

KBIP An authentic knowledge building environment for second language learners

Ángela Rocío Pérez & Thérèse Laferrière, Université Laval

Statement of the problem

Most contemporary language learning models are based on Vygotsky's theory (1978), which emphasizes the socio-cultural view in language acquisition. Eun and Lim (2009) stress the importance of "meaningful interaction". Emerging classroom-based KBCs, which participate in the Knowledge Building International Project (KBIP), work collaboratively on authentic questions and communicate with one another, often using a second or third language. Our assumption was that the Knowledge Building International Project (KBIP), supported by Knowledge Forum (written discourse) and VIA (verbal discourse) and reaching a wide variety of participants, meets the "meaningful interaction" criterion (Eun & Lim, 2009) to the effect that students will improve their language proficiency while working on real and authentic questions and topics of interest. Specific research questions were the following ones: What was the vocabulary usage in these KBIP classrooms? Do we see any vocabulary growth? Is online interaction, between classrooms speaking different native languages, valuable for language acquisition?

Context of the study

* The Remote Networked Schools (RNS) is an initiative of the Quebec Ministry of Education and CEFRIQ to investigate how the use of information and communication technologies (ICTs) may enrich the learning environment of small rural schools (less than 100 students) in Quebec, Canada. These small rural schools face many problems caused by a decrease in the number of students and poor access to educational resources, thus threatening the schools to close. One of the RNS objectives is to experiment and document the innovation process of networking (large bandwidth) small schools among themselves and with other schools such as city schools using a videoconferencing tool (VIA) and an electronic forum (Knowledge Forum) so that they can work together, thus breaching walls and diminishing distances between them and other schools.



* The Knowledge-Building International Project (KBIP) is an endeavor that promotes classroom-based knowledge building. Thus, communication between classrooms, located across geographical, cultural and linguistic barriers, occurs mostly in English, French, and Spanish. Participating classrooms collaborate to deepen their understanding of authentic problems of global importance (such as climate change) during a process known as knowledge building. KBIP is the result of school-university-government partnerships in several countries throughout the world.



Participants

Sixteen-year old students from a school in Quebec (Côte-du-Sud School Board) worked collaboratively with a class from New York during the 2011-2013 period, to define what a "digital citizen is, and the challenges they have to face while interacting on the web". Other specific topics concerning students were also addressed: Advertising, College costs, Social Activism, Meat Industry, Indoor Pollution, Outdoor Air Pollution, Social Networks. Students worked in small groups for creating written contributions on Knowledge Forum, and also for planning and conducting meetings on VIA. For this study, only the contributions from the Quebec-based teams were analyzed because they were from the classroom for which English was the second language.

