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LEARNING ENGLISH THROUGH AN LMS, FACE-TO-FACE LECTURES AND THE RESULTING BLEND

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Abstract

As the 21st. century wears on and we find ourselves fully immersed in the digital age, new and amazing activities come about which are forever keeping us lecturers engaged in trying state-of-the-art technology to improve the learning-teaching activity. We have been using Moodle in our lectures over 8 years now and although there have been some ups and down along the line, on the whole, the experience shows an upward trend of satisfaction that correspond to the same trend which has affected the efficiency and improvements in technology and communications worldwide lately. Implementing "blended learning" to teach English Language using Moodle, has been the core of our research in the last few years and we have solved it by leaving the more cumbersome and creative tasks (writing and speaking) activities for the "face-to-face" lectures and the more "mechanical" activities have been inserted in an LMS (Learning Management System), in our case Moodle, with outstanding results. Slower and more backward students take their time and catch up quickly thanks to the LMS and the activities we give them. Thus, in a relatively short time, they level up with the brighter students and manage to acquire a deeper understanding of the subject and, in cases, excel thanks, first, to their work and dedication and, secondly, to the opportunity we give them to work at their own pace through our LMS, and lastly to the motivation they receive from using a system which inculcates the students with a sense of "group" responsibility, ever since whatever they do, or do not do affects the rest of the members in the group. Our main concern henceforth has been to adjust each and every subject we teach using an LMS, to the new realization: the work students do in the LMS and the face-to-face lectures. The success or failure depends entirely on the blend we make of these two elements and the activities and resources we provide both in the lecture room and in the LMS. This article reveals the secrets of this "language blend", which for us was an exceptional starting point to course building strategies for language learners.

Keywords - Blended learning, adaptive hypermedia, e-learning.

1. Introduction

When we started building our course in Moodle, the very first thing we thought about was that we wanted it to last long and stand strong against the passing of time. Two reasons, in the back of our minds, guided us through this process: to see whether our course was of any use to fulfil our expectancies as far as learning is concerned; and, if it was, to make it available to the rest of our colleagues wherever they might be and no matter what. LMSs they could be using. To that end, we had to put some order and logic into everything we were to do. Order is a necessary condition for anything the human mind is to understand and logic tells us what is feasible what is superfluous and unnecessary for the human mind to comprehend.

Turning to standards was the perfect solutions to make our course available to anyone and to assure its functionality across any Course Management System. The lack of interoperability had been the norm up until the first LMS started to upsurge and improve. By adhering to standards, courseware builders can construct components completely independent of the management systems under which they are intended to run—that's interoperability. Because of this, the life expectancy of a courseware component is greatly increased when we know that we can upgrade a management system and it still works, or when we reuse that component in a totally new course.

Considering all this, we naturally discarded Moodle embedded activity modules and opted for authoring programs such as Hot Potatoes, Textoys, eXe-learning, QuizCreator and Questionmark, all of which serve for building Sharable Content Objects (SCOs) and export them using SCORM compliant activities. Furthermore, by using authoring programs like the ones above, you don't have to be on line while building your activities. They can be built and tested locally and henceforth uploaded to the system; whereas if you had to use the programs inside the Moodle system you would always have to be logged in. This is quite a disadvantage being communications as they are today, not always 100% stable and reliable. Preferably we would rather test everything beforehand and then, when everything is ready and consistent, upload it to the system.
Truly, one objection made to authoring tools of the past which were SCORM [1] compliant, was that they were based on a single learner model. This model assumed that a learner interacted only with content objects and that the learning activities were content-based activities engaging the learner in the learning process. Thus, the support provided by SCORM-based courseware authoring tools in the authoring process was limited in supporting the creation and sequencing of single learner, content-based learning activities.
With the appearance of eXe-learning all this has changed radically. The key design principle in this tool is the separation of the learning design process from the content packaging process. This separation enables the design of learning scenarios by defining the participating actors, the response of a learning system to their interaction with the learning content and the services provided by the learning system in such a way that is independent from the learning content. Thus, it enables the same learning scenario to be used with different content, as well as, different learning scenarios to use the same content objects.
The main components of the tool are the following:
- *Learning Design subsystem*. This part of the authoring system is based on the use of IMS Learning Design specification in order to provide the pedagogical designer with the environment for defining learning scenarios. The main scope is to enable the definition of generic, domain independent learning scenarios that can be used by the content packaging system in order to create learning activities based on the use of the learning objects stored in the content repository.
- *Content Packaging subsystem*. This part of the authoring system enables the population and packaging of learning scenarios with the learning content. In our system implementation, the development of such packaging tool is based on the commonly used IMS Content Packaging, SCORM 1.2, or IMS Common Cartridge.
- *Learning Resources Metadata Authoring & Management subsystem*. This part of the authoring system supports the metadata authoring and repository management. The main goal of this component is to provide an easy-to-use and accessible from anywhere platform capable of authoring, storing, managing and deliver the educational metadata produced for supporting searching and retrieval of learning resources.
Furthermore, with the other tools (Hot Potatoes, Textoys, etc.) we have complemented the learning scenario in our system with novel activities that are embedded within the eXe-learning SCORM package.

