Evaluation of the Opportunities for Sustainability Education Through Content-Based Learning in Online German Classes in Ecuador

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Abstract

This paper proposes to reflect on online German class as vehicle for sustainability education and evaluates the (up to now unused) opportunities language classes offer. In the last decades, modern methodology for foreign language acquisition like the communicative approach has become increasingly popular to develop linguistic abilities, focusing on content-based instruction. Standardizing documents like the CEFR (Common European Framework of Reference, 2001) are mainly based on this methodology and define fundamental competences (reading, listening, writing, speaking) and sub-competences e.g. reading a newspaper article, writing a personal letter, hold a formal conversation etc. The contents on the contrary are not defined, which allows language class to have a variety of topics that can be chosen by the teacher/tutor. The selection process of the material is, however, key to the success of the project. Foreign language learning can thus be a vehicle to education of specific topics, and hence suitable for sustainability education. The exemplified units are from a lower level (A2) and a middle level (B2). The proposed concept can be a blueprint for other language classes that decide to include sustainability education.

Keywords: sustainability education, CEFR, content-based language learning, competences, German as foreign language

1. Introduction

1.1 Sustainability development in Ecuador

Ecuador is a developing country with per capita GDP of \$6248 according to the world bank. It has a population of 16.1 million inhabitants. According to the United Nations' Human Development Report, Ecuador has a Human Development Index of 0.739. It is also classified as an upper middle income country and it is a country classified as a fuel exporter given that its fuel exports is at least twenty per cent more than its imports of fuel. Finally the literacy rate of those aged older than 15 years is 94.5% according the CIA World Fact Book.

Concerning sustainability development, several efforts have been undertaken with a positive outcome: sustainable tourism/ecotourism, politics for fishing and farming (Ministerio de Agricultura, Ganaderia, Acuacultura y Pesca, 2016) and also promoting cultural activities. The UN System Task Team on the Post-2015 UN Development Agenda quotes in a report about Culture as a Driver and an Enabler for Sustainable Development UNESCO statistics from March 2012 stating that formal and private cultural activities contributed 4.76% to the 2010 GDP and that 2.64% of the total employed population worked in cultural occupations with a 60% participation of women (UNESCO, 2012, 4).

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1.2 Online language learning

On-line learning and teaching is a quickly developing field in modern pedagogy. Online language learning (OLL) can take place in Web-facilitated, hybrid or fully virtual classes. The field of computer-assisted language learning (CALL) is nowadays so well established, that the vast majority of recent language learning textbooks propose a supplementary online platform with extra exercises, tests and assessment. The technical side of constructing and designing online applications, exercises and a coherent course concept is fairly manageable and is developed and researched (Colpaert, 2006). Interest for OLL is rising worldwide – also in Ecuador, despite the still negative reputation virtual education has. For many, the traditional face-to-face instruction is the gold standard of education, guaranteeing at its best a learning process while many fear a decrease in educational quality when being taught online. However, there are no conclusive studies to support this idea.

As Robert Blake (2011) states, "traditional classroom practices can vary widely with respect to techniques, class sizes, individual student attention and teacher talents" such as "online courses also differ wildly not only in terms of their format but also in terms of their use of particular technological tools and pedagogies" which makes it extremely difficult to compare courses even within the same modality (p. 20).

It is certain that the hurdles on-line learners face vary a lot from a face-to-face class and present new challenges not only to the learner but also to the instructor, i.e. concerning motivation, discipline and the effectiveness of contents and exercises. Especially in the field of language learning, the outcome of online learning is often discussed because it's a skill that you learn by constant and sensible practicing and through social interaction. Both characteristics can be jeopardized in an exclusive online class setting. Despite the reservations, online learning represents for developing countries like Ecuador an opportunity to reach a population located in remote areas that have little to no access to quality education.

