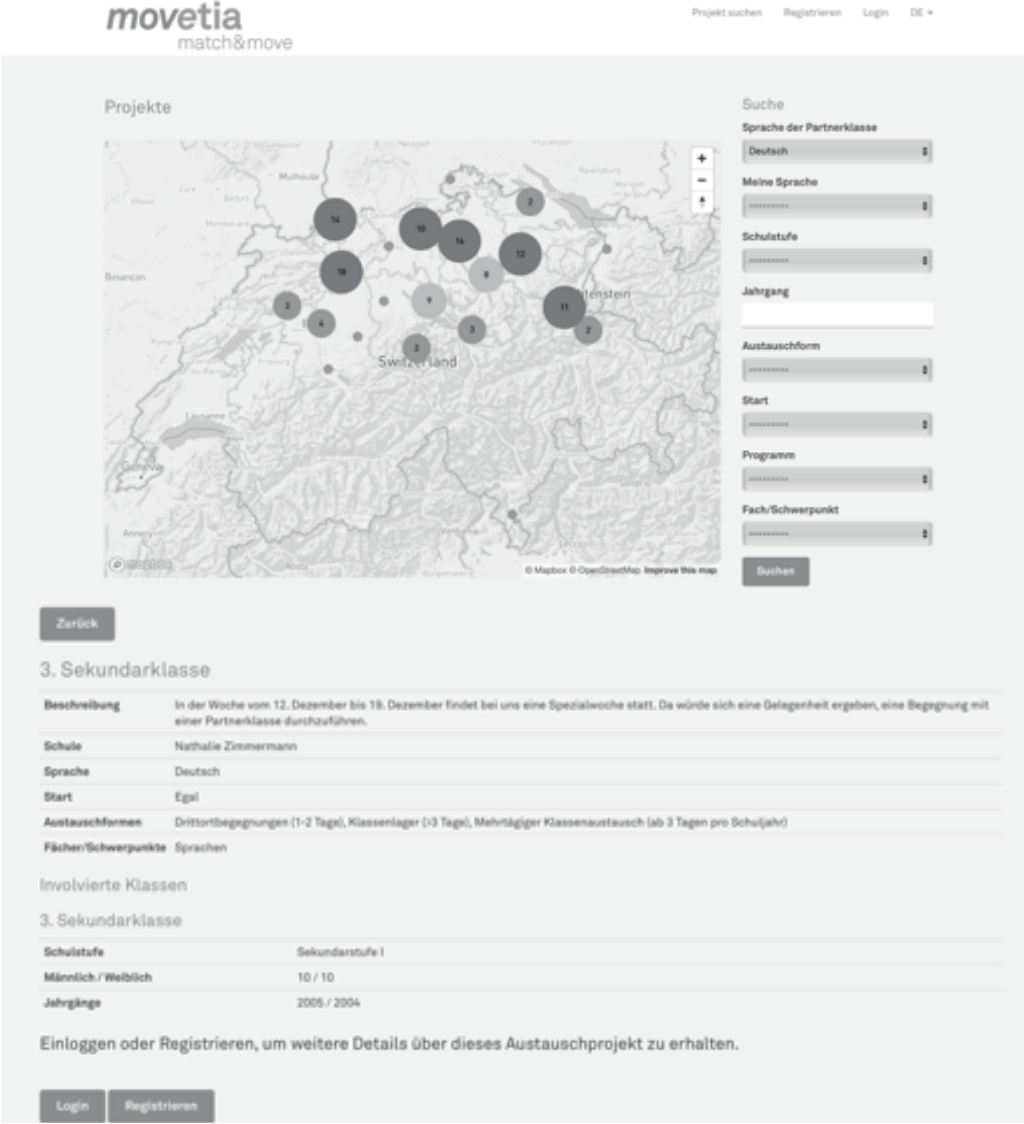
The agency also highlights existing exchange projects and events for classes but also for individual students, such as holiday exchanges. It also highlights teacher training and offers moral and budgetary support for the different kinds of exchange undertaken. The platform brings together all the different existing programs for Switzerland on a national and international level. However, it is mostly focused on classes exchange or relationship between schools. They encourage and test different programs.

Mostly for classes and students like the program Deux langues-ein Ziel, a partnership between schools that enable a half class rotational exchange of 9 days. Each student is paired with one student of the other region. This system of half classes gives the possibility to the teachers to stay at home and to follow, if they wish to do so the normal program or to create specials content. The students are on their side immersed in a different reality and follow real classes. The year that follow this experience, student have the possibility to individually go back in their guest family for two weeks.

Movetia also offers some Thematic Meetings. Those thematic days are events that tandem classes could choose to follow. These special days offer an original environment where students collaborate together around a specific theme. For example, the

(CDPE AND CO, 2017, P.4, TRAD.

[MATCH & MOVE]



Match&Move Movetia: <https://www.matchmove.ch/fr/projects/>

thematic Exchange and science, with the contribution of the EPFL, reunites two different classes with experts that prepare activities like programming a robot and resolving mathematic challenges and that bring the student to work together for one or two day. They also offer tools or suggestions to enhance the exchange experience or to keep contact afterwards. They suggest for example to create bounds before the exchange by doing some exchanges of advent calendar between the two classes, composed of texts and drawings from the students. The creation of a cartoon with the photos taken during the exchange would allow them to keep a memory and express the feeling they experienced.

Movetia is also interested in technologies and the possibilities they bring. They are open to suggestions from institutions that wish to create new ways of exchange. The project AlpConnectar, in collaboration with Swisscom, represents for example a way technologies could take place in exchanges. This a pilot program that was tested during the year s2018-2019 in elementary classes (4th to 6th year of school). The idea was to use numeric technologies to work regularly with a partner class. This should allow students to improve their language and communication skills as well as their media literacy in an authentic environment. This should also give the possibility to the students to learn from each other as each student can be considered as a master in his or her own language. Some material as PCs, Tablets, beamers, webcams and microphones were put at the disposal from each class. Diverse exercises and thematics to discuss were established and put at the disposal of the teacher. For example, exercises in class of explaining some comic illustrations, the creation of questions to ask and subject to speak about with the partner class by the student themselves. They also organise online seminars beforehand with the teacher, to explain what can be done with the students and how new media can be used. The program duration is one year during at least one real physical meeting between the classes has to be realised.

This Movetia platform that I wasn't aware of until recently, especially the Match & Move page is close to the solution I could have considered. It is significantly related to my theme and can have a significant impact on my project. However, this platform is still recent and I believe it is little known or little used. The movement is moreover in full development a lot of different possibilities are offered. The platform calls for creativity and offers funding for several project proposals from institutions that wish to develop concepts promoting exchanges and mobility. One of the aspects of my project will therefore probably be the analysis of this new medium, its impact and effectiveness. According to the evolution of my project, I will be able to analyse the weak or missing areas and suggest an alternative, an improvement or a complement to this platform and the existing program.

LINGOBEE

LingoBee is a mobile application, which is based on crowd sourcing. By using an everyday life situation, the application collects content created by the users themselves. Users can create entries related to some objects, words or situations which can be in the form of a description, an image or multimedia. The entries are gathered and put at the disposal of the community. The people of this community which can be describes as learners have the possibility to add new descriptions or media to existing entries. A system of rating is also included; entries can be judged by the community using a system of stars. The idea is to co-construct

[EXCHANGE AND SCIENCE]



https://www.movetia.ch/fr/programmes/echange-de-classe/rencontres-thematiques/echange-science/

a data base by building and sharing photos, web-links and audio with other users and at the same time to gather vocabulary knowledge.

Different case studies have been done by introducing LingoBee into language classes. Petersen, Procter-Legg and Cacchione studied how LingoBee could be a support for language learning. They are of the opinion that learners and teachers could and should take advantage of the availability of mobile learning apps. They are convinced that formal learning formats, such as classes could benefit from a non-formal format like LingoBee. They suggest in their research that learners should have a bigger influence on how and where learning should happen, and that the learners should not be restricted to being of consumers of content but expended rather be allowed to become producers of content.

« Autodidacticism or self-directed learning is an important part of life-long learning. »

(PETERSEN AND CO, 2014, P.200)

LingoBee use the existing situation to create a concept of “anywhere, anytime” learning and interacting. Users can capture moments of their life to share something new or something they wish to share. However, the case studies that have been done show that there is more participation from the community if the teachers play a select role in the process.

They also observe a tendency to create own contents and put aside co-creation. Auto-learning and collaboration is a new approach to language learning. This new way of learning differs from the well-known teaching experience but is an experience that needs transition and that is why the support of teachers has been proven to bring better results. Bringing together a part of LingoBee with the experience learners got in their classes was a good way to make the transition and to use the application with efficiency.

(PETERSEN AND CO, 2014, P.216)

« When the learners were asked to use LingoBee autonomously as an additional support rather than as an integrated part of their classes and course requirements, their level of engagement in LingoBee was limited. [...] The case studies highlighted that the support and guidance provided within a teacher-led context can impact positively on learners' engagement and use of LingoBee. »

As already seen in the project of Wang-Sizlas there is once again the question of what non-formal learning could bring to learners if it is supervised to a certain extend. Adding to that the implementing of self-creating content by learners, this project reflects once again issues I will be confronted to in the realization of my project.

MEMRISE

Memrise is a mobile application that is partly developed by the users themselves. Therefore, the number of languages offered through the application is of great extent. In comparison to other basics languages learning tools, which only offer courses to follow, Memrise gives the possibility to create courses and share them, so that others can learn from them. It is mostly focused on vocabulary courses that are built in different level forms representing different themes of vocabulary for example. The words are presented to the learner together with some memory aids like pictures, examples of sentences, audio files or photos.

«Developers of the software believe that creating mental associations or «vivid encoding» is key to learning anything. »

(NUSHI AND EQBALI, 2017)

After seeing the words, the learners are tested with phrases to translate or with multi-choice definitions. Learners have the possibility to save difficult words to choose the number of words to learn and to do review sessions.

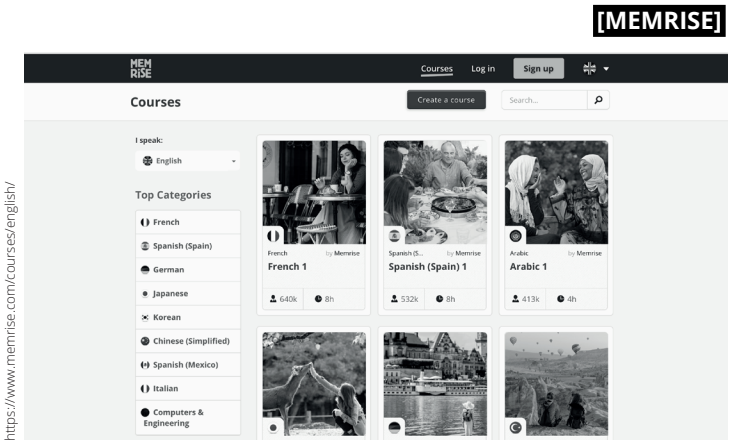
The positive point to retain from Memrise is the community and participative aspect of the application, which engages people in their learning. The gamification is also a source of motivation as the game attributes points for correct answers. To another perspective this application does not offer “contact to the reality of the languages” in other words: The experience. I also does not take others language criteria like grammar learning or speaking practice which are aspects that I believe eveny important in language learning.

TIKTOK

TikTok is the new fashionable application for young people, most of the user being minors still. A platform on which individuals present themselves in a different way than on Instagram or Facebook. Indeed, TikTok defends a trend of performance and challenge in a video format of a few seconds accompanied by music and effects. The medium is made to demonstrate a certain creativity and above all a desire to show off your skills. Like other popular applications, TikTok attracts brands. The Swiss Tourism agency sees this platform as a good opportunity to promote our landscapes and it seeks to hire young talents eager for adventure and nature in order to promote tourism in our country.