2. Adaptive hypermedia for theory and practice exploitation

These factors and tools depicted above, however, do not directly improve the pedagogical quality of the content produced. Learners are known to respond well to content and education systems that adapt to their personal preferences and which find an eco in face-to-face lectures. The key to this process is an appropriate learner model constructed either explicitly through an online instrument or implicitly through the learner's interaction with the learning environment and in-person classes.
Our "Language Blend" is based on three fundamental lines:

- Theory development and supportive resources.
- Deployment of activity practice to assimilate the theory above.
- In-person classes.

Adaptive hypermedia (AH) is an alternative to the traditional "one-size-fits-all" approach in the development of hypermedia systems. Adaptive hypermedia systems (AHS) build a model of the goals, preferences and knowledge of each individual user, and exploit this model throughout the interaction with the user, in order to adapt to the needs of that user [2]. For example, a student in an adaptive educational hypermedia system will be given a presentation that is adapted specifically to his or her

knowledge of the subject [3], and a suggested set of most relevant links to proceed further [4]. AH systems can be useful in any application area where the system is expected to be used by people with different levels and knowledge, something quite often found in language learning, and where the hyperspace is reasonably big. Users with different levels and knowledge may be interested in different pieces of information presented on a hypermedia page and may use different links for navigation. AH tries to overcome this problem by using knowledge represented in the user model to adapt the information and links being presented to the given user. Adaptation can also assist the user in a navigational sense, which is particularly relevant for a large hyperspace. Knowing user goals and knowledge, AH systems can support users in their navigation by limiting browsing space, suggesting most relevant links to follow, or providing adaptive comments to visible links. In short, a Hypermedia System is an application which uses associative relationships amongst information contained within multiple media data for the purpose of facilitating access to, and manipulation of, the information encapsulated by the data, that is, the theory and activities we present.

As we understand, AH has been a feature all throughout our course rather than an occasional digression at a certain point in time or occasion. Both in theory presentation and activity development, we have made numerous links providing explanation to the different relevant items students encounter as they work. Very much like the hyperlinks in "Wikipedia," where key words offer selective links which redirect learners to other web pages to help them out when doing their practice tasks. Naturally, our course is full of hyperlinks which clarify, expand and illustrate essential concepts if need be, or if the student feels he needs to learn more about certain aspects as he reads on.

In our theory presentations we have structured different links for different levels of English, introducing theory units and with abundant links to activities which practice what is being explained, or to profound exegesis in to the nature of some grammatical concept or other. Likewise, and when using the authoring software mentioned above to build our practice activities, we offer students important feedback as to the nature and cause of their mistakes as well as some links which focus on their deficiencies and help them solve their problem instantly. Recurrent mistakes require immediacy of action: first with simple and clear instruction and later with more practice. Not only did we cater enough resources for the students to consult (on-line dictionaries, grammars, thesauri, etc.), but also we have provided ample and specific information for anything they got wrong. These were either web pages built by ourselves or links to other on-line explanations. In this respect AH has saved us a lot work when we diverted students to other web pages to find a solution to solve their mistakes.

So, our Language Blend [5] constitutes a framework for Adaptive Blended Learning based on distributed, re-usable learning activities that we ourselves have developed using SCORM compliant learning objects and activities, built mainly by means of two authoring tools: Hot Potatoes and eXe-learning. The goal of The Language Blend is to bridge the gap between the information power of modern educational material repositories, and the just-in-time delivery and personalization potential of LMSs and AH, and fit it all together into a language course.