PUCE University, one of the private universities in Quito, number 78 in the LatAm ranking (2017, June 08, Topuniversities.com) and number 3 in Ecuador (2017, June 10, Webometrics.info), has different projects to implement or grow online studies in the area of languages, currently proposing German, English, French and Italian as either blended learning classes or fully virtual classes. Depending on the proposal of each language, the "fully" virtual classes can include more traditional teaching methods like correspondence courses and teleconferences. The German department has decided to always give constant support and presence by including two to three videoconferences through the week and one to two autonomous sequences. The online program exists since October 2015 and the experience has shown that learners have difficulty to stay connected to the class if they are "left alone" with the online material.

It is an interesting idea to combine those online classes with sustainable development education by adjusting the content: instead of following a textbook from European editors, that often rise intercultural problems within the learners, the tutor can adjust to chosen material and topics defined by UNESCO to educate sustainability. This paper evaluates how and why online language teaching can be a chance for sustainability education in a developing economy like Ecuador.

2. Theoretical Part: Content-/Task-Based Language Class

Modern language teaching methodology is communication based, meaning that the emphasis lies on the communicative outcome (formulating one's opinion, participating in a discussion, writing an essay). In this concept, language is acquired as a tool to generate knowledge, whereas it is no longer necessary to have a passive knowledge about language meaning grammar rules. Instead, this methodology stresses the context and the use of language that the learner is likely to be exposed to. Instead of learning grammar rules about how to build for example the comparative (small-smaller, accessible-more accessible), learners are required to fulfill a task where they are naturally, by the topic obliged to use the comparative. For example, in a lesson about the differences of living in a big city or on the countryside, the learners hold a discussion where they have to perform in fact a variety of tasks: expressing the own opinion, giving arguments to sustain the own opinion, reacting to the other's opinion etc. The learning goal is never formulated as grammar since this is the content and not the goal. The learning goal is to hold a successful conversation/discussion about the specific topic city/countryside and the learning content is the grammar (and vocabulary) that is needed to fulfill the goal - in this case amongst others the comparative. Researchers distinguish between task-based (Nunan, 2004) and content-based approach. As their names insinuate, in the first, the learners learn a language by carrying out a task whereas the latter focuses on real-world content and the understanding and communication of information through language (i.e. science class in a foreign language). The specific differences won't be discussed in this article and, as most of the time, a good combination of different approaches is the best pedagogy. For our purpose it is essential that both are instruments to help learners increase their capabilities in a foreign language through action. This means the learner himself becomes active in speaking, listening, writing and reading, in opposition to older methodologies that focus on a passive knowledge, mainly grammatical, of the target language and culture.

The Common European Framework of Reference for Languages: Learning, teaching, assessment, in the following abbreviated CEFR, is entirely based on an action-orientated approach, defining the use of language as substantially in its pragmatic sense:

Language use, embracing language learning, comprises the actions performed by persons who as individuals and as social agents develop a range of **competences**, both **general** and in particular **communicative language competences**. They draw on the competences at their disposal in various contexts under various **conditions** and under various **constraints** to engage in **language activities** involving **language processes** to produce and/or receive **texts** in relation to **themes** in specific **domains**, activating those **strategies** which seem most appropriate for carrying out the **tasks** to be accomplished. The monitoring of these actions by the participants leads to the reinforcement or modification of their competences. (CEFR p. 9, highlights in the original)

The Framework was created by the Council of Europe to standardize language learning and testing in all the member states. The CEFR defines eight levels from Breakthrough (A1) to Mastery (C2) and has become not only in Europe but globally a reference for language learning organization.

In the action-oriented approach, the contents can thus be defined by the teacher/tutor,

which opens wide possibilities to include country specific topics communicating and teaching sustainable development. This opportunity of indirect education seems to result in a more sustainable outcome compared to a class with the title "sustainable development education" and it can reach people who would not be interested in learning about sustainable behavior. Whereas the regular Ecuadorian university student has access to ideas of sustainable thinking (the transfer of that thinking in real life is a different question), the vast majority of the society does not have access to those ideas. This imbalance can be improved by the openness of online language classes.