« This new platform is a promising channel for the younger generation to create emotional ties with Switzerland as a travel destination at an early stage. »

(SUISSE TOURISME, 2020, TRAD. M.A)



https://www.memrise.com/courses/english/

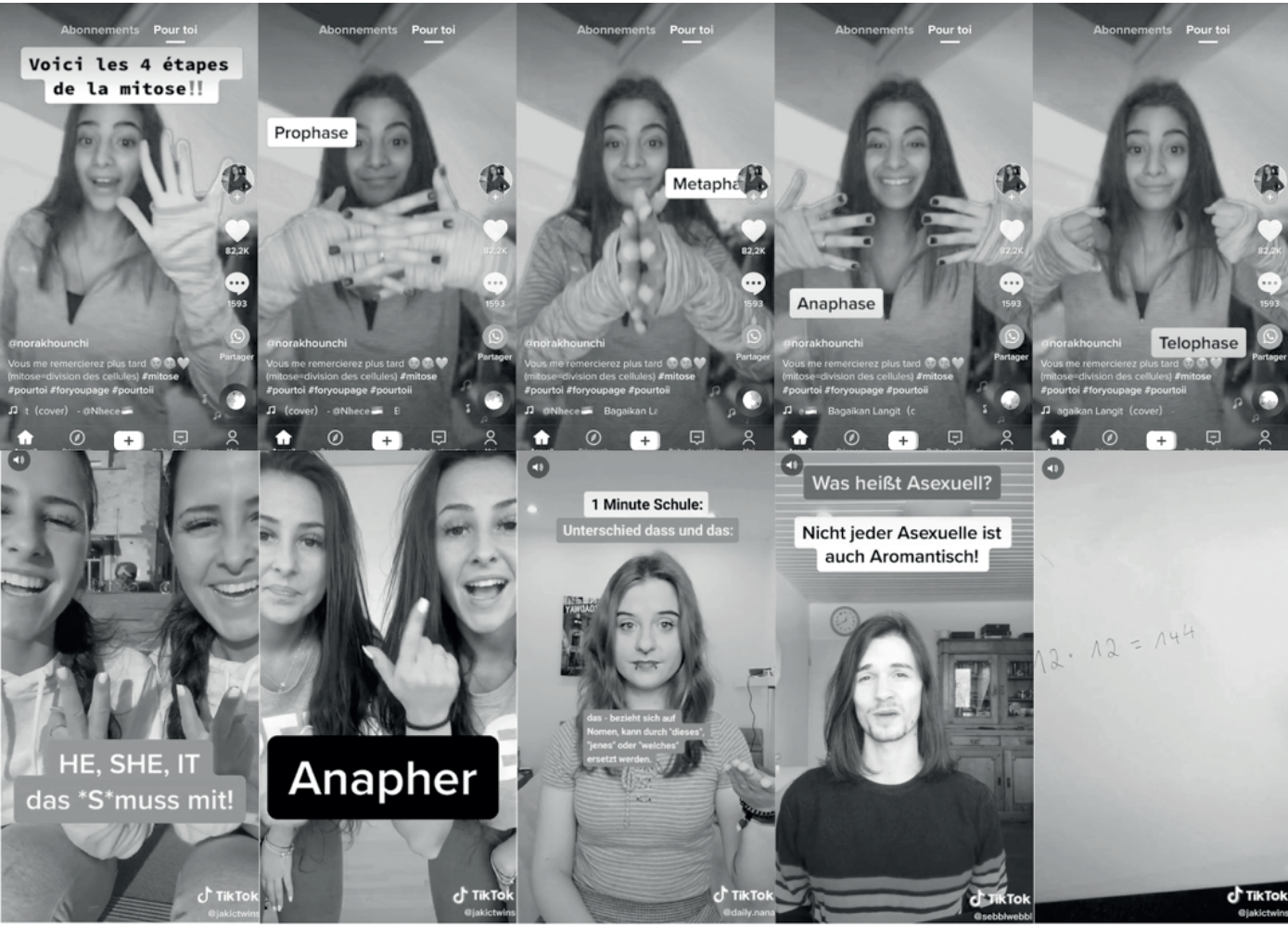
TikTok is using mini videos as a mean of drawing attention and has a undeniable potential to convey emotions as well as information and interaction. In this way it is common to have a chain of videos that respond to each other or even videos created with some other users. This potential outside of brands is also used by some content creators for explanatory or learning purposes although it is not widely spread on the platform.

An example is this young lady that explain the process of mitosis, a scientific concept. She describes the different stages of mitosis with the help of her hands.

The German hashtag #1minuteschule has also recently appeared on the platform. Under this trend, different little videos are produce about a lot of different topics; people share some basics tricks for mathematics, text writing and give their ideas or explanations about certain topics.

This potential for learning and collaboration is intriguing, so in the framework of my project it would be desirable to understand the mechanisms that attract young people to this medium in order to possibly implement them in a Swiss dedicated application focused specifically on Swiss culture and languages.

[TIKTOK]



4. USER STUDIES

INTRODUCTION

During my first researches in order to define more precisely my subject I went out in the city and was able to interview different people from Fribourg, Lausanne and Zurich. While discussing with these people about Switzerland and languages I realized that people talk about Swiss culture and its different facets quite naturally. While showing a certain pride in this diversity, most of them admitted that they do not fully enjoy it or do not know Switzerland as much as they would like to. Languages were also discussed a lot and from all the people I met no one was really comfortable with the other Swiss languages apart from their mother tongue. And what I found interesting is that they were all concern about the way they learn it at school and mostly thought it was not the right way to learnt a language. I could also perceive some stereotype about the different region and languages of Switzerland. So I realized that I would have to take a second look at the current school system to see how language curricula and the stereotypes of young people about Swiss languages and culture have changed in the last few years.

STUDENT

Firstly, I was interested in the children's point of view. But, with the education system being extremely closed in the French-speaking regions and without contact with the other regions of Switzerland, it was extremely difficult for me to question children. In the end I managed to get access to a small group via an extracurricular activity. This group of 5 young people from the canton of Vaud, aged between 11 and 13 years old, allowed me to get an idea of the children's current views on language learning, their motivation and their experience in the classroom. I discussed several aspects of languages together with this group.

My first question was: Is it important to learn national languages? Only two of the children admitted a certain importance for German, for reasons of work and communication. The rest of the girls were somewhat mitigated and didn't think German was extremely important and would not consider Italian, which they thought would be too much work on top of it. In comparison all agreed on the importance of English and linked this language mainly to tourism. As for motivation, in overall terms, being able to communicate abroad is a very motivating factor, according to them. Games and discussions in class are aspects of the courses that they particularly enjoy. With tests and exercises alone, learning vocabulary is considered a rather a negative aspect of language learning. When the question is asked, what would be an ideal course?

« Speaking in the language and learning more cultural aspect of the language by playing » « watching movies in the language».

(ANONYM, 2020)

To summarize, the playful and practical aspect of the language is an essential asset that they have identified and that motivates them, but which they claim should be more present.

Finally, I discussed with them the topic of exchanges and interactions between different Swiss classes. Two of the girls were delighted to tell me that they were going to participate or were

already participating in this kind of activity with their class. One of the two was having a correspondence with a Swiss-German student and the other one would soon participate in a class exchange. Both of them thought it was a great opportunity. As for more exchanges between classes or with other Swiss students, they were all very enthusiastic, they imagined that it would make learning more enjoyable and easier.

« I think it would be good to mingle and it would be easier » « It would be interesting, because we are with friends and we are learning while we are having fun. » « It would be fun and it would motivate us » « It would be more entertaining and I think we would be more interested in learning, but not sleeping at other people's houses I don't like it, just doing activities. »

TEACHERS

In a second step, I decided to conduct an inquiry on the professors in order to get their opinion on the evolution of teaching, on the methods available to them as well as on their room for manoeuvre in terms of exchange and interaction between Swiss people. As a result, I created an online questionnaire [see 2] translated into French and German and I passed it on to language teachers through my classmates or acquaintances. I was able to get 5 answers from the canton of Vaud and 3 from the canton of Zurich. Unfortunately, I was not able to introduce my questionnaire into the educational system of the Italian-speaking cantons. However, in view of the answers and my meeting with the Head of Division School education and Adult education of Movetia, I have already been able to get a good overview of the general situation.

In the canton of Vaud, I gathered the opinion of two Italian and three German teachers, teaching to people aged between the age of 10 to 15 years old. With one exception, these teachers do not regularly practice exchange activities such as written correspondence, audio-visual meetings and school outings. However, among the various possibilities of exchange, correspondence by letter with other Swiss classes as well as school trips to a Swiss region, are the activities most frequently mentioned. For Italian teachers the question of the budget is the biggest issue in the factors that play a role in the realization of such actions. However, in the opinion of teachers from all regions combined, the question of the organization, the search for partners and the administrative action with the time of personal investment that it requires, are the factors that are considered as most constraining. Some also consider that there is a lack in the existing structures. In general however, teachers feel that creating the content for possible interaction, motivating students and integrating those action into the programme are not serious problems in carrying out these exchange actions and most would feel supported by their school.

In the case of the Swiss German, although this sample is small, a difference in mentality can be perceived. The three teachers report that they carry out exchange activities even less frequently or not at all, except for one teacher who claims to go on excursions to another region of Switzerland with all their classes. As for the constraining factor, German-speaking teachers are rather well in line with the results of the teachers from the French-speaking regions.

As far as existing structures are concerned, none of the teachers in the German-speaking part of Switzerland are aware of the Movetia agency and their Match&Move platform, whereas in the

(ANONYM, 2020)

[2]

Bloc de questions par défaut

Bonjour,

Je suis une étudiante en 3ème de Bachelor en Design et je rédige actuellement mon mémoire.

Je fais des recherches sur **l'opportunité qu'offre le contexte suisse dans le cadre de l'enseignement linguistique à l'école obligatoire**.

Le but final de mon travail étant de réaliser un projet ou un support concret à l'usage des établissements.

Je vous propose de répondre à ce questionnaire qui va me permettre d'avoir le point de vue des enseignants de plusieurs établissements dans les différentes régions linguistique Suisse.

Le questionnaire prends entre 15-20 minutes à compléter et les réponses données seront anonymisées.

Je vous remercie par avance pour le temps accordé, votre aide m'est précieuse!

À quelles classes (HarmoS) enseignez-vous généralement?

☐ 1ère

☐ 2ème

☐ 3ème

☐ 4ème

☐ 13 bis 15 Jahre alt
☐ 15 bis 17 Jahre alt

Welche Sprache(n) unterrichten Sie?

☐ Französisch
☐ Italienisch
☐ Deutsch

Bloc 1

Nehmen Sie mit Ihren Klassen am nationalen und internationalen Austausch teil?

	Nie	selten	Regelmäßig	Immer
Schriftliche Korrespondenz mit anderen Schweizer Klassen	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Schriftliche Korrespondenz mit anderen ausländischen Klassen	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Direkter oder indirekter Austausch (Sprachkurse, Videokonferenzen, Treffen) mit Schweizer Schülern	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Direkter oder indirekter Austausch (Sprachkurse, Videokonferenzen, Treffen) mit ausländischen Schülern	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Schüler in eine andere Sprachregion der Schweiz	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mehrtägiger Austausch in der Schweiz	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mehrtägiger Austausch im Ausland	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Kommentar oder andere Arten des Austauschs gemacht?

[illegible]

Bloc 2

Kennen Sie das Schweizer Austausch- und Mobilitätsprogramm und dessen Plattform [movetia.ch](https://www.movetia.ch)?

☐ nein

☐ ja, aber ich benutze ihre Plattform nicht.