Most LMSs are web-based to facilitate access to learning content and administration. A learning management system (LMS) such as Moodle is software for delivering, tracking and managing training. In our case, we have used Moodle because it is free. It imports SCORM courses and learning objects based on SCORM. And since SCORM does not (currently) address instructional design issues, nor does it prescribe specific functionality for LMSs, we have provided one using the tools afore mentioned so as to combine what we consider should be the a standard for language learning. We have turned to authoring tools because they are independent from the system we are working on, we do not depend on Internet for its building and they can be tested on and off line. And most importantly the can be exported to SCORM specification, while activities built in Moodle, cannot. This feature is common to nearly all LMSs: they can all import SCORM compliant learning objects and even whole courses, but they cannot export them into any of the learning standards available.

3. Language acquisition within the framework of blended learning

Blended learning is an important building block of the new university that offers students both flexibility and convenience, important characteristics for ordinary students and working adults who decide to pursue postsecondary degrees. It is a hybrid of traditional face-to-face and online learning so that instruction occurs both in the classroom and online, and where the online component becomes a natural extension of traditional classroom learning. Blended learning is thus a flexible approach to course design that supports the blending of different times and places for learning, offering some of the conveniences of fully online courses without the complete loss of face-to-face contact. The result

is potentially a more robust educational experience than either traditional or fully online learning can offer.
Times are changing for higher education. From the de-emphasis on thinking about delivering instruction and the concurrent emphasis placed on producing learning, to using technology to expand distance education, to the recognition of the importance of **sense of community**, we are witnessing a transformation of higher education.
Harvey Singh [6] superbly explains what for us has been the core of blending learning practice, and performance support:

> *"Perhaps the finest form of blended learning is to supplement learning (organized prior to beginning a new job-task) with practice (using job-task (…) simulation models) and just-in-time performance support tools that facilitate the appropriate execution of job-tasks.*
>
> *Cutting-edge productivity tools provide 'workspace' environments that package together the computer based work, collaboration, and performance support tools."*

Indeed to attain any kind of competence in any language one has to be able to master specific situations by means of linguistic skills and this is what we do with our practice activities and learning design. In a sense ours is a three-pronged instruction which takes into account theory, practice and real linguistic performance in real or unreal situations. This last part is accomplished within classroom proper.
Another common belief is that learning is the same as knowledge transfer. The idea which comes with it is that it is enough to make knowledge available to learners according to some pedagogical structure. However, providing adequate knowledge is not enough: it has to be *learned*. It is this learning process that is the process we are putting at the centre when we discuss instructional design or learning design. Ask yourself: 'where is the *learning'* in eLearning? On top of that, a lot of learning does not come from knowledge resources at all, but stems from the **activities of learners solving problems**, interacting with real devices, interacting in their social and work situation or in the classrooms.
A lot of research about learning processes provides evidence for this stance that learning doesn't come from the provision of knowledge solely, but that it is **the activities** of the learners into the learning environment that are accountable for the learning. This is not to say that knowledge objects are not of importance in learning situations, but that they are not the key thing in effective learning processes.
Traditionally second language learning practice was performed along four main lines:

- Comprehension (reading and listening).
- Use of English (cloze tests, gap-filling exercises, rewriting, etc.).
- Speaking.
- Writing.

3.1 Computer-based instruction

In a blended course such as ours we have shifted all the mechanical activities that involve "comprehension" and "use of English" to be trained within the LMS, with immediate feedback and remedial practice activities.
In a traditional classroom this was done in a painstaking, choral and in-turn manner with no attention to individual needs. In the case of "listening comprehension" everyone had to understand and progress at the same time, assuming that our brains work on the same wavelength and take things in simultaneously. But this is far from being true and, first the language laboratory, and now the computer, help us build exercises both for reading and listening comprehension that allow students to work at their own pace and go back and forward, stop, listen,/read again, check grammar appendixes, etc. when they need it. Some exercises are best done in isolation because their very nature calls for such diversity of action on the part of the learner; it would be a nightmare for the teacher to solve all problems individually were they to be done in groups. This explains the difference in linguistic competence in most language classrooms. Most exercises done in a computer and in an LMS should adjust to meet the student's individual needs and his own rhythm of learning [7].
The same occurs with "Use of English" activities. *Hot Potatoes* is especially suited to work with cloze and multiple choice exercises to practice grammar and vocabulary. Practically all of the activities that pertain to what we usually call "Use of English" can be made with this authoring software with some