Positive outcome:

- No pollution by traveling to the city
- Cultural development (awareness raising, diffusion of principles like recycling etc.)
- Social inclusiveness (non-monetized benefits)
- Creating access for learners to a wider field of jobs or projects through development of intercultural and communicational skills
- Learner autonomy
- Proficiency in the use of technology
- Learner motivation through meaningful contents
- Methodology that stimulates active participation of the learners

3. Practical Part: Proposed Sequence

In September 2015, Heads of State, Government leaders, UN High Level Representatives and civil society met at the 70th Session of the United Nations General Assembly and adopted the Sustainable Development Goals (SDGs).



Figure 1 (2017, May 11, Unesco.org).

These 17 sustainable development goals should guide the choice of content for a language class. For further preparation and scaffolding, internet provides already a

variety of prepared material i.e. by Oxfam or Baltic University Program, the latter giving a link list of online available material. Within the material from Oxfam, one can find sole material like a poster or entirely built units, i.e. "Everyone Counts" for the first topic "Poverty" as a primary math resource comparing Young Lives around the world (http://www.oxfam.org.uk/education/resources/everyone-counts). Before using it, the proposed material must be naturally evaluated for the specific context and the level of the language class they are going to be used for.

3.1 Proposal for A2.1 (Waystage)

As mentioned previously, our approach is not following exclusively one methodology but rather combines different ones in order to have the best outcome. Also, the limits of this paper do not allow us to explain in depth the pedagogical steps. Instead, our proposal includes only the main ideas that have to be broken down and divided into small sections with their respective learning goals. Important topics like assessment and timeframe will also not be addressed in this work. For detailed description of how to develop a task-based unit, see David Nunan (2004).

One unit should cover all four competences of reading, writing, listening and speaking, and organize all the language activities around one topic. The goals defined by UNESCO should be broken down into several subtopics

The CEFR defines the achievements for the first part of level A2 (A2.1) in the four competences as followed (selection):

SPEAKING:

OVERALL ORAL PRODUCTION:

Can give a simple description or presentation of people, living or working conditions, daily routines, likes/dislikes, etc. as a short series of simple phrases and sentences linked into a list. (CEFR p.58)

SUSTAINED MONOLOGUE: Describing experience

Can describe his/her family, living conditions, educational background, present or most recent job. Can describe people, places and possessions in simple terms.(CEFR p. 59)

ADDRESSING AUDIENCES

Can give a short, rehearsed, basic presentation on a familiar subject.

Can answer straightforward follow up questions if he/she can ask for repetition and if some help with the formulation of his/her reply is possible. (p. 60)

WRITING:

OVERALL WRITTEN PRODUCTION

Can write a series of simple phrases and sentences linked with simple connectors like 'and', 'but' and because'. (p. 61)

LISTENING

OVERALL LISTENING COMPREHENSION

Can understand phrases and expressions related to areas of most immediate priority (e.g. very basic personal and family information, shopping, local geography, employment) provided speech is clearly and slowly articulated. (p. 66)

LISTENING TO AUDIO MEDIA AND RECORDINGS

Can understand and extract the essential information from short, recorded passages dealing with predictable everyday matters which are delivered slowly and clearly. (p. 68)

READING

OVERALL READING COMPREHENSION

Can understand short, simple texts containing the highest frequency vocabulary, including a proportion of shared international vocabulary items. (p. 69)

READING FOR INFORMATION AND ARGUMENT

Can identify specific information in simpler written material he/she encounters such as letters, brochures and short newspaper articles describing events.(p. 70)

Proposed topic: **children's education** (covering parts of goals 4 Quality Education and 5 Gender Equality)

Grammar content: depending largely on the material, but should certainly focus in this level on connecting sentences ("und", "oder", "weil"), giving reasons ("weil") and revision of conjugation in present and past tense. Specific grammar explanations and exercises should be included when necessary.

<u>Vocabulary content</u>: description of family, hobbies, children's activity, verbal expressions for opinion, statement and evaluation

Task for learners: write a small overview about the situation of children's education in your respective city, including introduction, main part (testimonies) and conclusion

A. INPUT SECTION

- 0. Explaining the task, the steps and the timeframe
- **1. Listening**: a short audio/video of a German child telling about his living conditions, hobbies, activities, family.