☐ ja, und ich benutze ihre Plattform.

☐ andres:

Was halten Sie von der Plattform [movetia.ch](https://www.movetia.ch)?

Bloc 3

Was sind Ihrer Meinung nach die Faktoren, welche unterschiedliche Austauschaktionen behindern oder verhindern?

	Nicht verbindlich	neutral	verbindlich
Zeitmangel in Ihrem Lehrplan	<input type="radio"/>		<input type="radio"/>
Schwierigkeiten bei der Integration in den Lernplan	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Fehlende institutionelle Unterstützung	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Das Budget	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mangel an bestehenden Austauschstrukturen	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Der damit verbundene Mangel an Lerngeheim	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	Pas du tout envisageable	Pas très envisageable	Moyennement envisageable	Assez envisageable	Totalement envisageable
Sortie scolaire dans une autre région linguistique Suisse	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Visites d'élèves d'autres régions linguistiques Suisses	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Participation à des événements inter-régionaux	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Attribution automatique d'un partenaire linguistique par élève	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Correspondence par emails entre élèves	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Correspondence par lettres entre élèves	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Echanges oraux par envoiements vocaux entre classes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Réunions par vidéo conférence entre classes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Réunion directe en sortie scolaire	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Echange de classe de plusieurs jours	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Accueil d'élèves en salle de classe	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Das persönliche Aspect des Austausches	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Anfrage an die Verwaltung nach Genehmigung	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Die Suche nach Partnern	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Organisation mit Partnern	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Die Entwicklung und Erstellung möglicher Interaktionen	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Die Organisation der Reise oder Aktivität	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Der administrative Aspekt im Allgemeinen	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Die Zeit, die für die Organisation aufgewendet wird	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mangelnde Motivation seitens der Studierenden	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Die persönliche Einbringung, die dies erfordert	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Kommentar oder andere Faktoren?

Bloc 4

Könten Sie sich vorstellen, diese verschiedenen Austauschaktionen zwischen Schweizer Regionen in Ihr Programm zu integrieren?

	ja	neutral	ja
Schreibe in eine andere Sprachregion der Schweiz	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Besuche an Schulen in anderen Sprachregionen der Schweiz	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Teilnahme an Interregionalen Veranstaltungen	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Echange d'entraides et de questions proposées via une plateforme	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Echange d'entraides à disposition des élèves hors classes via une plateforme	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Commentaire ou autres actions d'échanges?

Bloc 5

En partant du principe que l'enseignement des langues se modifie régulièrement.

Quelle est l'évolution ces dernières années?

Comment vous adapter vous à cette évolution?

Bloc 6

À votre avis, dans le domaine des langues pourquoi est-il nécessaire d'encourager et de chercher des moyens de communication, d'interactions entre les différents établissements des cantons Suisse?

Aufmutigende Zuumung eines Sprachpartners pro Schler	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
E-Mail-Korrespondenz zwischen Studierenden	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Korrespondenz durch Briefe zwischen Studierenden	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mündlicher Austausch durch Sprachaufnahmen zwischen den Klassen	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Videookonferenzen zwischen den Klassen	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Direkte Begegnung bei einem Schulauftrag	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mehrfacher Klassenaustausch	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Empfang der Studierenden in Klassenrömmern	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Austausch von Übungen und vorgeschlagenen Fragen über eine Plattform	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Übungsaustausch für Schüler außerhalb des Unterrichts über eine Plattform	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Kommentar oder andere Aktionen?

Bloc 5

Ausgehend von der Annahme, dass der Sprachunterricht regelmäßig wechselt:

Wie ist die Entwicklung in den letzten Jahren?

Bloc 7

N'hésitez pas à me laisser une remarque ou un commentaire supplémentaire si vous souhaitez vous exprimer sur un aspect du sujet que je n'ai pas développé au cours de ce questionnaire.

Bloc 8

Le but final de mon travail est de réaliser un projet concret. Pour y parvenir je vais définir et tester un concept afin de réaliser un prototype fonctionnel.

Si vous êtes intéressé à une brève interview concernant mon concept ou un premier prototype, merci de me laisser votre adresse mail. *Les données de ce questionnaire ne seront pas reliées à cette adresse mail.*

Produit par Qualitrics

Wie passen Sie sich auf diese Entwicklung an?

Bloc 6

Warum ist es Ihrer Meinung nach notwendig, Mittel zur Interaktion zwischen den verschiedenen Institutionen der Schweizer Kantone im Bereich der Sprachen zu suchen?

Bloc 7

Zögern Sie nicht, mir eine Bemerkung oder einen zusätzlichen Kommentar zu hinterlassen, wenn Sie sich zu einem Aspekt des Themas äußern möchten, den ich während dieses Fragebogens nicht entwickelt habe.

Bloc 8

Das Ziel meiner Arbeit ist die Realisierung eines konkreten Projektes. Um dies zu erreichen, werde ich ein Konzept definieren und testen, um einen funktionsfähigen Prototypen zu realisieren.

Wenn Sie an einem kurzen Interview über mein Konzept oder einen ersten Prototyp interessiert sind, hinterlassen Sie mir bitte Ihre E-Mail-

Q9. Participez-vous à des actions d'échanges nationaux et internationaux avec vos classes?

	Jamais	Rarement	Parfois	Régulièrement	Toujours
Correspondance écrite avec d'autres classes Suisses	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Correspondance écrite avec d'autres classes étrangères	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Echange directs ou indirects (enregistrements vocaux, vidéo conférence, rencontre) avec des élèves Suisses	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Echange directs ou indirects (enregistrements vocaux, vidéo conférence, rencontre) avec des élèves étrangers	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sortie scolaire dans une autre région linguistique en Suisse	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Echange de plusieurs jours en Suisse	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Echange de plusieurs jours l'étranger	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q10. Commentaire ou autres types d'échanges?

Q11. Connaissez-vous le programme Suisse: échange et mobilité et leur plateforme movetia.ch?

- ☒ Je ne connais pas
- ☐ J'en ai brièvement entendu parler
- ☐ Je connais un peu mais n'utilise pas leur plateforme
- ☐ Je connais et souhaite faire usage de leur plateforme prochainement
- ☐ Je connais et utilise déjà leur plateforme
- ☐ Autre:

Q12. Que pensez-vous de la plateforme movetia.ch?

Q9. Nehmen Sie mit Ihren Klassen am nationalen und internationalen Austausch teil?

	Nie	selten	Regelmäßig	Immer
Schriftliche Korrespondenz mit anderen Schweizer Klassen	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Schriftliche Korrespondenz mit anderen ausländischen Klassen	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Direkter oder indirekter Austausch (Sprachaufnahmen, Videokonferenzen, Treffen) mit Schweizer Schüler	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Direkter oder indirekter Austausch (Sprachaufnahmen, Videokonferenzen, Treffen) mit ausländischen Schüler.	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Schulreise in eine andere Sprachregion der Schweiz	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mehrtägiger Austausch in der Schweiz	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mehrtägiger Austausch im Ausland	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q10. Kommentar oder andere Arten des Austauschs gemacht?

Q11. Kennen Sie das Schweizer Austausch- und Mobilitätsprogramm und dessen Plattform movetia.ch?

- ☒ nein
- ☐ ja, aber ich benutze ihre Plattform nicht.
- ☐ ja, und ich benutze ihre Plattform.
- ☐ anders:

Q12. Was halten Sie von der Plattform movetia.ch?

Klingt spannend

French-speaking part of Switzerland two teachers are aware of the platform but do not use it and two teachers use it regularly. Regardless, all of them are rather open to integrating different exchange activities in their classes with a preference for inter-regional activities, predefined partner allocation, actual meetings between classes, exchange of exercise in class between different school or individually between pupils outside class via a platform.

« *The Movetia platform is very good and is often used by my students.*
» « *The platform is not very instinctive but its purpose is laudable.* »

(ANONYM, 2020)

Finally, with regard to the evolution of teaching over time and the strategies developed in the face of change, the French-speaking Swiss in particular describes a change in teaching that is more oriented towards action and practical learning. A shift towards authentic communication and an approach that would better demonstrate the importance of languages to students and would thus develop their motivation for learning.

« *In order to adapt myself I would need partners, but also authentic documents (with internet access, for example).* » « *I create a lot of new material and in order to get a constant motivation from the students. I try to make young people understand the importance of languages and communication. And I set up as many interactive activities as possible. I focus myself on real uses of languages in the context of everyday and modern life, adapted to the real needs of students and society.* »

(ANONYM, 2020)

On the Swiss-German side, although this evolution is less perceived by the teachers, the latter are nevertheless in complete agreement with their French-speaking neighbours on the importance of developing and encouraging interaction between cantons.

« *To break down boundaries.* » « *To promote opportunities for contact with the target language.* » « *Communication is the basis of a language. If students are confronted with fellow students who speak the foreign language they will be motivated to learn it in a communicative and interactive way. Connecting the learned language with reality, the school branch serves in everyday life. This is very important!* » « *It shows the children how important communication is and increases their motivation.* » « *In schools from the age of 12 onwards, exchange between the Swiss subcultures is important for the formation of personal and national identity. This should take place before military service and should include all young people.* » « *Networking makes sense*»

MOVETIA

My meeting with Christine Keller, the Head of Division School education and Adult education of Movetia allowed me to have an official and more global view of the situation as well as to better perceive the direction to follow. She confirmed my view of the complexity of the different Swiss education systems as well as the multitude of programmes and alliances existing between cantons, each one being specific in their own way. She revealed to me that the cantons having their own programmes and exchange agreements with other institutions participated more easily in exchanges than institutions lacking prior agreements, which may seem obvious. She briefly informed me on the existing programmes, the most relevant of them being the ones I described earlier in this paper.

5. FINDINGS AND ANALYSE

These different field studies allowed me to clearly define select needs on the part of the teachers as well as the opportunities for content creation and individual learning for the students. On the teacher's side and in Swiss society in general, there is a desire to increase exchange at the national level in order to make teaching more interactive and tangible for children. Teachers are in demand of facilitated exchange and sharing of content which would undeniably be beneficial for them. On the children's side, it is quite conceivable to address the issue of motivation to learn, which is still not optimal, by adding more natural interactions, and more voluntary individual investment on their part.

These two aspects are slightly different challenges and I'll probably have to differentiate between them. In view of the existing studies and the projects I've already done, creating an application that allows students to interact and learn more about each other by entertaining and creating content themselves is a good option, as is the competitive aspect between users. However, according to some studies, learning requires a certain framework, which the education system is designed to fulfil, in order to be entirely effective. Currently I don't see the place that teachers and the education system could have in the context of such an application.

In the school setting, the problem is the opposite. Teachers, by involving classes in exchanges and sharing content created with their students while taking into account their demands and creating contacts with other students in Switzerland, would certainly have an impact on student motivation. The creation of such an application would meet a real need on the part of teachers. However, the involvement of students would be slightly different than if the content creation initiatives came from them.

DEVELOPMENT

With different prototype and experiment I wanted to test my early findings. I wanted to materialize the gaps and the opportunities I had discovered previously into workshop. Defining how much children were ready to learn by themselves and to interact. Defining if there is a possibility to implement an online setup that would connect people from Switzerland and more generally what lack people are more concerned about and up to which point they are ready to get invested. The actual Covid-19 Situation made it hard for me to find user tester but I managed to develop a strategy to do some user studies and online workshops. These Workshops gave me the possibility to define more clearly a final idea and a final form of prototype. It leads me into the right experience people want by learning languages. And it allows me to do iteration until a final concept.