variations and enhancements of traditional exercises. We can include video comprehension activities, phonetic transcription, etc., [8].
Speaking and writing activities, which require some sort of human intervention have been left for the face-to-face lectures or asynchronous review, correction, checking of delivered materials. These could either be written essays or audio feeds sent for evaluation. About these last two activities, a more profound feedback must be given in the classroom since they entail questions related tasks in relation with style, register, unity, cohesion, etc.; aspects which are not easily explained unless you are in front of the learner.
So far we have mentioned three types of activities which can be done in the LMS for second language acquisition:

- Theory presentation and AH links to overcome the difference in students' knowledge and levels.
- Self-check activities which were built by the lecturer beforehand and when they are done by the student they get immediate feedback and possible solutions to overcome weaknesses by means of AH links.
- Activities which can be handed in using the LMS but that require a more personal feedback from the lecturer either to individual students or groups.

Of course, we have not mentioned other management or communication tools within the LMS such as the "grading book", the "announcement board", "the forum", "chat", etc., which are of great help both to lecturers and students and which keep everyone informed of what is going on in and outside the classroom and which are forever building a sense of community we are particularly fond of.
Finally, we feel we should mention another important feature of our "Language Blend", the use of collaborative tools within the LMS to promote group work and sense of community. The regular use of "wikis" and "workshops" in our learning device foster social constructivism. Collaborative groups are important because we can test our own understanding and examine the understanding of others as a mechanism for enriching, interweaving, and expanding our understanding of particular issues or phenomena. More often than not we give students tasks which involve working in groups to develop written assignments or oral presentations. But this will be dealt with next.

3.2 Face-To-Face Communication Tasks

In second language classrooms, the language, whether English or any another language, is the medium through which teachers teach, and students demonstrate what they have learned. Acquiring that language is the ultimate instructional goal of second language education. Yet, how teachers and students use language to communicate in second language classrooms mediates between teaching, learning, and second language acquisition. Therefore, understanding the dynamics of classroom communication is essential for all those involved in second language education. However, understanding communication in second language classrooms is not a simple task. Classroom communication in general has been described as a "problematic medium" since differences in how, when, where, and to whom things are communicated can not only create slight misunderstandings, but can also seriously impair effective teaching and learning. Moreover, if that classroom is filled with students from a wide variety of linguistic and cultural backgrounds who possess a range of second language proficiency levels, then teachers cannot assume that their second language students will learn, talk, act, or interact in predictable ways. On the other hand, if teachers understand how the dynamics of classroom communication influence second language students' perceptions and of participation in classroom activities, they may be better able to monitor and adjust the patterns of classroom communication in order to create an environment that is conducive to both classroom teaming and second language acquisition.
The overall goal of face-to-face communication activities is to enable students to recognize how the patterns of communication are established and maintained in order to foster participation and thus shape the ways in which they use language for classroom learning and their opportunities for second language acquisition and expressed by Ortega and Young [9], [10].
University lecturers are often challenged by teaching communication skills. Their students have already spent most of their lives speaking and listening and sometimes resist efforts to teach them what they think they already know.
When natural and man-made disasters unfold on the news, horrified viewers seek out in-person opportunities to share their grief and gather information. It is easy to strike out a conversation about something everybody knows about and is of interest to him. Who could forget the sight of the

pilgrimages to makeshift shrines following accidents such as Princess Diana's car crash or John F. Kennedy Jr.'s downed plane? [11]

In the 21st century, men and women continually lurch between the impersonal nature of technology and the intimate reality of human relationships. There are many situations—often those involving learning a second language or real situations that could very well be exploited in the classrooms such as: escalating conflict, sensitive feelings, high priority, important authority, or a great deal of money—that demand business people take the time and trouble to get into the same room to exchange information. Or at least they try to *simulate* face-to-face communication when individuals are in remote locations. Face-to-face communication skills remain one of the primary roads to learn to master a new language, career success, or whatever, even in this computer age.

Most communication is carried out face-to-face with other individuals: asking for information, offering advice, your intervention in the classroom, or telling someone what you think of their performance—all tend to be done in a one-to-one situation.

