

Project Overview

Project Title (in English):
Developing Language Proficiency for
Post-secondary Students:
Online Assessment and Self-learning of
Putonghua through gamification and
automation

Project Title (in Chinese):
專上學生語文能力提升計劃：
普通話網上評核及自學系統——以遊戲化及
自動化為指標

Executive Summary

(Please provide, within this page, an executive summary of the project.)

With the accelerating development of technology, online teaching and other digital platforms for distance learning have become more mature. Yet, some critics hold that online teaching lacks the ‘human’ element, fails to promote proper interactivity and makes learning into a ‘one-way street’. Online teaching may not necessarily meet the learning needs of the new generation. There is a strong cry for teachers to change how online teaching is viewed and applied. (Simon Ho, 2014) This project aims to set up the online assessment and self-learning of Putonghua not only to provide students with out of class opportunities to practice Putonghua, but also to ‘humanize’ and improve the interactivity of online learning through gamification and automation. In addition, there will be opportunities for a more social experience. Through this new development, we hope to change the one-way online teaching mode for Putonghua where teaching materials and test instruments are simply uploaded to encourage reflexive responses, and instead to create a motivating experience for students whilst also providing online assessment tasks and self-learning through certification.

Background:

Employers of all kinds have expressed a demand for high levels of language proficiency among their employees, particularly for Putonghua. The Hang Seng Management College (HSMC) has attached considerable importance to the enhancement of its students’ Putonghua proficiency. Established in June 2013, the Putonghua Education and Assessment Centre aims to provide students with quality service in assessment and training. The project aligns with the College’s language policy of enhancing students’ Putonghua proficiency and providing students with a broader and richer out-of-class learning experience. Accordingly, it will develop an online platform for assessment and self-learning and so provide students with a more effective Putonghua curriculum during their study at HSMC. This will allow students to achieve the required level of Putonghua proficiency upon graduation whilst helping them establish a practical Putonghua learning environment where they can enhance their oral proficiency in social and everyday contexts. Once the system, curriculum, assessment and learning services have been developed, the project can be promoted to secondary and higher education institutions. The system’s uptake may then enhance the Putonghua proficiency of Hong Kong speakers generally and so increase their competitiveness in the Greater China region. After achieving maturity the system is capable of on-going development and can support other types of learning activities such as those for Chinese and English writing, grammar and oral practice.

Objectives:

This project aims to establish a social platform for the online assessment and self-learning of Putonghua. The platform is practical, target-oriented and can use gamification and automation to achieve the following objectives:

1. Establish a well-recognized assessment system with clear objectives, set down a plausible trajectory of language development, proffering games and rewards to encourage students to measure and analyze their development of Putonghua proficiency. Through the internal assessment at HSMC, students will be able to identify their strengths and weaknesses so as to boost their interest in learning Putonghua.
2. Establish an online assessment system that can assess and record students' proficiency in all its aspects so as to automatically tailor a self-learning programme to student need.
3. Develop an online self-learning curriculum: based on students' results from the online assessment system, automatically identify their strengths and weaknesses and assign them to complete relevant self-learning courses.
4. Create a practical Putonghua learning environment with the opportunity of social engagement and exchange e.g. a virtual chat room to increase students' confidence in speaking Putonghua publicly.
5. Use the system's recording programme so that students can use their smart phones or online recording system for discussion, thus reducing the manpower and other resources needed to provide more comprehensive and high quality Putonghua training services.
6. Once the system is well-developed, it can be promoted to secondary schools and higher education institutions in Hong Kong with the ultimate target of opening it up to public use.

Contents: (Refer to Appendix I for details and the work flow chart)

This project consists of two parts: assessment and self-learning. It uses an online platform to solve the problems of time and manpower, while matching students to teachers and teachers to students. At the same time it provides an online assessment platform which is target-oriented, instant and manpower-saving. Features that of themselves make learning Putonghua more effective.

Part I: Online Assessment of Putonghua

This part is about the development of an online assessment system to allow students to learn the apps to assess their Putonghua proficiency in all aspects. Based on the assessment results, the system will automatically identify students' strengths and weaknesses and ensure a tailor-made self-learning course for them. The system will also record the learning progress of a student. Through the reports and graphical analysis of a student's progress, teachers can offer additional advice. Furthermore, this system will issue electronic certificates so that students can share their learning results on a social platform. Such a sharing encourages students to pursue a higher level of performance, builds up confidence and

facilitates mutual encouragement for learning among peers.