1. ONLINE WORKSHOP

INTRODUCTION

This first prototype was in the form of a Zoom workshop. The workshop was composed of three little games in the form of different cardboard and a final discussion. My main goal with this experiment was to answer the following questions by the means of observations, discussion and interaction:

How well can two persons/children who speak different languages interact together on live online sessions? This test should give me an example of how children and teenager view little games as a mean of helping them to learn languages. It will show me if they appreciate the direct online contact, if they learn something and if they like this kind of setting. This user test gives me an idea of the capacity and the difficulty of interaction they can manage as well as an idea of the level of vocabulary they already have depending on their age.

I originally thought the experiment would last 30 min and that the focus would be put on people from 6 to 13 years old. However, the group of participants was larger than expected and the on-line experiment lasted a whole hour as consequence. Some of the participants were also older than I imagined, which also brought a lot more insight than originally expected. I finally ended-up with five participants from 9 to 19 years old.

PROTOTYPE

The first cardboard, cardboard A, [see 3] was used to start the interaction. Composed of four simple forms, my goal was to describe one of the images and for the other participant to try to guess which one I had described. The second little game, the cardboard B, [see 4] was the same game as game A but with 12 different form that had slightly more differences. The idea was to invert the situation. The participants had to take turns describing one of the form and making a guess. The last game, cardboard C, was a bit different: the only instruction given was to find something we had in common and to draw it on the card. The idea was to give each of them a topic to discuss with would go and we could have a more open interaction.

ANALYSE

The game A went on pretty well and it was quite simple for them to guess. To make it more challenging I tried to restrain my vocabulary on the second attempt. Being inspired by the game taboo, I decided that I should not name a colour directly. Instead I describe the colour with objects that are of the colour I chose. This way it was definitely a bit more challenging for them and they had a short discussion between them before giving me the right answer.

For the game B we started with the oldest participant and finished with the youngest. At this point I realised that being in a configuration where it was a group of people in front of the camera playing with me instead of a one-on-one setup could have some advantage and disadvantage. They help each other a bit if some vocabulary was missing. Sometimes they also instinctively used the same word the precedent participant had used to describe the image. Which had the positive aspect that when arriving to the youngest participant that never learn French she was able to do

the exercise pretty well with only little help as she had heard the strategy and the words of the others. However, I have the feeling that a negative aspect of this configuration was that they more or less all relied on the knowledge of the others. As they had different levels of knowledge they were able to turn to the ones who knew the most vocabulary. I wonder if by putting them alone or by pairs of age and knowledge they would rely more and their own words capacity and perhaps play more with gesture, or if they would try to find other strategies to express themselves (as I did with the colours previously).

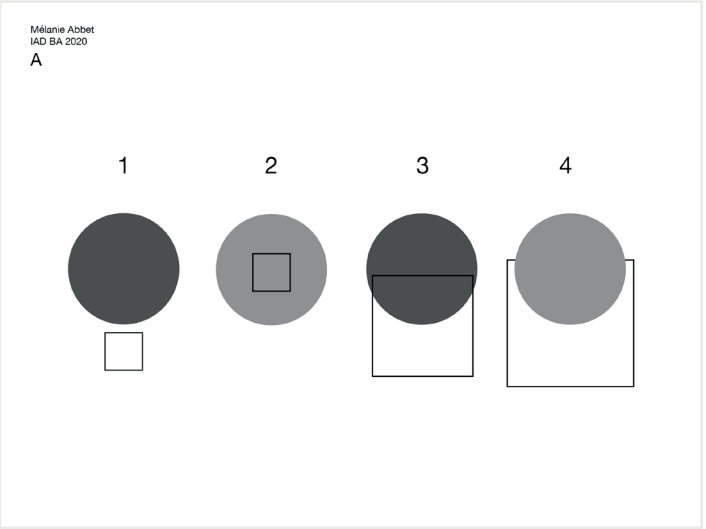
The last game, cardboard C went on pretty well even if it was a bit difficult at times to start choosing a direction to take, and I often had to take the lead. At times they were hesitant to ask questions, perhaps worrying about doing something wrong, but I suppose that was also an effect of being with a group. In the end we manage to find common interested with all the participant after a bit of discussion and questioning. [see 5] At this point they also regularly asked me some vocabulary or tried German words that were really close to French one. I believe then that if they had played with other children of their aged they would have managed to understand each other. I realise that this struggling phase was perhaps what was interesting, because developing strategy is the real part of language learning. This reality is what is missing in schools, because by only doing exercises with other students from their own class, they always have the possibility to come back and forth to their own language thus avoiding this “strategy development” to a degree.

DISCUSSION

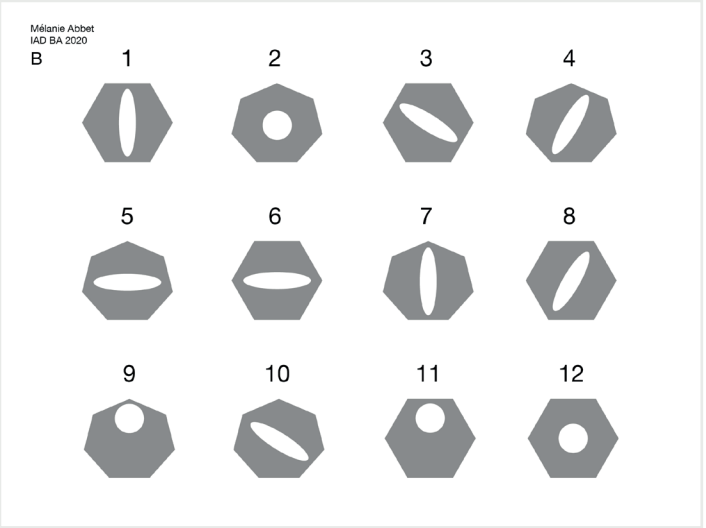
In the end of the Experiment I managed to start a discussion about the little games and we debated about what could be created or what was needed to have a better game experience and what they felt they needed to be motivated in learning languages. At this point my internet connection was really bad but luckily their mother played the role of moderator of the debate. I sadly could not really take part in the debate and could not understand everything that was shared. I mostly analysed the discussion afterwards with the screen-recordings that were sent to me.

Firstly, they debated what game they liked the most, some argued that the drawing game was more interesting because we could have a better exchange with some real discussion. Others could see interest of the image challenge as it restrained them and allowed them to practice a more precise vocabulary, perhaps they also liked because it was a bit easier and less awkward to start, in comparison to the last game, which was more personal and with which we had a difficult time choosing topic. We then switch of to existing platforms and challenges that could be found on Instagram or TikTok. What I get from their perspective is that they like challenge on TikTok but mostly use the platform as spectators and not as creators. Also something as ephemeral like the Instagram stories or snapchat interaction that disappear after a certain amount of time is not optimal for challenge creation or interaction. They saw the potential of integrating language learning in such a format, however they would not use snapchat to learn languages, One comment was that they mostly have selected friends with whom they interact through the platform among whom probably nobody speak the language they want to learn (or if it's the case and that they are motivated they could find other ways of learning as they already know the person). One point also

[3]



[4]



[5]



mentioned is that some would prefer to download an app made exclusively for that purpose, which they could use in the longer term and on which they could keep a trace of their evolution. The game aspect was also said to be a good way to have fun learn at the same time. They were all interested in making contacts with other people for example with brief writings or exchanges on a specific topic. I noticed that they repeatedly mentioned the topics game. They also talk about how time constraint could bring a more challenging aspect. However once the negative aspect of the pressure it could bring arised, they suggested a rewarding system depending on your time performance. Such a system would allow to keep a kind of challenging aspect, but without the stress of a time constraint.

The next point to discuss was which people you should be put in contact with whom. They all liked the matching aspect and felt necessary to be able to choose the language or country you want to learn from, however, they debated a lot about the process of matching if it should connect people of the same interest (like a dating app) or more freely to maybe allow people to discuss a larger variety of topics. I liked this part of the discussion because it reminded me back of the issue of constraint, which is needed to learn a language efficiently, and I could feel that they grasped this aspect spontaneously. The following question was should the connection already been the constraint or the various little game should be the more restrictive part. They agreed that both aspects were important, having topics that follow your own interests as well as other topics that you would be less passionate about, but which would help you learn something out of you comfort zone. Until this point they mostly thought about one to one interaction and they realized that if you could have multiple interaction you could automatically approach different topics because of the different interactions. At the same time having a list of different people that could be online at the same time as you would give you more chance to train spontaneously.

Finally we came back to the gaming aspect. They reiterated their suggestion of a reward system, working with points and level. The idea is that depending on how long you play or with how many different people/topic you could unlock some options or harder game. They debated a lot on what kind of game you should be able to do with other people, like a memory game or the description game they had just played. The agreed that it should be a simple game. With them I realise that people would have a lot of different interests so it could be interesting to have different games to match everybody's needs. They expressed an interest in creating their own sustain the application thought the time.

CONCLUSION

To summarize they were enthusiastic about a project that would allow you to match you with different people and that would give you the opportunity to develop a relationship with these people through discussion or little games. The goal is not just to learn language but also to have fun and be entertained. A kind of parallel setup for learning/fun and speaking/playing. This experiment along with the talk coincide with the direction I had already imagined and it gave me some really good supplementary input about how such an application would be able to work, what are their most important requirements for such a setup. What I also realised was that I will have to choose from a group setup or a one-on-one setup.

2. CO-DESIGNING VIA SKYPE

INTRODUCTION

Based on my first prototype and experiment, I decided with a group of adults to make a brainstorming session about how a learning languages application that connect people together with the possibility to play with others could work and how it should look.

WORKSHOP

The session was built around the application Awwap, [seen 6] which is a kind of interactive white board and a conference call. The goal of the workshop with them was to imagine an on-line Application to learn languages in a playful way and with the constraint of having to interact with other people. In a first step we gathered ideas, and word on the form of little cards. In a second step, we regrouped the cards into categories and talked about them. We then selected the most essential idea for us between the different ideas. [see 7]

DISCUSSION

In the beginning we revolved a bit around some thematics I had already approached but with time some interesting reflections surfaced. The notion of dating app as also seen in my first experiment emerged quickly. All the participant liked the possibility of choosing the age, the language to learn, the level and, perhaps in a second time, the interests. Then the possibility to be matched randomly with somebody as near as possible to you that correspond to those criteria also came into view. With this idea, they, could possibly meet each other one day. However, they all agreed that it would be annoying if the first thing you always have to do is to present yourself and discuss about your life because it takes time and is really repetitive. Therefore, they suggested the possibility to skip the presentation and personal discussion, and to choose topics that interest you to discuss about. I found interesting this contrast between the possibility to meet people that have common interest to you and at the same time the wish to separate the personal topics from the interaction. They also liked the idea to have the possibility to keep other users as contacts to be able to develop a deeper relation if they wanted.

They liked the idea to learn by doing games or challenges online with the people you meet. The idea of thematic as seen in the first experiment, was an important point as well. If there is some little games or activities to do they found important to also have section of grammar or conjugation for example, not just vocabulary practice. They also defined a bit more what they would need to get motivated, like getting points, having some daily challenges to fulfil, having the possibility to compete against friends or to unlock some features. In general, having something that motivates you to play daily and lets you see your progression is necessary. They are not bothered by the need of being connected or creating an account but suggest that you should also be able to play freely if you don't care about your progression nor about the possibility of adding friends.