This is one of the most critical areas of communication to get right and this is what we try to practice in our time with our students in the classroom.

Blended Learning combines face-to-face instruction with computer-mediated instruction. It is the synergy of these two different learning environments, taking the specific benefits that each environment provides and merging them is such a way to provide greater access to improved learning experiences; and doing so in cost-effective manner. [12]

There are certain things that can be done better face-to-face than through computer-mediated instruction and vice versa, it is through identifying the affordances that they both provide and strategically combining them. The most important consideration is to clarify the goals and learning objectives which will then determine the best mix or blend of these two environments. Above, we delineated what should be set aside to be done in the LMS, what should be left for face-to-face lectures and what aspects of the LMS should merge into the in-person classes.

As of today, computers are not witty enough to maintain a conversation with a person and to correct and assess students of a foreign language, they will be in a not-too-distant future, but until that time we will have to leave communication activities and creative writing for in-person interaction.

Two communication tasks are felt to be needed in our face-to-face sessions:

a) Those related with the writing activities. Reading examples and eliciting from students the framework for our writing tasks. Whether they be paragraphs based on examples, contrast, definition (something which pertains to technical English), etc., or descriptions, narrative writing, discursive articles (general English), etc., the idea is to pull together a number of writing rubrics [13], [14] which will be the source for the writing activities. Using a Moodle tool called *workshop*, we set up a collaborative environment wherein, having explained and agreed upon the rubric for every specific writing task, students embark on this exhilarating, constructivist activity working in partnership to learn and monitor other fellow colleagues and help them improve their writing essays. It is here where we also implement the use of Story Telling multimedia composition. [15]

b) Those related with oral presentations and discussions. Oral, aural activities are central in our lectures and take up most of the time of our face-to-face classes. These classes are well organized and prepared with little improvisation. Any loose ends in oral classes lead to a secure and downright failure, so we need to set up the adequate material and make sure it works well. Whether it be picture description, short presentations based on prompts, group discussion, exploitation of situational dialogues, function dialogue practice etc., we need something well prepared and leave nothing to chance. These activities prepare students for oral competence and are essential to practise the most common aspects of oral skills.

This distribution of machine-aided instruction together with in-person communication programs, constitute what for us should be the ideal framework for second language learning today. Our language Blend aims at setting up a standard to course builders and lecturers of foreign languages who seek to make the most of e-learning and face-to-face instruction. And we feel we're on the right path. [16]

3.3 The Structure of the Language Blend

We have elaborated a good number of learning objects and practical activities per unit, most of which are self-check, instantly-graded (with immediate feedback) and auto-regenerating (the exercise changes every time it opens), all of which offer self-monitoring paths to cater for all levels and knowledge. A few collaborative or individual assignments link on-line instruction with face-to-face classes, such as the writing tasks, workshops and speaking activities.

In this article we have laid the foundations of each half of the instruction: the computer-based activities and the face-to-face lectures. This diagram (Fig.1) illustrates what we understand should be second-language, blended learning and the gravitational forces that have a bearing on each and every part of the instruction.

