

## Article:

### ***Curating and nudging in virtual CLIL environments***

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#### **Abstract**

Foreign language teachers can benefit substantially from the notions of curation and nudging when scaffolding CLIL activities on the internet. This article shows how these principles can be integrated into CLILstore, a free multimedia-rich learning tool with seamless access to online dictionaries, and presents feedback from first and second year university students of Arabic as a second language to inform foreign language teachers about students' needs and preferences in virtual learning environments.

**Keywords:** Curating, nudging, Clilstore, Arabic as a second language.

#### **1. Introduction**

One of the most challenging tasks for foreign language teachers is to structure and scaffold internet based material, not only to provide their students with the best learning opportunities possible, but also to keep the students' focus on an intended learning task: The easy access to an overwhelming amount of material available on the internet easily makes students engage in other unrelated activities. And the task becomes even more challenging when working within a Content and Language Integrated Learning (CLIL) context. The dual educational focus of using a foreign language for the learning and teaching of both content and language might well be a highly motivating factor for students who soon realize that a foreign language can be used for purposes other than studying linguistic structures *per se*. But for teachers, the CLIL context is even more challenging since they will need to carefully organize and scaffold *both* content *and* language structures in order to ensure a suitable pedagogical progression for the benefit of the students (Carloni 2012, Coyle et al. 2010).

This study suggests a way of dealing with the challenges in CALL of structuring and scaffolding net-based material and making learners maintain focus on intended learning tasks by incorporating two pedagogical principles, curating and nudging, into a free multimedia-rich learning tool, CLILstore. The tool offers the possibility to create teaching units for Content and Language Integrated Learning and supports foreign language learning processes by giving seamless access to free online dictionaries and supplementary materials. In the present study, CLILstore units incorporating the principles of curation and nudging are tested on language learners of Arabic as a second language with the purpose of generating learning activities outside the classroom, but the principles could easily be applied in any foreign language supported by CLILstore (i.e. 100+ languages) and for any learning context (classroom teaching, blended learning, group work, etc.). The purpose of the study is to examine how language learners rate multimedia CLIL units with seamless access to dictionaries and supplementary material, based on the principles of curating and nudging, thus giving feedback to the profession about language learners' needs and preferences in virtual learning environments.

In what follows, I shall first define the concepts of curating and nudging. Then follows a short presentation of CLILstore to demonstrate how this tool supports foreign language learning, and how curating and nudging have been integrated into the construction of clusters of units. In the third section, I shall report on the feedback from first and second year university students of Arabic as a second language, and then, in the final section, show how this feedback can inform the profession on language learners' needs and preferences.

## 2. Curating and nudging

Hubbard (2012), Nielsen (2013) and others have suggested that foreign language teachers can benefit substantially from the notion of curation when making use of virtual learning environments. Not only has the professional focus of foreign language teachers moved "from creation to curation" when developing new teaching material - today, rather than starting from scratch, most teachers pick and choose among the overwhelming amount of materials available on the net which is then adapted to specific teaching and learning goals. Also, curation is a very useful metaphor when trying to define in more detail some of the new skills which have become central to the teaching profession in a digital postmodern world. Just as the curator in a museum is supposed to make a careful and deliberate selection of relevant material for an exhibition based on clearly defined criteria, so must language teachers design their virtual learning scenarios by carefully selecting and combining material in thematic or otherwise related units. Curating online material for foreign language learners can be divided into a number of sub-processes. First, the learning goals must be outlined; they might be based on themes, e.g. about the Arab spring - what happened in the Arab world in the spring of 2011? Who are the winners of the ongoing process and who are the losers? Or they might be designed to meet more complex learning goals where students are to reflect on causal explanations: Why did it happen? Why did it happen precisely in 2011? In other words, the learning goals of "who should learn what" must be identified, thereby establishing guidelines for the selection of materials. Such guidelines are crucial, since the process of selecting material, which is the second step in the curation process, has changed substantially in recent years, from the earlier scarcity of authentic and relevant material in foreign languages which had to be gathered carefully over time, to today's overload of net based material, where the pick and choose-approach must be followed by a rigorous selection process, so as to keep only material which is pedagogically adequate.