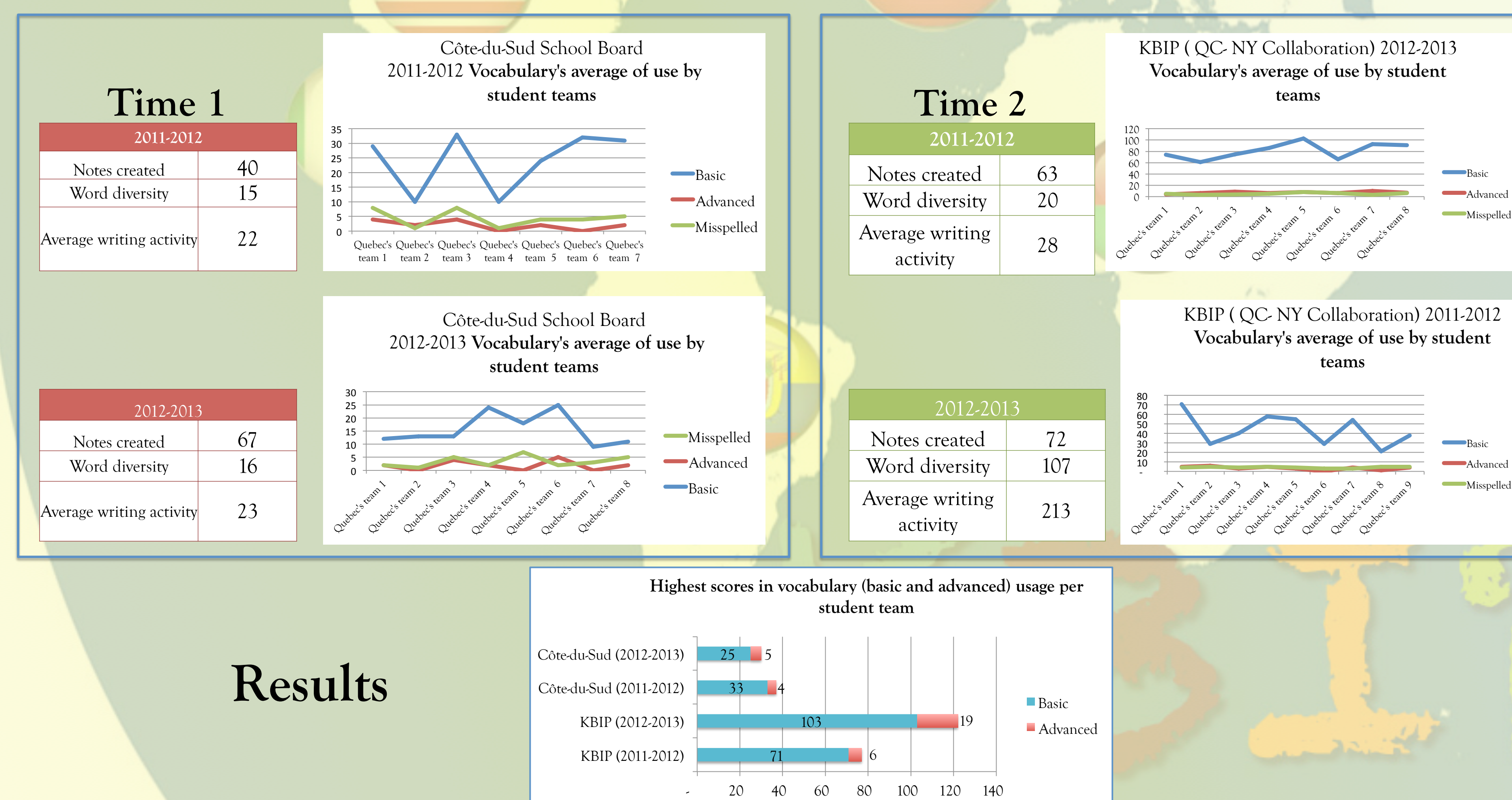
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<https://www.knowledgeforum.com>
https://ikit.org/kt/46/help/enhanced/Vocabulary_Growth_Tool.htm

Data collection

- * The QC-NY Database (2011-2012) presented a total of 135 written contributions in 16 views, corresponding to 18 authors (3 to 4 students per author group).
- * The CS-Côte-du-Sud Database (2012-2013) presented a total of 107 written contributions in 3 views, corresponding to 15 authors (3 students per author group).
- * On the Via platform, eight rooms were created for students to work with this videoconferencing tool, for a total of 42 activities between April 2011 and May 2013.

Data analysis

- * A qualitative analysis of the written contributions on the Knowledge base was made for identifying the topics and questions students worked on, so that we could observe the presence of "meaningful interaction". Videoconferencing verbal content provided complementary information.
- * A quantitative analysis of these contributions was made by using the vocabulary growth and writing KF's tool, focusing on diversity and vocabulary growth in each of the views. Time 1 represents students discussing with fellow classmates. Time 2 represents students discussing in a "meaningful interaction" environment provided by their participation in the KBIP project.



Results

Next steps

- * Baseline data will be presented to interested participating KBIP teachers who, as a community of practice, will co-design the participation of their classrooms in the next KBIP round.
- * New data will be collected midway into the school year, and fed back to the teachers who will be invited to match the results with their school's assessment of student proficiency in the second language in use.
- * Data will be collected one more time at the end of the year, and comparisons with baseline data made.
- * The emerging research question is: Do vocabulary gains become internalized as part of students' own "lexical field"?

Discussion

- * In terms of "meaningful interaction", students improved their vocabulary from their written and verbal interactions with native speakers.
- * While attempting to solve authentic problems, students became conscious of other contexts and realities. Examples:

Almost everyone in our school has a Facebook account. Some use the account to play games, to chat with friends and chat with family from other parts of the world.

There is a problem at QC, students are on strike because the government decided to increase the scholarship fees of 75%.

It's crazy how students in Quebec are obligated to go to college when the price of it keeps climbing. And what is also crazy is that CLASSE has rejected the vote to hike up student tuition even though it still does.

Knowledge Forum as a technology of use for L2 language acquisition:

- * Teachers can follow students' performance and progress by using the applets so that they can guide their vocabulary growth and writing improvement.
- * The same tools can be used by students for assessing their progress while checking their misspelled words and correcting them.