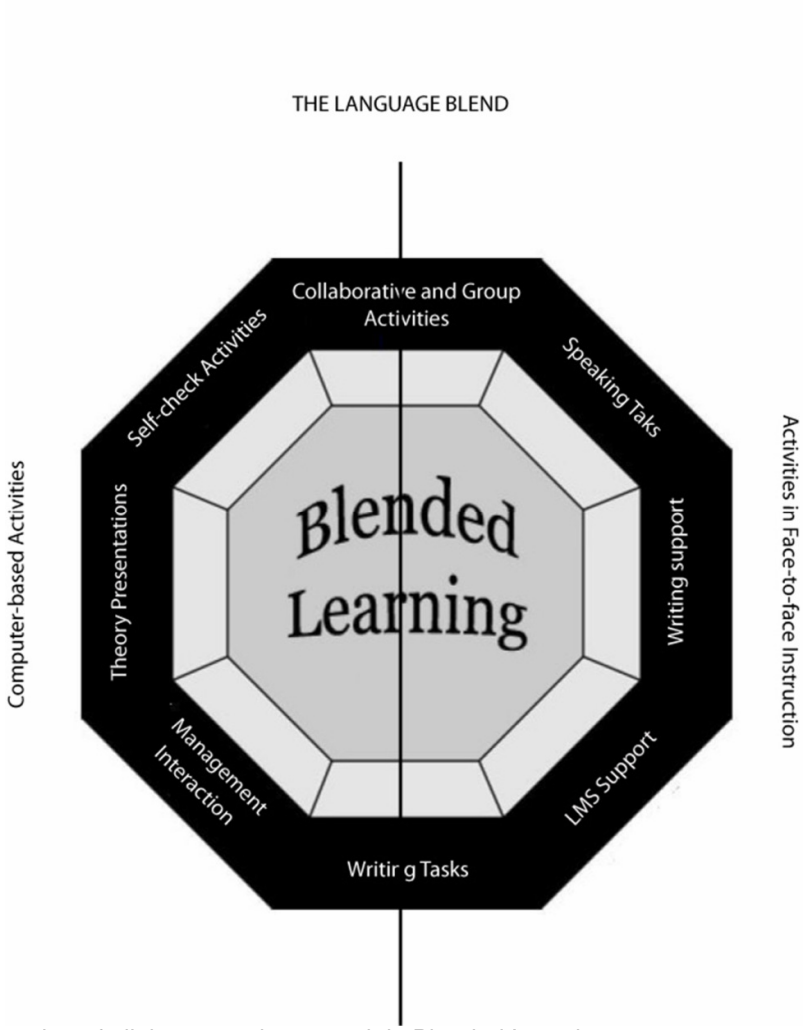

Fig.1. Representation of all the synergies at work in Blended Learning.

Each side of the octagon leads to the hub or centre where all the learning blends in one single nucleus that distinguishes no sections or subdivisions. The top and bottom sides share both halves of the instruction, viz., the writing and collaborative tasks. Management interaction and social communication with learners in the LMS is done by means of e-mails, chats and forums, all of them inside the LMS. Also, and especially at the beginning of each course, there is a lot of LMS support in the face-to-face classes to lay the groundwork we wish to apply for the rest of the course and make everything dovetail accurately.

Conclusion

SCORM [17], [18] constitutes an important first step towards liberating learning content objects from local implementations. It represents currently a leading effort towards the reusability and interoperability of learning resources. Also SCORM's good compatibility with most of popular learning resource specifications ensures its widespread acceptance and bright application prospect in the near future. Our system, based on SCORM 1.2, is actually an early exploration to the great potential of SCORM. The new version of this specification (SCORM 2004) only shows the great demand it has worldwide. By using SCORM in combination with authoring tools which comply with SCORM

standards we liberate whatever materials we might be building from the systems where they are supposed to be running.

The World Wide Web hypertext and hypermedia [19] system allows the user to freely navigate between nodes by following links in an extensive, decentralized network of information and knowledge. The open, free-browsing nature of the web affords exploratory and inquiry-based learning. At the same time however, given the extensive growth of the World Wide Web, the potential is great for user disorientation in such a large knowledge base. A further problem with hypermedia navigation is that it is not specifically designed to differentiate between and to accommodate users with different interests, goals and needs. Thus, traditional hypermedia systems present a disadvantage for educational use of the World Wide Web since without direct teacher or system support, students' learning experiences may not be very efficient or effective. While a discovery or inquiry-based type of online learning may be envisioned as an effective model, it nonetheless needs to be coupled with some type of system control or support. With Moodle and AH (Adaptive Hypermedia) [20], we have tailored a system which caters for individual needs and knowledge focusing on specific task we wish to develop. At the same time we provide some system support and control to users which a free roaming of the web does not.

Our "language blend" clearly breaks up into small sections what should be taught / learnt with a computer (using a computer for practical purposes), in an LMS (as part of blended learning) and in the face-to-face classes. Essentially, all of the typical exercises which fall within the scope of "Use of English training" (rephrasing, listening, reading, word-formation, etc., exercises) can be done in the LMS, while direct communication activities are left for classroom instruction.

This three-pronged impact into ESL has brought great benefits into our teaching at the University of Alicante, and we have received numerous appraisals from university officials, but the ones we truly appreciate are those that come from our students and from the figures we get by the end of the year's term. Since its application, successful student figures have risen considerably and more importantly, the quality of instruction is also on the upgrade.

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