The third step in the curation process has cohesion as its key term: is the material to be presented chronologically or according to subthemes, or should it rather be organized according to learner experiences or learning processes? What is the nexus of cohesion across the different virtual learning rooms as well as inside the particular ones? And not least: How does the cohesion of the material match the learning goals? There are many possible principles of cohesion, but the skilful foreign language teacher should always be very conscious that not only are online materials to be curated according to content, but learning processes should also play a pivotal role.

The final step in the curation process is to provide pedagogical support in the form of tips and tools which can be used by learners if needed. Directions for use, links to meaning technology - online dictionaries, word lists, concordances, etc. - and supplementary materials as well as *links* and *likes* from other users provide flexible input which learners can draw on throughout their learning journey. With such support, the students are now ready to discover the virtual learning environment, to experiment with the challenges they meet along the way, and will hopefully learn a lot (Hubbard 2012, Nielsen 2013).

A virtual learning environment based on skilful curation does not guarantee, however, that foreign language learners will stay focused on their learning task. The fact that there is a wealth of other interesting resources next to the virtual learning room they are currently engaged in, and that it only takes a click or two to get there, provides an easy exit for students and seriously challenges even the most skilfully curated learning task. And once the students have left the virtual learning room, it often proves difficult to drag them back. For obvious reasons, foreign language teachers cannot force students to stay behind locked doors in cyberspace, but what they can do is to try to *nudge* them to stay focused. The basic definition of nudging, a term developed by researchers in marketing and decision making, is “to push mildly (...) attempting to move people in directions that will alter their behaviour and improve their lives” (Thaler and Sunstein, 2008: 5). The concept is based on the assumption that there is no such thing as neutral design, and that “small, apparently insignificant details can have major impact on people’s behaviour” (ibid.: 3). Nudging, in Thaler and Sunstein’s definition, is shaped by choice architects who analyse and organize the context in which people make decisions, and consequently, choice architects must pay a great deal of attention to graphics and layout which can push users to make suitable decisions. A nudge is hence defined as “any aspect of the choice architecture that alters people’s behaviour in a predictable way without forbidding any options” (ibid.: 6). If we translate the nudging approach into foreign language learning in virtual environments, the teacher becomes a choice architect who must design the material used in a virtual learning environment in such a way as to nudge learners to stay focused on their learning task with the aim of improving their language acquisition. How this is done in practice varies according to the actual context and the graphic and sound clues made available by the chosen software.

### 3. CLILstore

CLILstore is a free multimedia rich website which links copy left content and language integrated teaching materials, including texts, videos, sound files and pictures, with free online dictionaries in a seamless process which allows users to click on any word in a unit and get immediate response from one or more chosen dictionaries. The CLILstore user interface is shown in fig. 1, where a learner listening to a You Tube video with the famous Egyptian singer Ramy Essam repeating “bread, freedom, social justice”, has clicked on the Arabic word for “social”. The click opens a dictionary window in the right hand side of the screen, in which the learner has already chosen the appropriate bilingual language pairing and the preferred dictionary. The green buttons in the CLILstore window (from right to left: “What is the Arab spring”, “The music revolution” and “Famous slogans”) are links to other CLILstore units and to supplementary material on the Arab spring, whereas the blue button named “CLILstore” will take the user to a repository of other CLIL units (hence the name of the website: CLIL-store).



Figure 1. CLILstore user interface.

Units can be created in any foreign language supported by CLILstore (100+ languages) and the creation process is quick and easy: All teachers needs to do is to register and fill in a basic template with required information (title of unit, embed codes for videos, sound files and pictures, the text to appear in the unit and tick a small number of information boxes on language levels, etc.). CLILstore has good support facilities in the form of instructional videos in different languages as well as a handbook with technical and pedagogical instructions and examples of best practice.

The integrated use of videos, audio files, pictures and texts and the seamless access to meaning technology in the form of dictionaries make CLILstore units both entertaining and time saving for learners to use. But as in most cases of CALL, the technology offered by CLILstore needs the added value of pedagogical underpinning, if its learning and teaching potential is to be fully exploited. In the present perspective, curating and nudging have been integrated into the construction of clusters of CLIL units in order to illustrate how net based material can be organized and scaffolded as a means to maintaining learner focus in virtual learning environments and thus to maximize foreign language learning.