They agree that having a live contact is the best way to learn and that in combination with vocabulary learning or games, it would be

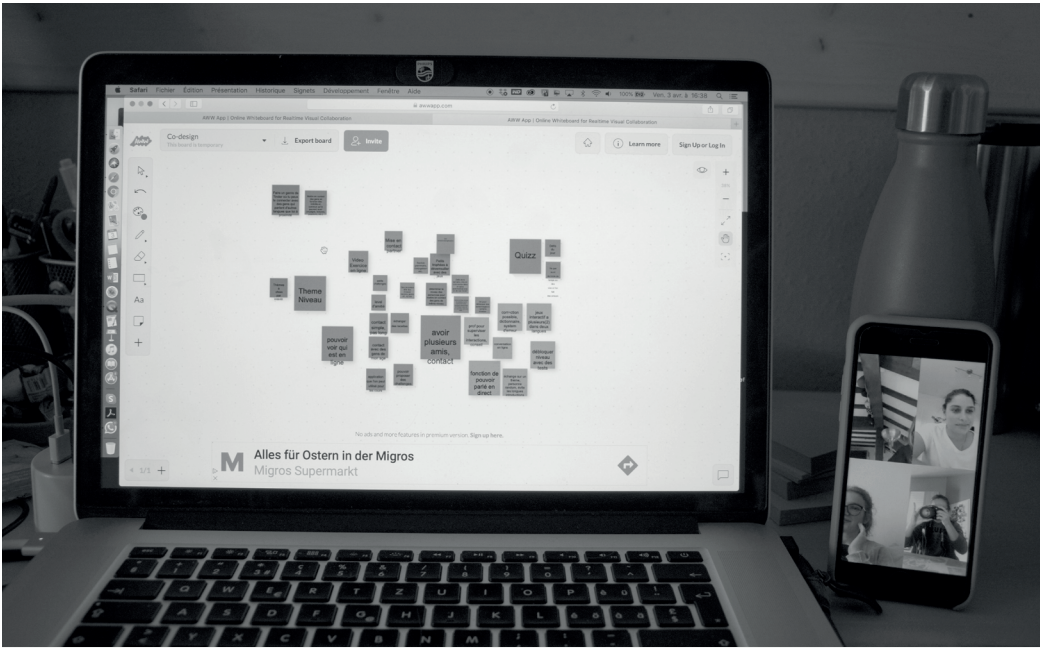
great. They also admit that this is something not possible in most existing learning application. However, the Webcam meeting was for them a bit too much and would prefer the use of the microphones. They also asked if there could have a possibility to play or interact by writing or with a more indirect way. This way people would be able to play on the train or in public spaces where the use of microphones could be problematic.

They also felt the need to test their level to a degree or to have a correcting feature, when you write for example. They also suggest the possibility for teacher to check students' connection time or to be supervisors for questions. Looking further into the possibilities for classes, we came along the application Quizlet, that allows teachers to create quizzes and tests to be done by the whole class. That is a funny way to learn that could perhaps be integrated into the application.

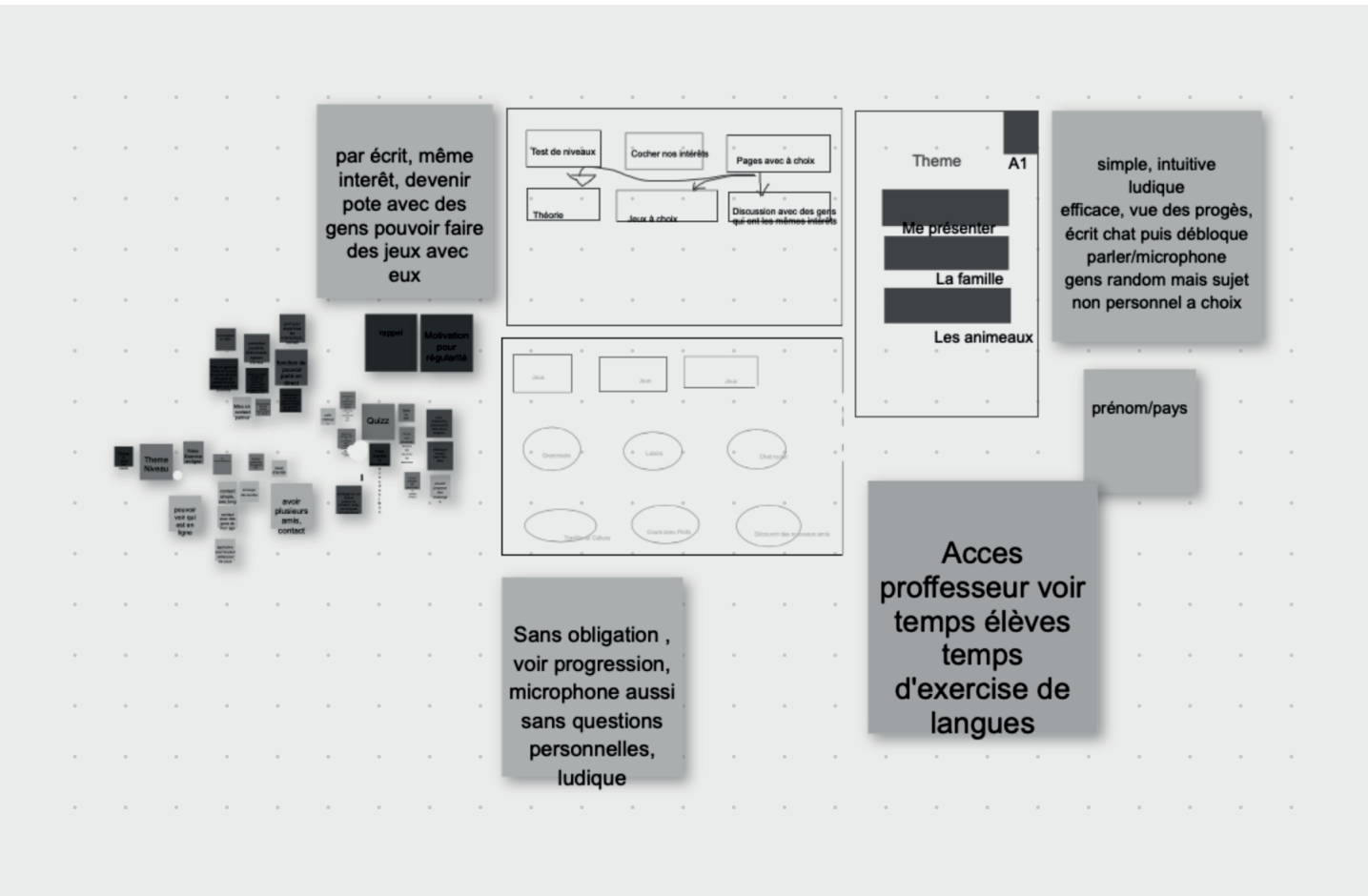
CONCLUSION

At the beginning I wanted to create a tool as simple as possible and almost ready to use. However, with those two first experiment I realised that creating an account was not a big problem and that, in the contrary, it was necessary to get user to be motivated and to let them follow their evolution. From this experiment I really liked the suggestion to chat or to do some challenge by writing as well as the recommendation of the gaming and challenging aspect. I was able to feel the wish to have real interaction with people. I realised at this point that introducing grammar, vocabulary and diverse learning contents beside or as pretext for interaction could perhaps take the lead on the interaction which is something I wish to avoid. What I am also not sure about is whether a dictionary is needed to correct the vocabulary used. I feel like the participants could fulfil this role by themselves. And I am not sure that the role of teachers as discuss with the group is the best position it could have. However, when we spoke about Quizlet and class challenges, I realised that teacher could find their place into such a setup and perhaps the application could be used in the class environment as a support tool for speaking training.

[6]



[7]



3. STORYTELLING

INTRODUCTION

This prototype was meant for teachers to be able help me define with them what are the necessary aspect to have in an application for it to work well on a pedagogical aspect. What could be efficient in the idea developed through my first prototype and experiment session? What could we add to be more efficient or to have something that could be used in the school system and by the teachers themselves?

This prototype takes the form of a little video [see 8] that I sent by email to the teachers that had previously accepted to give me their email address during my first questionnaire. With storytelling I explained the platform idea that I had established based on the first experiment and the place that they could take in it as teacher. The idea was then to create a discussion and get a feedback from them with a skype meeting or a telephone call or at last resort via email.

PROTOTYPE

My short video described in a general way some aspects developed through my first prototype and experiences. I explained that it could take the form of a platform that contains little games. Children could play at home on this platform, by choosing a game and being in contact with other children of a different mother tongue. They could then play the two games chosen thought interacting and discussing. I then gave an overview of how teacher could add games to the application to have content related to their courses and how the platform could be used as an atelier to do during class time. By email I also gave other options about which they could express their interest. Those options can be related to the student, for example the possibility to create an account to be connected with friends or suggesting daily challenge. They can be more related to the teachers, for example the possibility to exchange student work or share more material than just games, to see how many people are connected or to see when another class is planning to be connected.

DISCUSSION

I managed to get two feedbacks by email with a debriefing by telephone both time. I had the chance that one teacher came from the French part of Switzerland and the second from the German part. In a general way they found the main concept pretty good. They would enjoy such a setup and would wish to integrate it into their class if the games existing on the app matched with their program. However, they both express less interest for the creation of games, they worried of the time it would take and how complex it would be.

They mentioned that learning by playing was the best way to motivate their student and both admitted that establishing a competition between the students of their class or between the class of the school could work pretty well. One teacher mentioned that his class already did this kind of competitions in math with another class and that it has good results on the long term.

They like the fact that students can play outside of school, saying it will allow students with difficulty to practice without pressure,

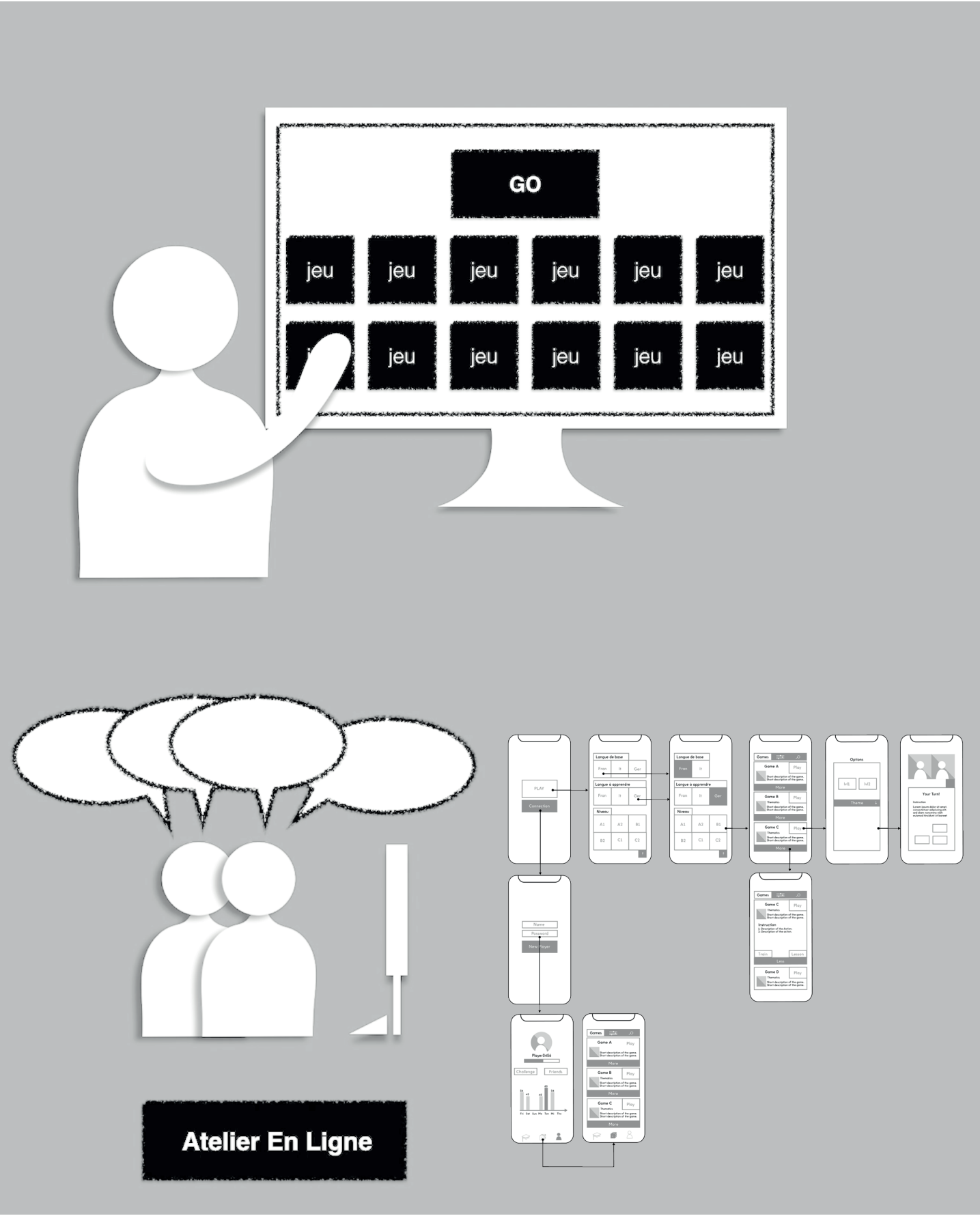
without the stress of having a public or the feeling of being evaluated by the teacher. One teacher also mentioned that he regularly Quizlet uses but that it involves the entire class and puts a bit aside the students with difficulties.