Assessment levels and descriptions:

Elementary: vowels, consonants and intonation

Intermediate: vocabulary and sentences

Advanced: ability to speak Putonghua in a social context (e.g. Putonghua for travelling, business Putonghua, Putonghua for interview)

Part II: Online self-learning of Putonghua

This part describes how the assessment system automatically advises students based on the records with the system. The function of gamification will be introduced to self-learning at all levels to boost student interest in learning. The following are elements of gamification:

1. Competition: including the competition between a learner and another learner, a learner and the game emulator or among a group of learners.
2. Achievements/Badges: appropriate recognition and rewards will be given according to the game level achieved (level of Putonghua).
3. Leveling: increase the difficulty of each level and so provided a graded, step-by-step route to Putonghua proficiency.
4. Stories: make the learning process of Putonghua a story to give the learning platform a whole, world view that keeps students interested and eager to continue their learning.
5. Continued personal feedback: strengthen strong learning behaviours in students through virtual feedback and encouragement, for example by awarding badges to those who are making good daily progress over the course of a week.
6. Continuous updating: update the contents and awards once a week to keep students engaged.
7. Social learning: open the learning experience from an individual to a social or group one through public messaging, sharing, and the encouragement of peer support.

The items above enable students to have individual feedback to strengthen correct or to rectify incorrect learning methods. At the same time, challenges related to learning results will be set up to maintain students' continued motivation to learn. Gamification provides students with opportunities for self-testing and self-exploration. Besides, this system can be downloaded through smartphone or mobile online devices to learn Putonghua making students, teachers, learning materials and installation devices mobile, allowing a one-stop, automatic experience for learning Putonghua. This system uses automatic pronunciation assessment. For example, students can practice oral Putonghua through smartphone apps and get automatic assessment and suggestions for improvement. This facilitates the instant identification of a problem and makes its immediate solution possible.

According to research, members of a virtual community communicate and interact, get inspiration from one and another, listen to opinions, look for things in common and share what they learn. Yuen (2000) says that participation in virtual communities can help the individual re-arrange their thoughts or engage in such tasks as dispute resolution to achieve a higher level of language use (Harasim, 1990). This system therefore will develop a 'group pronunciation discussion system' so that students can participate in the online Putonghua virtual chat room anytime they like. They can also form a group discussion or pair up with any other participants in the virtual chat room deciding their discussion topics or joining the discussion with topics provided by the teachers. A professional Putonghua teacher will be on duty at a certain time during the day to give students immediate advice or open a dialogue with them. For the rest of the time, students can use the recording function of the system to record the conversation of the group discussion and get teachers' feedback (see the flowchart at Appendix II).

The advantages of using the 'group pronunciation discussion system' are:

- Students can join in any time they like. There are no restrictions on the number of participants, venue and time. Students are encouraged to form discussion groups with new recruits and so avoid having a fixed and regular group. The authenticity of the social language environment is thus greatly enhanced.
- When the professional Putonghua teacher is on duty, he or she can join the discussion giving immediate responses and correcting mistakes. Teachers can also play different roles as this is demanded by different scenarios making the approach even more flexible. They do not have any time or place restraints. They can be on duty anywhere. When no teacher is on duty, student groups can use the recording function and get feedback later.
- The system can generate a large amount of different 'scenes'. These help to build up the confidence of students by making them feel able to cope with a range of contexts for Putonghua use, e.g. Putonghua for travelling, Putonghua in court, Putonghua for interview, Putonghua for speech, etc. There will also be the function of free discussion where a virtual chat room allows students to choose the discussion groups they are interested in joining.
- The hierarchy of the discussion groups will be based on membership grades; members who have a higher participation rate will be senior members. When they reach a certain grade, they can host or set up discussion groups freely. (Or members with a high Putonghua proficiency result can anchor, host or set up discussion groups) This serves as an incentive for student participation.
- The system is complementary to regular classroom teaching. In supervised tutorials, students can record their group conversation in the assigned language environment so that teachers correct their pronunciation or speaking problems step by step or for the purpose of reference or examination.

Problems Identified

(Please provide your assessments to the problems / needs identified.)

1. At the community level

- Development of Putonghua programmes and research

In general, the assessment of Putonghua at universities is based on a candidate's familiarity with pinyin (transcription), vocabulary, grammar as well as his accuracy in reading aloud from a given article. For daily and social contact, the standard of these programmes is at the foundation level. However, there have been problems with manpower deployment, resources management and students not having enough study time when it comes to communicative competence training. The portion of curriculum and assessment for communicative competence training is often not adequately addressed because of the shortage of resources.