As mentioned above, the CLILstore unit shown in fig. 1 deals with the Arab spring and has the intended learning goal of providing first and second year students of Arabic with a general understanding of this phenomenon as experienced by Egyptian youth, and consequently to learn basic key vocabulary in Arabic on this subject. The unit is one of six dealing with same issue. Based on the learning goals, a number of different videos, texts and pictures were selected to support different learning styles, the main linguistic goals being basic syntax and relevant and transparent vocabulary which should be recycled frequently. This resulted in a collection of several videos of demonstrations from different Arab countries where people are shouting slightly different slogans, two revolutionary songs with catchy refrains, cartoons with symbolic use of objects and people, and a short simplified text on the Arab spring from the Arabic Wikipedia as well as a supplementary text in English on the musical revolution in Egypt. The selected material was then transformed into CLILstore units so as to give seamless access to online dictionaries, and units were subsequently sequenced by the use of one-way linking from one unit to two or three new ones. Based on the idea of nudging, it was decided not to refer users to a list of units which would provide them with an overview of units and themes to be explored, but rather to nudge them to new units by means of

CLILstore's green buttons so as to create a feeling of exploring a "universe of the Arab spring". This cluster of units was then linked, again through the use of green buttons, to another cluster of CLIL units, at slightly higher language level, dealing with Egyptian music. The clusters, however, were linked in a two-way fashion so as to allow students to immediately click back to earlier units if they found the new ones too difficult. The graphics in fig. 2 show how units were linked in thematic clusters at different language levels, and how consequently students were nudged around in the CLILstore universe, hence imitating how users explore new issues on the net, while still keeping them focused on the intended learning task inside the CLILstore framework.