They also suggested that it should either be focused on a particular method, which brings the problem that each canton uses different manuals or in a more general training with open interaction on practice-based, daily vocabulary. They also suggested to have a system of categorisation of game by thematic or by order of creation. One of them worried a bit that it could happen that nobody is online simultaneously and that it would be better to play at any time you wish. The same teacher found the idea of being able to see when other class plan to be connected not very interesting, because he would like to use the application in a more spontaneous way. The other teacher however found that seeing how many people are connected would be useful to know in order to know how many students could play simultaneously. They both did not really discuss a lot about the option of sharing more content, as they found it would not be the first functionality of the platform. However, one of them found that sharing student content could be fun or that having special class space where student and teacher could communicate with other classes would be good as well.

CONCLUSION

I had the hope to get more answers, however I found the debriefing we had really comforting in the direction of a live gaming application to learn languages based on practice and self-learning with each other. It confirms the need of real contact and ludic aspect to learn. I think that with this prototype I could establish that I should create something that works well for students outside school. It could also be integrated in a second time in class by teacher with perhaps one or two functionalities that are more related to the school environment. This way teachers could have an almost ready-to-go application to work with and they could be the input to motivate students to play regularly by competing with other classes. What I also take from this discussion is that my application should focus either on concrete learning methods which could be then less efficient for a class environment or been focalized more on open topics which encourage more the practice in real time rather that the learning of complex content and which could be seen as a support in class.

[8]



4. ONE TO ONE

INTRODUCTION

This prototype was a zoom Workshop once again but with only two participants this time and more importantly two language learners, which is closer to the solution I looked for. My goal was to test different types of exercises focused on different topics like grammar, vocabulary and numbers. I also wanted to see if it was possible to play it via skype but without webcam and if the interaction was different when it was just two people face to face as with more people behind the screen. In a second time with this prototype, I further developed the challenging aspect, with time challenges, the possibility to choose the difficulty and to ask for help with a system of points and I had a discussion about that with the participant.

PROTOTYPE

I had created different cardboards again, [see 9] that represented different games to choose from. In order to be closer to an online application each cardboard had its own instruction and I interfered as little as possible during the workshop.

Cardboard A was grammar game, they both were attributed a game number and had to follow the instructions. Each player one after the other had to choose a temporality and then create a sentence in this temporality in their own language. The other player had to guess the temporality of the sentence. I gave them the possibility to choose between different levels. Level one consisted of using the basic words to describe a time space: Yesterday, Today and Tomorrow. Level two allowed them to use any kind of time words to help, for example: two weeks ago, the next day or in the next month. For the last level they had to use just the verb tense to mark the temporality.

Cardboard B was a game with number. They had three card, on each card they had a sequence numbers and a pool of numbers to choose from. The game was, each player one after the other, to spell the defined number to the other player who had to cross the corresponding numbers. There were three cards of increasing level, the goal was to fulfil as much cards as possible in the time limit of one minute.

Cardboard C was a guessing game. Both player had an animal on their card that the other player had to guess. They needed to ask questions to guess the animal. I allowed them to ask me vocabulary question.

We finally got to discuss the different games and challenging aspect I tried to represent on the game and on an illustration.

DISCUSSION

I started the workshop by explaining what we were going to do and the two girls decided with which game they wanted to start. The first game, Cardboard B went on smoothly. Without explanation they quickly understood what to do and they just went through the game once the chronometer started. I stopped them in the middle of the second card and, despite the time limit, we went through the last card. I was surprised that it went so smoothly and I realised with the discussion, that the exercise was not

that simple. Actually they both revealed that it was difficult, that they both instinctively spell the number slowly in order to give the other player time to think about each number. However, they both did mistakes on card two and they did not fill everything on card three and when I asked why they did not ask to listen again when they were not sure, they answered that it was because the goal was to do as many numbers as possible in one minute and they did not feel right to pause to ask a question. They compared the situation to the listening exercise done in class where you cannot stop the teacher. We discussed more about it and we arrived to the conclusion that if the goal was to achieve as many numbers as possible in a given time, you should get points with the right answer or lose points with each wrong answer so that you are pushed to ask and interrupt the other player if necessary. An alternative would also be to have to fill the three cards as quickly as possible but without any time limit, and again to lose more points if you did mistake than if you are a bit slower. One of the two said that it could be interesting to also have a kind of option to get help or theory reminders before starting or perhaps during the game even if you lose points because she found the last card to be really hard. The good point of this game was that they both did not feel uncomfortable by using just the microphone even if they agreed that it would be better with the camera as you can see the reaction of the other player when you read the number.

The second game we moved on to was cardboard A, the grammar game. We did this one with the webcam on as it was more comfortable for us. They decided to start with the level two, they also started easily without many instructions from myself outside of a short explanation of the level. With this game they already discussed a bit more because they each had to check that it was correct directly and if it was not, they had to explain it themselves. I feel like with the webcam on they also had more presence and could smile and look at each other which in my opinion creates a better experience. I had decided to do a short debriefing after each game and at this point they both argued that it was difficult to switch between the three languages, which gave me the feeling that my application should be maybe really only based on two languages face to face and not a combination of all Swiss languages which could be as confusing as what they just had experienced with English.

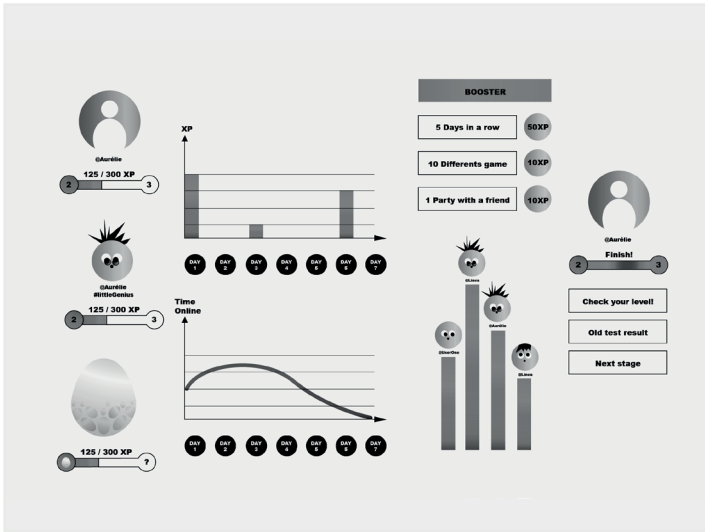
The last game, cardboard C was the only game in which they both spoke the language they tried to learn. They managed pretty well and it is the exercise in which they asked each other the most questions of languages. They did not ask for my help even if the game lasted a certain amount of time. They laughed a lot and seemed to have fun. They both agreed that it was the game they liked the most also because they had a better, truer conversation and were freer. They realized that even if it looked like the most difficult of the three games, they succeeded pretty easily in finding words or strategies in order to be understood.

At least, we discuss what functionalities or options they liked or could imagine to have in such an application. I brought images to further support our discussion on the topic. [see 10] They liked the idea of having an avatar and levels to achieve with point. They found that you should be able to choose your avatar and perhaps unlock attributes for it or add a picture of yourself as avatar. They liked the idea of a surprise that could be added, which was represented as an egg that you have to open by playing (like a Tamagotchi). However, they did not find the idea of having the egg as an avatar to be a good idea. They suggested that in order to bring

CONCLUSION

This experience showed me that in real conditions, such a setup worked really good, and that I should seriously consider the option to play it in a more indirect way. That comforts my idea that I should consider and define a bit more clearly the way I should build the gaming aspect with what will allow you to gather or lose points with each game. That also comforts my opinion that the one-on-one setting in the game worked pretty well to learn by interacting and that perhaps, it should be my main focus.

[10]

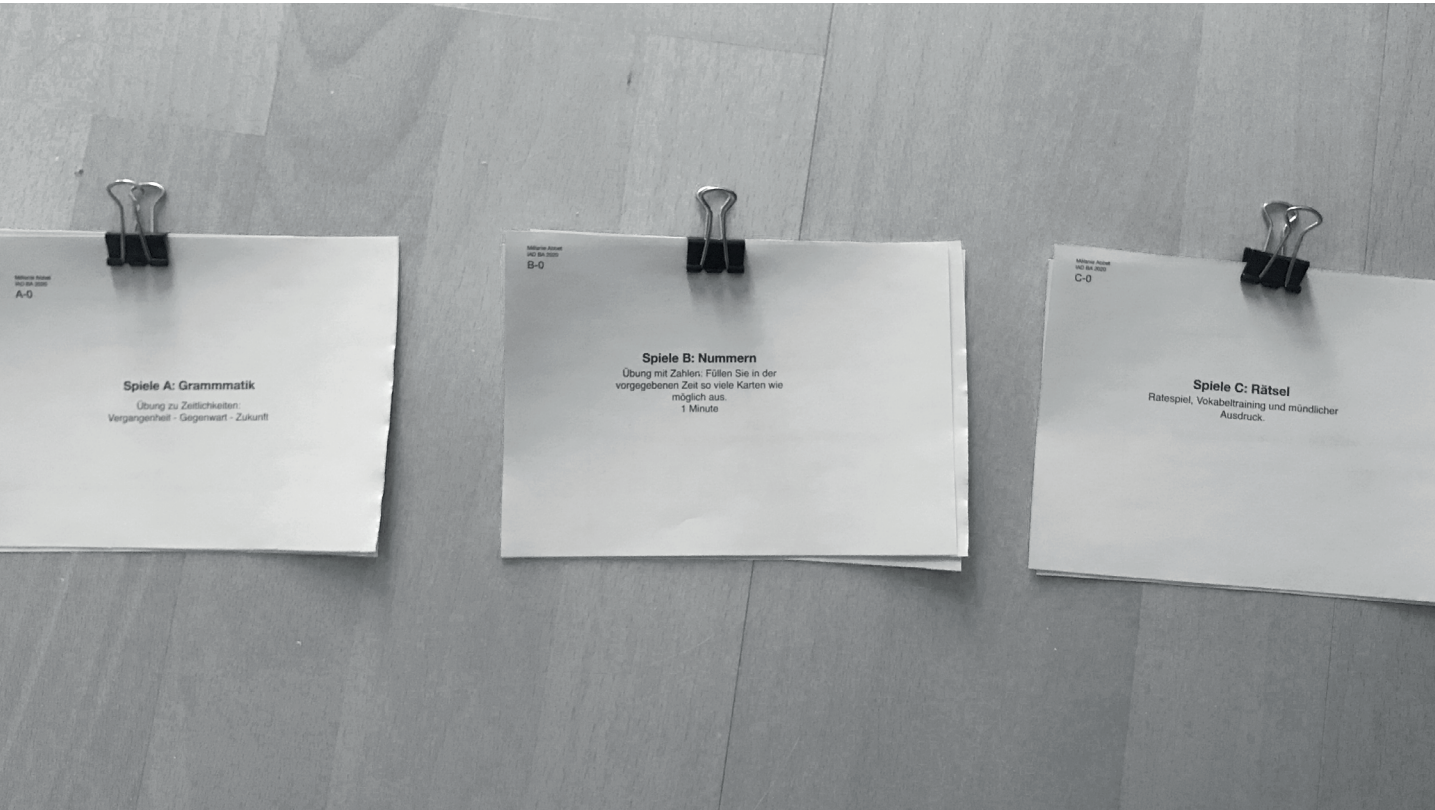


surprise elements into the application, there could have some hidden levels that you reach and that give you some kind of extra points or a little surprise. Still they found that having some known challenges to achieve was also interesting and motivating, ideally a combination of both would be perfect. With some easy boosters like adding a profile picture or the challenge to play 5 days in a row would help you to come play regularly. The idea to get a personalized name depending of your level or on your game activity was also welcome.