Academics have been concerned about students' communicative competence in Putonghua. For example, Kou and Lee (2012) in their article 'Designing and Implementing Communicative Putonghua Classroom Teaching' explore the possibility of introducing communicative Putonghua classroom teaching in secondary schools. One of the most desirable modes of teaching now involves creating a virtual communicative environment that is close to students' daily lives and so gives those more opportunities for speaking Putonghua.

- Post-secondary students' difficulties in learning Putonghua

The teaching of Putonghua at primary and secondary schools over-emphasises reading, listening and speaking from textbooks, but under-emphasises the goal of communicative competence. Zhu and Lai (2009) point out that the types of school-based activity outlined mean that post-secondary students learning Putonghua require a naturalistic learning environment to strengthen their communicative competence.

The Putonghua training programmes in Hong Kong focus on the correction of pronunciation, identification of vocabulary by sound discrimination and reading aloud of a given text. As such, it is difficult for students to have confidence in using Putonghua for daily communication or in negotiating more difficult contexts with meaningful utterances. To improve the situation, Chow (2004) suggests that students should be given more opportunities to apply their knowledge of Putonghua and should do more exercises on contrastive grammar and vocabulary between Putonghua and Cantonese of the kind available from textbooks. However, the best way forward is also to create a Putonghua-based communicative environment so that students can first develop a confident communicative use of the language and then achieve greater accuracy in vocabulary and grammar and more standard pronunciation.

2. At HSMC level

- Putonghua exit language test

Established since June 2013, the Putonghua Education and Assessment Centre of HSMC has been providing students and the general public with quality Putonghua training programmes and assessment services. Upon graduation, students will achieve a high standard of Putonghua proficiency and the certificates awarded are recognized by both the State and Hong Kong community, something which benefits their future careers. At the same time, HSMC requires students who are pursuing new programmes of study to pass the Putonghua proficiency test with at least 3B or above before graduation. Because of this, student demand for Putonghua training is increasing. There is a strong need to develop a comprehensive out-of-class package of Putonghua equipment and services for assessment, training and application purposes.

- Allocation of resources

The current Putonghua Education and Assessment Centre has been providing students with a good and natural language environment. However, the huge student demand means an increasing need for teachers to offer group or personal tutorials at different time slots. The full-time Putonghua teachers have to use a lot of time outside normal teaching hours to provide targeted assessment and training with a Putonghua ‘clinic’. On one hand, because of timetabling, there is no guarantee that students are able to receive professional Putonghua training at a certain time period. On the other hand, because students in general are not aware of their weaknesses and strengths in Putonghua, particularly in listening, speaking, reading and pinyin, it is impossible to tackle all their errors in just 30 minutes at the Putonghua clinic. This problem is made greater by the discrepancies in their learning. To cope with a huge student demand, all teachers can do is to solve simple problems of vocabulary and pronunciation without really getting to the bottom of students’ learning problems.

3. Limitations and weaknesses of current online self-assessment and self-learning of Putonghua

- System design

The current online Putonghua system, which includes all kinds of systems in post-secondary institutions, secondary schools and other platforms available to the public, only aims to enhance the accessibility of IT (teaching materials) with a teacher centered model. It can digitize traditional classroom teaching, but fails to revolutionise the mode of teaching. Although there may be rare occasions where games are introduced to the curriculum, the majority of them only provide a game ‘interlude’ or practice phase without integrating the concept of games (achievements, competition among peers, drama) into the curriculum as a whole, thus failing to increase rates of participation and course completion.

- Users’ preferences and experiences not taken into account

The current online learning systems are not designed from a user’s angle. They focus on the element of dynamics rather than interaction. A real interactive design requires feedback that is responsive to users’ instant behavior or needs, and does not just provide a default result. In addition, the current systems do not cater for the learning habits of young students. For

example, they lack the elements of modern apps such as instant feedback and interaction with users. Furthermore, since the existing online Putonghua systems are not user/student centred, they are not effective to induce student learning. Most importantly, the current systems and programmes neither encourage nor show the learning targets. There is a big difference between the end of learning and the actual requirement. For example, the curriculum does not match the assessment requirement of the Putonghua Proficiency Test. There are no grades to record each progress level nor any recognizable certification in the current systems. This weakens student interest in self-assessment.