Exercise: complete a questionnaire to test listening comprehension

2. Speaking: Express own opinion in regard to the audio and compare/contrast to situation of children in own country (list of verbal expressions provided)

Exercise: speak first in couples, then all together; collecting together a list of living conditions for children in Germany and children in Ecuador

3. Reading:

a. Four short testimonies of children in different countries talking about their opportunities. (small text with photo of the child)

Exercise: complete questionnaire to test reading comprehension

b. short text presenting the example of a program to help children attend school Exercise: summarize the program (Who? Where? When? Why? How?)

B. OUTPUT SECTION

- **1.** Preparing interviews with 3-4 children in the same age than the children in the audio file and the reading text. Research information about children's education in hometown.
- A. Defining the questions (in Spanish for the children and in German for the end product. The questions must cover same aspects than the listening and reading material and can be complemented by supplementary aspects from the discussion.) (= writing)
- B. Doing the interviews
- C. Presenting the outcomes in German in four short texts with a photo of the child. The texts are formulated in the third person. (= writing)
- D. Writing a short introduction and a conclusion to the interviews. Topic: children's education in the city of ___ . (= writing) *This exercise may require supplementary research and specific help in the definition of "introduction" and "conclusion".

- E. Send the document to tutor for correction. (May be several times)
- F. Upload the whole document on the online platform.
- 2. Presenting the work: in a short presentation learners tell about how they undertook the project, what difficulties they met and how they evaluate the outcome. (= speaking)

Observations:

Since it is an online class, cooperative learning parts have been reduced. Because of failing internet connection and difficulties of time management, we have opted for more individual work except the speaking parts. Depending on their surrounding, learners have normally very reduced opportunities to speak in German (or most other foreign languages, except maybe English). The speaking parts are therefore essential to do in a teleconference where learners can speak to the tutor and also amongst each other.

3.2 Proposal for B2.1.(Vantage)

The CEFR proposes for the first part of level B2 (B2.1) the following description of the learning achievements (selection):

SPEAKING

OVERALL ORAL PRODUCTION

Can give clear, detailed descriptions and presentations on a wide range of subjects related to his/her field of interest, expanding and supporting ideas with subsidiary points and relevant examples.(CEFR p. 58) SUSTAINED MONOLOGUE: Putting a case (e.g. in a debate)

Can develop a clear argument, expanding and supporting his/her points of view at some length with subsidiary points and relevant examples.

Can construct a chain of reasoned argument: Can explain a viewpoint on a topical issue giving the advantages and disadvantages of various options. (CEFR p. 59)

ADDRESSING AUDIENCES

Can give a clear, prepared presentation, giving reasons in support of or against a particular point of view and giving the advantages and disadvantages of various options.

Can take a series of follow up questions with a degree of fluency and spontaneity which poses no strain for either him/herself or the audience.(p. 60)

WRITING

OVERALL WRITTEN PRODUCTION

Can write clear, detailed texts on a variety of subjects related to his/her field of interest, synthesising and evaluating information and arguments from a number of sources.(p. 61)

REPORTS AND ESSAYS

Can write an essay or report which develops an argument, giving reasons in support of or against a particular point of view and explaining the advantages and disadvantages of various options.

Can synthesise information and arguments from a number of sources. (p. 62)

LISTENING

OVERALL LISTENING COMPREHENSION

Can understand the main ideas of propositionally and linguistically complex speech on both concrete and abstract topics delivered in a standard dialect, including technical discussions in his/her field of specialisation.

Can follow extended speech and complex lines of argument provided the topic is reasonably familiar, and the direction of the talk is sign-posted by explicit markers. (p. 66)

LISTENING TO AUDIO MEDIA AND RECORDINGS

Can understand most radio documentaries and most other recorded or broadcast audio material delivered in standard dialect and can identify the speaker's mood, tone etc.(p. 68)

READING

OVERALL READING COMPREHENSION

Can read with a large degree of independence, adapting style and speed of reading to different texts and purposes, and using appropriate reference sources selectively. Has a broad active reading vocabulary, but may experience some difficulty with low frequency idioms. (p. 69)

READING FOR INFORMATION AND ARGUMENT

Can understand articles and reports concerned with contemporary problems in which the writers adopt particular stances or viewpoints. (p. 70)

