Language Connector

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Overview

The Language Connector provides a scenario-based interface and platform to allow distant volunteers to teach essential language skills to poor and educationally underserved areas. The technology allows uncertified native speaker volunteers the ability to provide distant foreign language training that will revitalize the target areas’ economies.

The Target Village

Our product’s example target district is Huodoushan Village, Luanping County, Hebei Province, China. Luanping County is one of China’s 592 poorest counties (accredited and financially supported by Chinese government) and Huodoushan Village is one of poorest villages in Luanping County.

Luanping County is located in the water resource area for the Miyun Reservoir which provides drinking water to China’s capital city, Beijing. Industry is not allowed and the environment is stringently protected. This lack of industrial capability leads the county to be among the poorest in China.

However, this area has a unique resource – tourism. The Jinshanling section of the Great Wall is located on the boundary of Gubeikou Town, Miyun County, Beijing, and Luanping County. It is 140 kilometers (88 miles) to the north-east end of Beijing City and
is listed as a World Heritage site by UNESCO. Its ruinous state gives it an air of authenticity that has earned it the reputation of being the most beautiful section of the Great Wall. Unlike the sections to be seen at Badaling or Mutianyu that have undergone extensive restoration, the wall at Jinshanling has received very little attention. Because this section has retained much of its original 500 year old features from the Ming Dynasty, it attracts more than 10,000 tourists, most of them foreign. Since there is no industry here, the main income for local people comes from selling products to these tourists.
The Target Users

Our product’s targeted users are students at Amoco Hope Middle School which is located in Huodoushan Village, Luanping County. The school has more than 400 students, widely scattered around the area. Some students’ homes are more than 9 miles from school\(^2\). They have to walk to the school along the mountain road everyday. Most of them are from low income family (yearly average income per family member below 1,300 RMB – equivalent to $162)\(^2\).

In 2002, Ameco Company donated 40 computers to the school. This was the first time the school possessed computers. On November 7, 2003, Ameco donated 235,000 RMB (equal to $28,500) to renovate the school’s old facilities. Ameco also donated one set of networking equipment that enabled the school to gain internet access for the purpose of earning and teaching\(^2\).

Although Amoco Middle School’s facilities were updated because of the donation, the quality of its teachers is far below the average level of Luanping County. Even the level of this county is very low compared to the national level. The main reason is the poverty. It is very hard to attract any teacher with a bachelor degree. The highest degree which the teachers there have is an associate degree. This situation is extremely severe in the English subject area. All English teachers just have high school diploma. To improve students’ English performance, in 2003, Ameco even sent 3 volunteers to teach intensive spoken English. The drop rate at this school is 11\%. Most of graduates go home and make a living in agriculture\(^2\).
The Opportunities and Problems

The rich tourism in the area provides the opportunity for the school to greatly enhance its students’ economic prosperity. These students need to have a strong ability to communicate with the foreign tourists (most of them from English-speaking countries or can communicate in English) in order to sell more products to them.

The local learning environment does not provide effective ways to reach this goal. Three barriers prevent the teaching of effective language skills. The first barrier is ill-qualified English teachers. Teachers should be qualified in the languages they teach: proficiency in the language, experience with the cultures represented by the language, and pedagogical expertise specific to the language. Obviously, the middle-school graduate English teachers are not well-qualified⁵. Second, in general, the English teaching method in China is still knowledge-based, emphasizing on vocabulary and grammar⁶. After several year English study, although they can read and are good at grammar, most of Chinese English learners are unable to listen, speak, communicate, and apply English. Finally, the English learning in China does not mirror real life situation⁶. Students need to apply English to do authentic work. The first barrier applies specifically to our target area. The last two actually apply to the whole English teaching and learning in China, but are considerably more severe due to the poor quality of English teachers.

An English learning program to effectively improve the communication ability in English which is tailored to the local situation and overcomes the barriers mentioned above, will improve their possibility to have a better life by selling more products to foreign tourists,
and improve the local economy. Many places in China have problems similar to Huodoushan Village. Therefore, we believe that an effective solution for Huodoushan, will apply to other cities and villages as well.

The Solution

Our solution is an online English learning platform which is grounded in the local situation and appropriate language learning theories. The platform uses the latest advances in interactive web technologies including video and voice over IP. It is intended to be used in classroom, but can be also used out of school if students have their own internet access.
The following is an example illustrating how our design works:

Suppose the student engages in a one hour learning session.