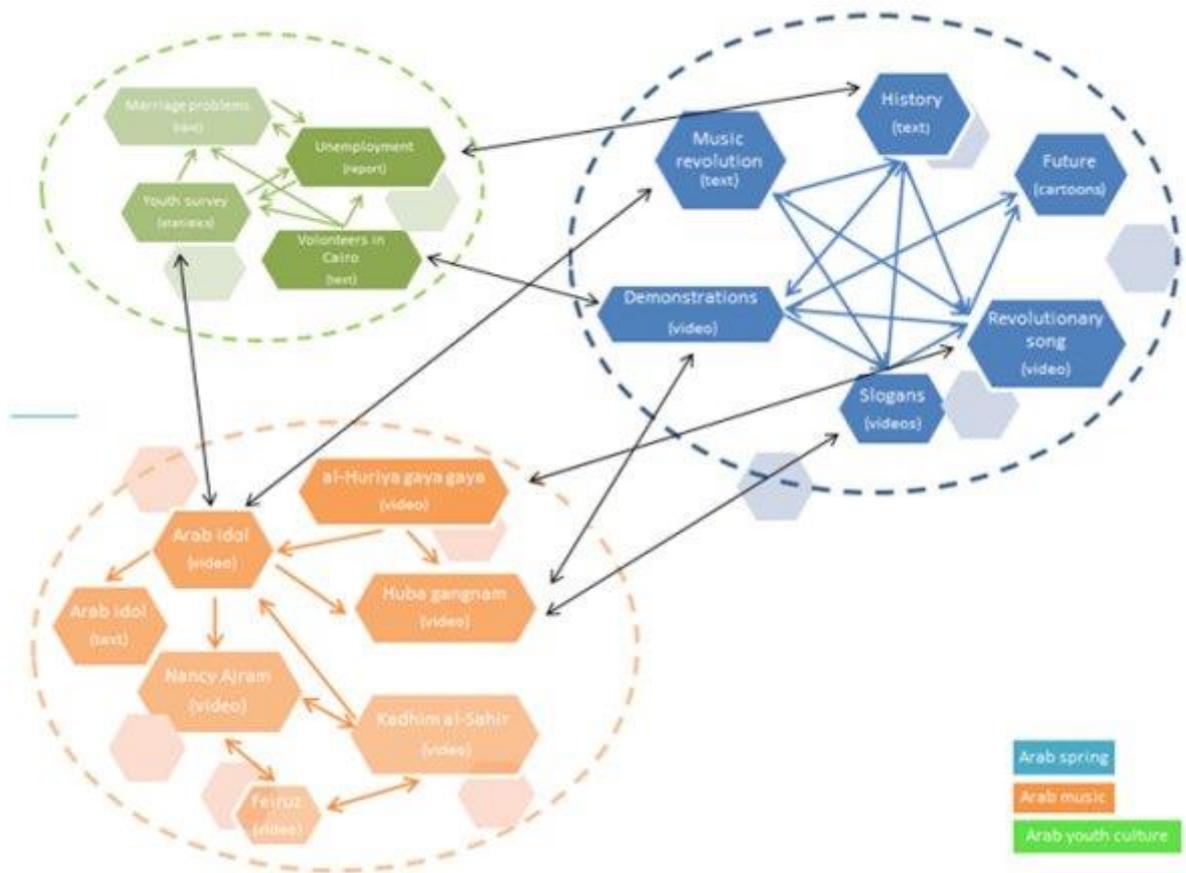


Figure 2. Thematic clusters of CLIL units at different language levels.

#### 4. Student feedback and recommendations

In order to test the above theories, the following research questions were formulated: How did language learners rate the virtual learning environments of CLILstore units based on curation and nudging? Did they benefit in any way, and if so, what effects did they find CLILstore units to have on their learning outcome? To find out, a questionnaire was distributed to 53 first and second year university students of Arabic, who had been introduced to CLILstore during class time for approximately one hour and then asked to test it outside class for two consecutive days. The questionnaire contained four questions on the use of CLILstore – Was CLILstore easy to work with? Did CLILstore make it easier to read texts? Did Clilstore help to manage the time available to read texts more effectively? Did the dictionary interface work well? The students were asked to rate their responses on a scale from 1 to 5, followed by two open ended questions on what the students liked the best and what they thought could be improved. An additional space for other suggestions was added at the end.

The global average from all four questions among first year students (n=30) was 3.6 out of 5, whereas the ratings of second year students (n=23) reached an average of 3.4. From the ratings of the individual questions it was clear that both groups were most enthusiastic about the fact that they could read texts easier and faster, whereas they differed in their assessment of the use of dictionaries: First year students rated the dictionary interface almost one point higher (3.5) than second year students (2.8). The same difference was found in the answers to the open ended questions: Whereas first year students were excited about the seamless access to dictionaries and mainly suggested that these should be improved to become faster and more elaborate, second year students were much more critical of the dictionaries, complaining about wrong translations, lack of adequate definition, etc. What these students appreciated in CLILstore, on the other hand, were the possibility to read and listen to texts simultaneously, to cover subjects which were more interesting than "the boring ones used in the classroom" and to experiment with units by clicking around in CLILstore.

From the student feedback, we might conclude at least three things which can inform the profession of foreign language teachers about learners' needs and preferences in virtual learning environments. First, what seems to underlie the rather enthusiastic assessment of CLILstore units among first year students was their "quick and dirty" use of the available dictionaries: By frequently clicking on words they did not know, they managed to unwrap information, however limited, which led them, by means of Arabic, to new insights into the Arab spring. Second year students, on the other hand, were much more critical of the dictionaries and showed a raised awareness of the many pitfalls encountered in net based meaning technology. Consequently, it seems as if learners develop a healthy awareness of both opportunities and pitfalls of the available meaning technology, even without being taught about it. This gradual move from "quick and dirty" to more critical user behaviour ought to reassure many foreign language teachers who argue against students' access to free meaning technology such as e.g. google translate.

Secondly, the fact that second year students emphasized the flexibility of CLILstore, which allowed them to reflect and experiment with language learning skills according to their needs, showed that students are able to cater for their own learning, thus taking a step forward towards becoming (more) autonomous learners. And thirdly, the combination of seamless access to meaning technology and a flexible approach to acquiring language learning skills seems to make detailed scaffolding of linguistic structures less important, as long as the (carefully curated) content is of genuine interest to the students. Nobody suggested the need for a more proper scaffolding of material (by e.g. complaining that units were too difficult) which is often the case when students are to deal with new material.

By nudging language learners around in a CLILstore universe based on curated material and with seamless access to meaning technology, we were able to motivate students to stay focused on their intended learning task, while at the same time fostering flexible and independent learner behaviour and supporting reflection on learning processes. We also managed to play down the need for detailed linguistic scaffolding, thus making the task of teachers easier.

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### **Websites**

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Multidict, <http://multidict.net/multidict>

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