Proposed topic: sustainable cities and communities. (goal 11)

<u>Communication task</u>: expressing consistently one's opinion, building arguments for debates, defending them and reacting to other people's opinion

<u>Vocabulary</u>: description of cities and communities, resources and their management, environmental care, verbal expressions for opinion, statement and evaluation

Listening: to a variety of authentic documents, like a report/documentary and several personal testimonies. (video) + exercises

Reading: journal article about sustainable cities + exercises

Speaking: 1. express personal opinion about the listening and reading input (questions for guiding) 2. Research arguments to support one's own opinion and do a presentation **Writing:** Write a short newspaper article about how sustainable your city is or could be.

4. Problems and Conclusions

Whereas the positive outcome of those classes is impressive with regard to the action-oriented approach and the possible topics that can be explored, there are some persistent problems that one meets during the implementation of online programs in Ecuador.

First and most importantly, the internet connection fails quite often, especially when it is raining. This is a persistent problem in online learning worldwide, especially in settings when synchronous parts are involved like teleconferences or individual tutoring sessions. In the case of a fully virtual course, the learner profits from the possibility of working his course asynchronously and can simply do his exercises later or on a different day when the internet connection is back. But in our opinion, synchronous face-to-face meetings are important in online courses concerning the time factor and the psychological factor. Giving feedback on a written or verbal performance or assessing questions from the learner is faster and more effective in a face-to-face situation. And the personal conversation makes the learning situation more human both for the tutor and for the learner than them only being confronted with technology and digitalized material.

Second, the need to familiarize learners with communication and information technology. By reaching out to people living in remote areas, one has to take into account that their proficiency with technology and prior knowledge decreases. Learners in Ecuadorian big cities (> 400k inhabitants) mostly have English as L2, then choose a L3 (i.g. German), meaning that they have consistent knowledge about the functionalities

of a language. The situation is very different for the rest of the country. The lack of prior knowledge both in previous language studies and in insufficient use of technology jeopardizes the learning process.

Third, the reputation of online learning in general and persistent learning traditions. Studies show that attrition is much higher in online classes than in traditional classroom settings (Kizilcec et al., 2015) and that learners in Africa, Latin America and Asia were up to 50% less likely to persist with lectures and achieve grade milestones than learners from North America, Europe and Oceania (p. 5). In the case of Ecuador, a traditionally authority-orientated learning tradition makes it difficult for newer approaches to be accepted. The old learning and teaching tradition does not include values like learner autonomy to self-regulate one's own learning process. Consequently, an online teaching setting that lacks all the surrounding to motivate or obligate the learner to do the exercises brings new difficulties to the learner that he does not know how to handle because he was never taught strategies to cope with these situations. Directly linked to learner autonomy is the field of self-study and self-organization. It has shown in Ecuador, but also worldwide, that good learners that are well organized and disciplined can perform excellent if not better in online settings than in face-to-face classes. This is mainly because they spend more time with the proposed material and therefore benefit well from the class (Blake, 2011, 21). On the other hand, learners with less learning facility, underperform easily if not supported by the tutor, meaning a one-to-one situation.

The novelty of online language classes in Ecuador and authoritarian learning traditions mean that an online class in Ecuador must be - to guarantee a learning process - in a small and personalized class with the possibility of individual tutoring instead of MOOCs (Massive Open Online Courses) where learners find themselves often unable to cope (Kizilcec et al., 2015).

Fourth, the institutional background and sustainability knowledge. Sustainability education is a question of principles and ideology, a decision that an institution or a single person can make based on personal or institutional involvement. In this article, we have seen the great opportunity language class offers for sustainability education by using language learning as a vehicle for those contents. However, the adaptation of language class for sustainability education requires first, a specific knowledge of the tutor or the class developer and second, more time for preparing the material compared to using a predefined textbook. The tutor must know the important points to emphasize on and why the learning goals are set the way they are. Up to now, the decision of putting the extra effort depends on the personal involvement of the tutor/class developer and if he/she has the freedom of defining the contents by his-/herself.

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