- At scheduled time, students and the trainers go to the website and log in.
- The system matches student and trainers and initiates a learning session.
- The student picks a learning level and topic from the list depending on his or her level.
- The corresponding expected learning outcomes, suggested learning activities, and recommended assessments list appear on the screen. Then, the trainer takes over control and follows the guided learning process designed by language learning experts. This ensures the quality of teaching and learning, even if the trainer is not pedagogically trained. The system provides cues and visual stimuli to both the trainer and the student to allow for the guided session.
- The activities are mainly performance and scenario-based learning mirroring real life situation such as role-playing selling products to foreign tourists or serving foreign guests as waiter or waitress in a restaurant.
- During their talking, the trainer can give oral feedback and/or textual feedback.
- There is a dictionary tool for students to look up new vocabulary and automatically store the word into the student’s new vocabulary list. It also stores and quizzes students on the relevant words for the scenario.
- The learning can also be conducted in group. However, the maximum students in one group are limited by 4 by default to ensure each student has enough time to practice.
- At the end of the session, the trainer uses an online rubric to evaluate students’ performance.
♦ For each scenario at each level, there is also a visual example or rubric in the form of a video to show students what is expected for the topic. The video is accessible even before the session so that students know what they are expected and what they should focus on.

♦ The learning session is recorded and stored into the students’ profile. Students can later review the session to see what they need to improve on, re-listen to parts they did not understand and identify strengths and weaknesses. This feature can develop students’ metacognitive ability – an important ability in language learning.

The following table illustrates how our solution addresses the existing problems:

<table>
<thead>
<tr>
<th>Poor quality of local English teachers</th>
<th>Online scheduled synchronous communication using Voice and video over IP in English between students and distant volunteer trainers (i.e. from the United States).</th>
</tr>
</thead>
<tbody>
<tr>
<td>Performance-based learning reflected in learning activities and assessment</td>
<td>Guided learning – built-in expected learning outcome, conversational cues, suggested instructional activities, and recommended assessment allows uncertified native speakers to conduct effective learning sessions.</td>
</tr>
<tr>
<td>The English teaching method in China is still knowledge-based, emphasizing on vocabulary and grammar.</td>
<td>Performance-based feedback or assessment</td>
</tr>
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<td></td>
<td>Emphasis on developing spoken English – the ability to communicate</td>
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<td></td>
<td>Develop students megacognitive ability – the ability to monitoring their learning</td>
</tr>
<tr>
<td>English learning in China are not mirroring real life situation.</td>
<td>Scenario-based learning mirrors real life activities tailored to tourism industry.</td>
</tr>
</tbody>
</table>
The following is an example of built-in rubric for trainers to assess learners’ performance:

<table>
<thead>
<tr>
<th>Rating Scale</th>
<th>Evaluative Criteria</th>
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<tbody>
<tr>
<td>Outstanding</td>
<td>Presentation exceeds basic requirements. Easy to understand. Includes some interesting or unusual detail. Tones are accurate. Students use considerably amount of vocabulary and structures not practiced in class. Students show teamwork and some spontaneity in their communication with, listening to, response to, and support of each other.</td>
</tr>
<tr>
<td>Good</td>
<td>Meets task requirements. Comprehensible but may need some inferences by the listener. Includes a variety of appropriate vocabulary and structures practiced in class. Students use some vocabulary and structures not practiced in class. Tones are generally accurate. Students attempt to show some spontaneity but may be stilted in places. Pauses tend to occur at the end of a phrase or sentence rather than after individual words. Students may attempt to self-correct.</td>
</tr>
<tr>
<td>Satisfactory</td>
<td>Presentation is largely recited, with frequent pauses. Students' speech is comprehensible with some effort on the part of the listener (the teacher may understand easily; students may have difficulty). Students attempt to provide accurate tones and pronunciation of words and structures that have been practiced in class but may not always be successful. Communication is stilted, with students concentrating on their own parts and often speaking word by word.</td>
</tr>
<tr>
<td>Not Demonstrated</td>
<td>Inappropriate, incomprehensible, or incomplete.</td>
</tr>
</tbody>
</table>
Reference:

1. 国家级扶贫重点县名单, retrieved on March 6, 2006 at
   http://www.cfen.cn/loginCt/pageprocess?pageurl=swxw/2005-05/10/content_104719_2.jsp

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   http://news.xinhuanet.com/newscenter/2003-04/14/content_830391.htm

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