They liked the idea to see how many points you get every time you play, day by day to compare and have an idea of what you have achieved and how regularly. But they were not really sure if the points were just there to motivate you or if you should do something more with it like upgrading your avatar or even get real life expansions to like the possibility to send a postcard to a friend you met online. We also discussed about an option to test your level. They found a good solution to have the possibility to check your capacity each time you reach a new level and to be able to compare it to your old results. However, they did not like the idea to have the obligation to do it or to be blocked or restricted in the game because of that. In other words, it should be informative, no compulsory.

Finally, we talked about where the application should take place and if it were possible to have also lessons on the platform or a bot to train yourself with when you are off-line. They approached the topic because of Wi-Fi restriction at home or in public spaces; this concern also came to light on the last experiment I did. Finally, they both found that adding an off-line functionality it would add something to the app but that the principal focus would still be the online direct connection, which is a better, more innovative and easy way to learn.

[9]



5. FINAL PROTOTYPE

EVOLUTION AND DECISION

After these various experiences it was absolutely necessary for me to determine a direction to follow. Regarding the experiences made, I decided to constrain myself to the idea of learning by interacting with others in a gaming form and without having the feeling of duty.

My application should be different from other language learning application that mostly offers vocabulary contents and are not principally based on communication with native learners. With a gaming aspect I also bring some fun and the possibility to do short sessions and to work spontaneously. This spontaneity that is missing when having a single tandem partner and having to define timetables together and learning topics. Therefore, I put aside the class environment and the learning content that is not related to the gaming aspect, to keep as the principal role the interaction. I also made the decision to focus myself on one game that can be broken down into different topics: the guessing game, who am I? That game offers the possibility for the player to interact and discuss more freely around a specific topic without too many constraints. This encourages them to find strategies to express themselves and can be easily adapted to a writing form as well. In other words, my application should give the possibility to each learner to practice live speaking and writing without pressure and outside a normal learning environment and atmosphere. My goal is not to introduce them to new grammar rules or vocabulary but more to give people a chance to learn from native speaker by interacting with them and practice their oral skills. I define my application as a complement of all other existing applications and the class environment.

WIREFRAME

These decisions taken, I defined that my age group should still be teenagers as they have the perfect learning environment in school to go along with my application. I created a first Mock-up of the application, with paper in order to clearly define the functionality and the overall experience. I wanted to keep it as simple as possible as well as motivating and challenging. I got inspired from Duolingo a bit because some gaming aspects, like the invitation to play multiple days in a row or the way information is displayed work pretty well in my opinion.

The application is built around one unique game, on the main page people should have access to the live version of the game. The game should works as follow: you have different category of words you can choose from: Animals, objects, places, you are then put randomly in contact with somebody else that chose the same category as you and that speak the language you wish to practice. You can choose to play with webcam or just microphone. Each of the player “become” a random word from the category chosen. You know which words the other player receives and the goal is to guess which word you are by asking questions. You can get some help during the game, like words, ways to ask question or tips. Once both found out what they were the game comes to an end. My idea is that by playing you should get points to level up and unlock different categories of words as well as receiving images for each word discovered. At the end of one game you can add your partner as friend to play later on with him or to chat. That way you can build stronger relationships.

Under their profile page the player should have access to their performance, their level, their number of points, images gained as well as to their friends. From there they can see who actually is online and they can start a writing discussion or play a game. When writing you also have the possibility to start the same game but by chatting. However, to prioritize the live version of the game I imagine that your partner would not get a random picture but that the program would randomly choose one image (between those you already possess) for you partner. At the end of the game you can still win the image you guessed as it prioritized image you did not have already and earn some points.

The last option I imagined had to do with levelling up or little challenges giving the possibility to gain money and buy different images from the category of your choice, that would be possible in the shop and would motivate children to play even more. That would also give a sense to your levelling up aspect. By levelling up you would also gain money that you could use that way. Each time you level up you should also have the possibility to test your actual level or to just keep going on. You should find this function in the parameters as well. These options in mind, I tested a first paper prototype and then the digital wireframe on different people [see 11]. They all understood easily the functionality and could navigate easily through the app. They suggested some modifications and I myself also noticed some things to adapt. For example, there should be a clear difference between playing live and playing by writing. I could also add the possibility to write messages or send little message when playing live for the case players need to write some words down to be better understood or want to learn the spelling of a word.

[11]



found with difficulty the first time came spontaneously in their conversation this time. This reinforces my belief that this is a game that is suitable for all levels to help people improve their capacity and that the features of adding friends with whom players have a good feeling or the possibility of acquiring clues are important options.

Finally, for the last group, with my design being a bit more advanced, I was able to give them pictures along with the words to guess. I could see an enthusiasm for these rather simple drawings described as «too cute». It was only natural that the two participants asked me for a picture of their own animal once they had guessed it, so in the end of the game I gave them their respective pictures, just as it would have been the case on my application. They really appreciated the idea of receiving a small card with the image they won and being able to collect them. These cards can therefore be means of motivation and also a possibility to keep track of the vocabulary and specific characteristics related to the words.

These last user tests allowed me to validate the feasibility of my concept, to have a more precise idea of the duration of a game or the needs of the players and to adapt my wireframe accordingly.

TECHNOLOGIE

In order to be able to continue testing in the future and to receive feedback on my project, I decided to launch and program a web application. My knowledge being limited in some areas, I had to call upon a programmer to help me develop select functions. The first challenge was to create a match between two people depending on the main language of the two users and the language to practice. With the help of a database and by creating different queues depending on the goal we wanted to achieve, we managed to establish a connection between two people via Node.js and Websocket. We then had to randomly distribute person a word and an image to each which represented the filter to display on the head of the players, corresponding to the word to be guessed by the partner.

This information is also stored in the database and the players communicate via the server to know which word has been assigned to them so that each one can at the end of the game validate their respective word in the language of their choice. The biggest challenge was to make a webcam exchange between these two people. This video communication will also pose problems in the deployment of the web page, due to the specific security system of the various browsers. Finally, when the two words are found and validated we give the player the possibility to restart a game or to leave the game to find another match.

I have been able to test my web page with some users, unfortunately for computer reasons and lack of time I could see that it is not yet ideal; I still lack secondary functions that I consider necessary such as clues, the display of the image of the partner or the reward with a card at the end of the game.

The biggest problem is that the users have to go through some complex steps to allow video sharing via my web page and that the site is not entirely secure, so it is not possible to offer it to children and teenagers at the moment. However, I think it is a prototype that is worth further developing in the future, to continue to test my concept without having to act as mediator.

CONCLUSION

Looking back on my research question, how can we improve language learning in Switzerland? I realise that there was a lot of different paths I could have taken. I also realise, looking back on my process, that even if Switzerland has this big opportunity in language learning. It is also a really complex system. This is mainly because of the languages diversity in such a reduce territory, and because of this complexity, it can be challenging to change things or find solutions that are in harmony with the whole country. That was mainly why in my process, I chose to take a step back from the educational system and I decided that my change should not imperatively happen inside the structure but could perhaps happen outside. That is how I finally ended up on the path of QUIS:

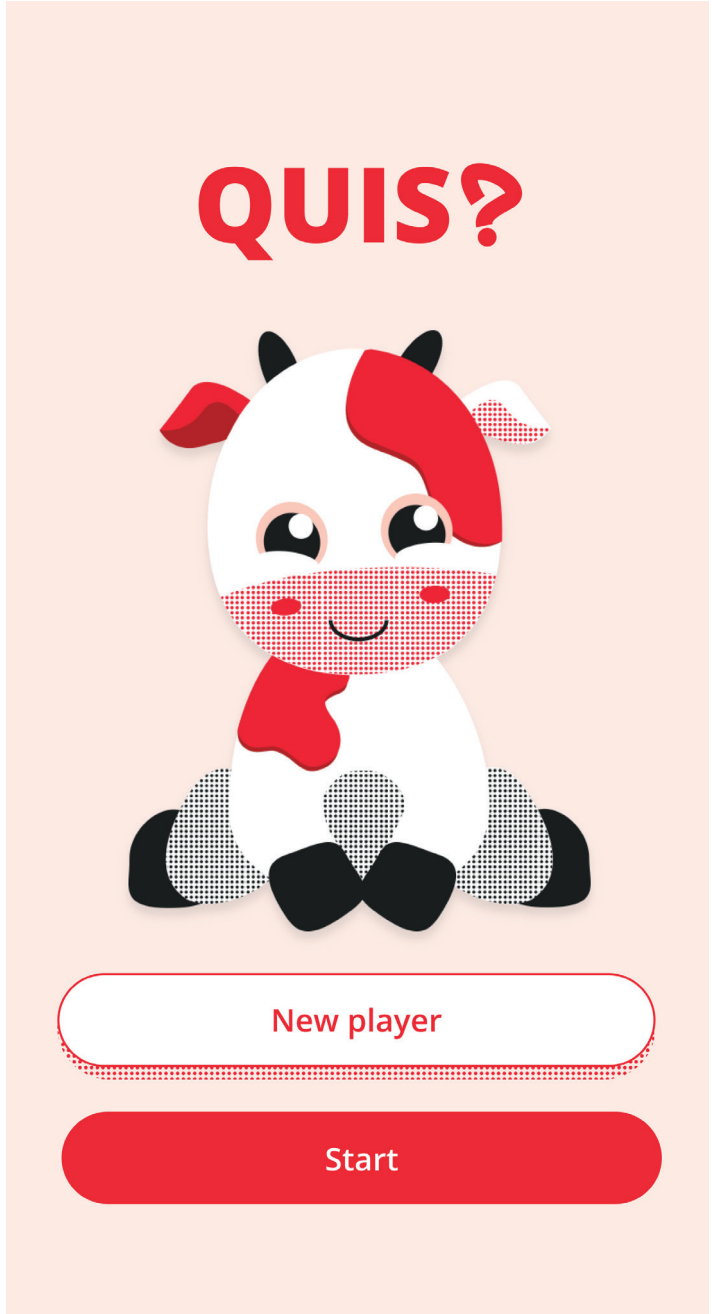
QUIS is a guessing game that connects two native speakers of different languages and helps them improve their language skills by interacting with each other. It is a platform to build mutually beneficial relationships, a playful solution for the lack of direct and spontaneous exchange when learning a language.

Initially, I did not create QUIS for a school setting, however, in the end it fits in our education system. It ends up being a tool that could be used as a support to what student learn in school as well as a tools to use in class sometimes. This tool is a good alternative to the live practice exercise done in front of the class. With QUIS student with difficulties and stressed when having to talk to a broad audience can practice in a more secure and comfortable space. It is something I would personally had appreciate has I was not really confident back then and from the feedback I got it demonstrate that playing even just with one person, multiple times helps increase this confidence and improve the speaking capacity, which is a great achievement. The school environment is in also a good way for me to promote and spread this tool.



1. LEARNINGS

Throughout my process I had the opportunity to use the methodology learned in class. I also learned how to adapt them and deal with the particular situation of Covid19. I learnt a lot from user feedback and discovered a new way to create feedback loops from a distance. I had a lot of video material to analyse and realized we can learn a lot from the behaviour of people when they interact with each other. I also learned more about how the Swiss education system is built and what the people age working on to change things. More importantly I learnt, how to express myself and clarify my ideas through the process. I realised that clear explanations or well-chosen words could change the way your idea is perceived and how it is interpreted. I also learnt that trusting myself was important in the decision making process, and that I could not always satisfy all of my wishes, and that there was sometimes a need to set priorities.



2. CONTRIBUTION

As an interaction designer I ideally wanted to provide a tangible and applicable solution that would address the shortcomings of language teaching in Switzerland and be in line with the needs of society. I also wanted to bring more reality and connection between people when learning a language. With QUIS I fulfilled this goal I could bring a down-to-heart solution that connect people together, a solution that has a real potential of integration as is proven in my process to have a positive impact on learning. As my user test also demonstrate, my project helps people being more confident in the language to learn and in their ability to express themselves, which contributes as well to help the motivation by learning. My project gives the possibility to create deeper relationship, and within the Swiss context these relationships have great chance of overcoming the online interaction and become real meetings somewhere in the country. Therefore, my project validates my hypothesis that as designer there is still action to take to use the Swiss context in order to create more exchange when learning. My research confirms as well that there is a lack of interest and motivation for Swiss languages at school, it also confirms me that there was great chance that with such a project like QUIS, which helps creating deeper stronger bound with the languages, could overcome to a degree this lack of motivation. However to fully confirms this second hypothesis, a long time and broader study of my project within this context is needed.

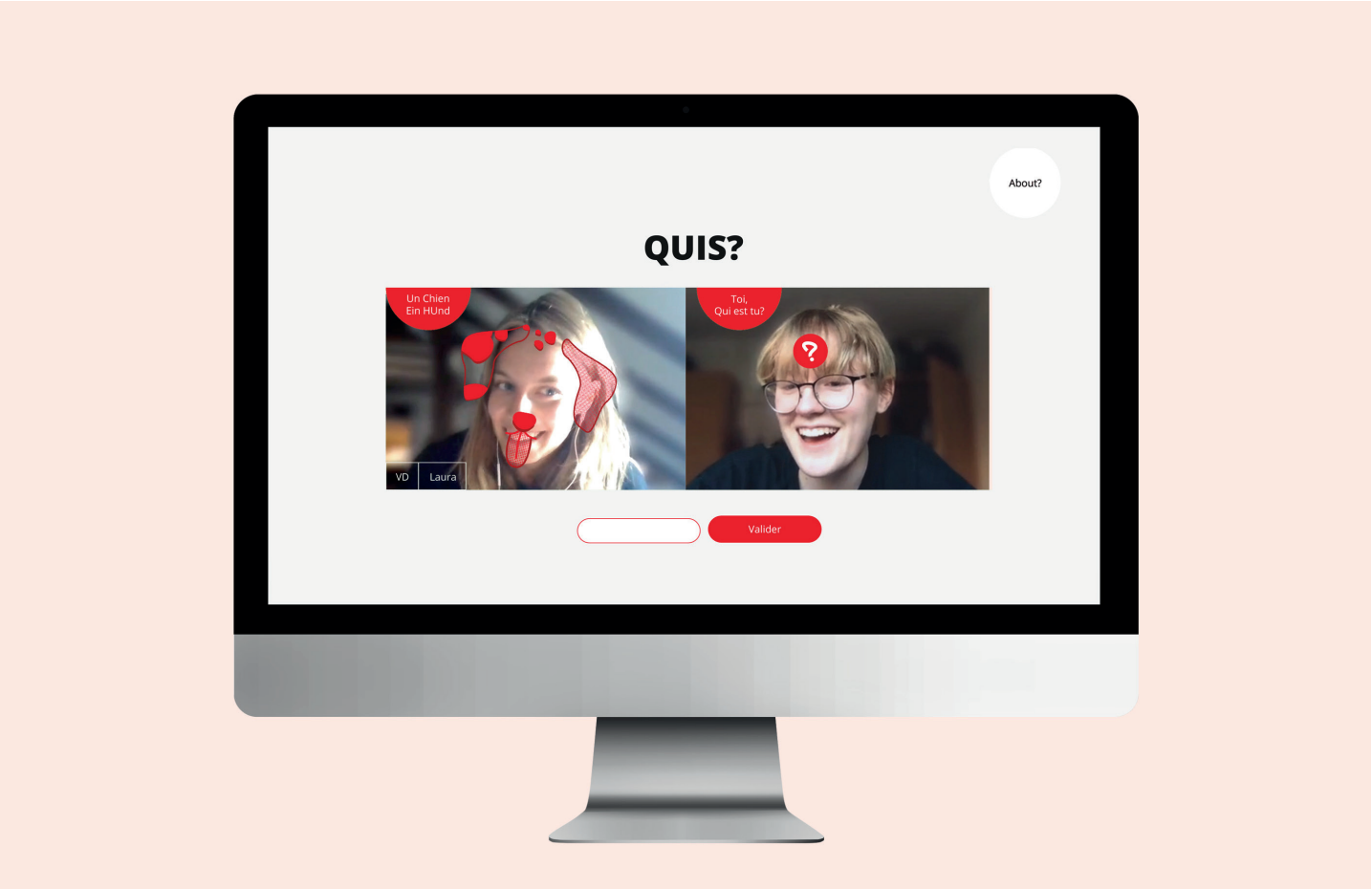
Finally, within this thesis I could answer my research questions. I analysed the actual situation and Switzerland is definitely going in the direction of a more practice-based teaching as well as more communication within the country. With QUIS I found what I could offer to the country to follow this direction and improve the actual learning situation.

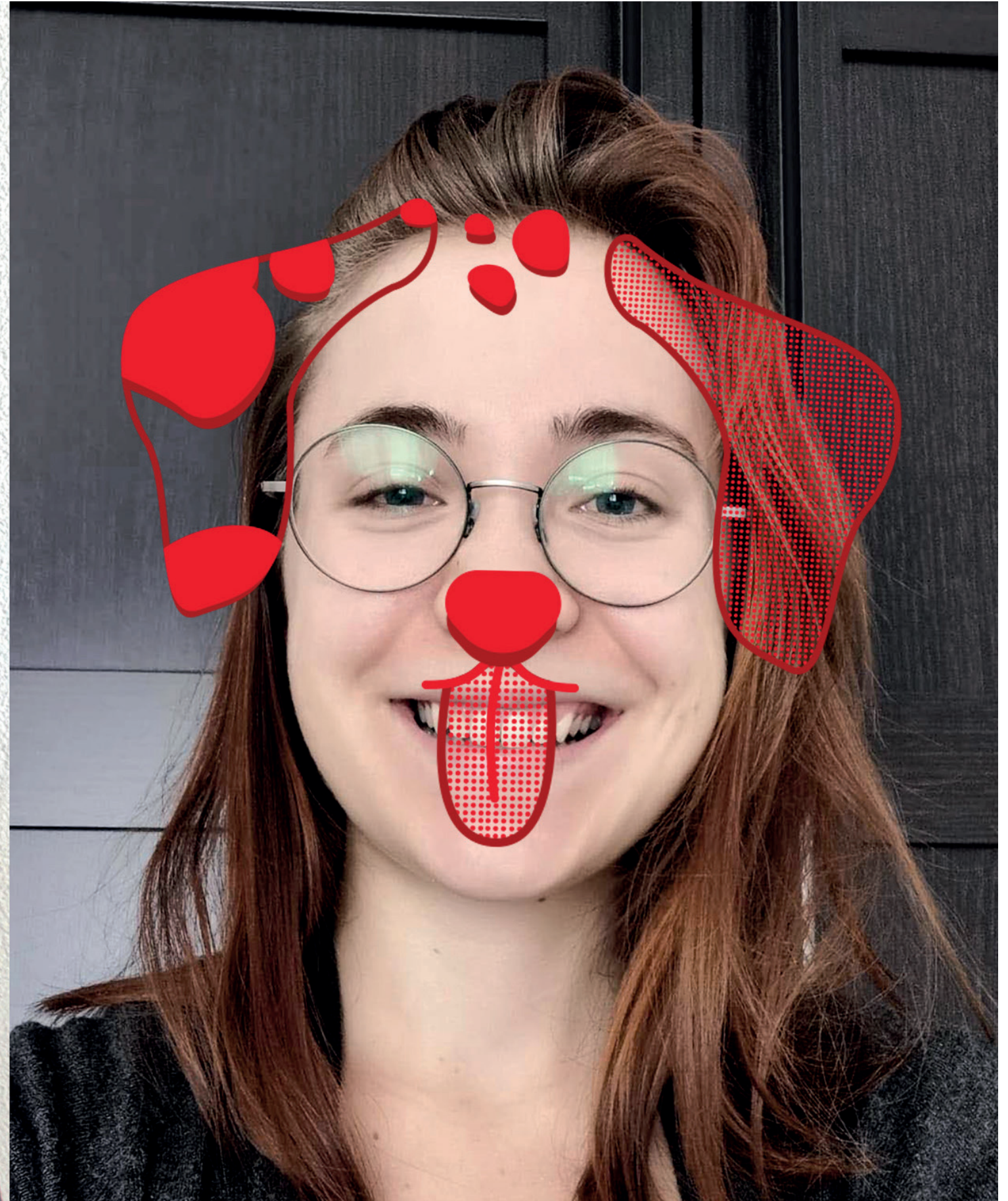
Additionally, QUIS is a project that questions to a degree the way in which a language is learned and the resources that are available to students to develop this learning phase. As my project is fully based on relationship and live, real practice, I also with this project criticise the fact that there is a lack on that in the actual system. That we should bring more effort to found such alternative like QUIS. Of course, it is a new tool that is not exactly revolutionary, contrary to some ideas explored in my thesis, but which could perfectly fulfil the role of link between the different Swiss cantons. From the feedback I got and from my own perspective I think it's a project with great potential of deployment. I am sure that it could increase the motivation for the pupils and could help create links between children from different linguistic regions of Switzerland.

3. FUTURE STEPS

From the beginning, I was surprised that all the people I spoke to about my project were really enthusiastic about the subject. It is as if they had the same feeling as me that something could be done to better language learning. This motivation coming from everywhere created a kind of pressure on myself, what if I could not achieve something good with such a great topic? Finally, when explaining my final project and showing how it should work, what it should look like, people were still as enthusiastic as before. Therefore, it convinces me that I took right decision during my process.

Via the Skype platform, I was able to test and demonstrate that my concept works, however I regret that I was not able to faithfully transcribe the concept of my application on my web page. I think the big challenge and the first thing to accomplish in the future when further developing my project, is to take the time and find the necessary financial means to make this web page fully functional. In other words, making it without any security problem, as the page is still intended for children and teenagers. In a second time I should add the secondary features that are missing at the moment. Looking at this perspective, my ideal objective for the future would be to offer the web platform to different Swiss classes and to organize sessions with groups of two of classes from different language regions of Switzerland. This kind of final test would be for me a way to promote my idea and to get a glimpse of its reception by a wider audience before eventually launching the mobile application.





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