- **Matching between system and curriculum**

Limited by the system design, the current digital platforms tend to divide the curriculum into individual chapters. They do not present the whole picture of the curriculum nor do they enliven the learning targets by giving them a visual representation. As such, students may not be able to grasp the continuity of the teaching materials of each chapter, something which weakens their learning incentive. For those online platforms with assessment and self-learning materials, the design will at best allow single-focused listening or reading materials. They have not fully utilized cutting-edge digitisation. Besides, the contents are generally weak, with at most 20-30 assessment questions. When it comes to assessing the ability of students or sustaining their learning, they have a negative impact. Once one part of an exercise is completed, the system does not allow students to continue to ‘upgrade’ their knowledge or continue to learn on that part. Moreover, the relationship between assessment and self-learning is rather unclear and fails to encourage self-learning after the assessment. These negative factors have diluted students’ interest in conducting the self-assessment and self-learning of Putonghua through the online digital platform.

Project Objectives and Deliverables	
Measurable Objectives	How it can be achieved
1. Developing a quality Putonghua teaching brand for HSMC	➤ Through introducing the feature of social platform links, students can interact among one another e.g. posting ‘like’ or sharing so as to promote brand awareness and thus achieve a viral marketing effect.
2. Increasing student interest in learning Putonghua	➤ Introducing the elements of gamification, leveling, award system and competition into assessment and self-learning programmes to increase and sustain student interest in learning.
3. Increasing the accessibility and usability of out-of-class learning by creating a social environment to provide plenty of opportunity	➤ Introducing social media: teamwork, group exchange, online virtual chat room, etc. to enable students to have more opportunities

for students to practise Putonghua outside the classroom	<ul style="list-style-type: none"> ➤ to socialize in Putonghua ➤ Using the apps of smart phones and online digital platforms as the media
4. Allowing students to receive targeted and automatic Putonghua assessment and training	<ul style="list-style-type: none"> ➤ Automatic assessment systems ➤ Through the automatic learning workflow as follows: Assessment>Record>Analysis>Advice>Suggested practice ➤ Targeted to meet the needs of students in taking self-learning programmes
5. Promote the use of online self-learning and self-assessment of Putonghua to the general public	<ul style="list-style-type: none"> ➤ Open the digital platform for public use in three years starting from post-secondary institutions to the community

Project Deliverables

(Please list out all the deliverables to be achieved and how they can be shared with, if possible, other institutions.)

Deliverables	Sharing mechanism
1. Putonghua assessment and self-learning programmes with gamification <ul style="list-style-type: none"> ➤ Member login and record system ➤ Assessment and grades system ➤ Competition system 	<ul style="list-style-type: none"> ➤ Using member login and record system can allow the general public and students from post-secondary institutions and secondary schools other than HSMC students to use the system. ➤ The impact of gamification on digital teaching and its contributions will be shared in academic papers for further research.
2. Provide an out-of-class path of Putonghua assessment and self-learning which is highly accessible and useful <ul style="list-style-type: none"> ➤ Smart phone apps version learning platform (iOS + Android) ➤ Website version learning platform 	<ul style="list-style-type: none"> ➤ At the end of the project, it will be open for the other institutions and public use with \ collaboration partners being the priority users. The revised version will be open for public use. Please refer to the Publicity Plan for details.
3. A learning model with social networking features <ul style="list-style-type: none"> ➤ Function of sharing through the social network ➤ Online virtual chat room 	<ul style="list-style-type: none"> ➤ Allow people outside HSMC such as the general public or students from post-secondary institutions or secondary schools to login as it is registered under HSMC. ➤ Give priority to partner institutions to use it first.

<p>4. Automatic assessment mechanism</p> <ul style="list-style-type: none"> ➤ Automatic pronunciation assessment system (default content) ➤ Automatic student learning progress record 	<ul style="list-style-type: none"> ➤ Membership login and record system allow people outside HSMC such as the general public or students from post-secondary institutions or secondary schools to use it. ➤ Based on the results of the research, gradually apply the automatic assessment mechanism to other language learning or different disciplines for electronic teaching.
<p>5. Targeted feedback and self-learning programmes</p> <ul style="list-style-type: none"> ➤ Social network sharing of self-learning programmes, common learning mechanism 	<ul style="list-style-type: none"> ➤ Membership login and record systems allow people outside HSMC such as the general public or students from post-secondary institutions or secondary schools to use the platform. ➤ Based on the results of the research, gradually apply the automatic assessment mechanism to other language learning or different disciplines for electronic teaching.
<p>6. Allow a large number of users to use Putonghua assessment and self-learning platform simultaneously</p> <ul style="list-style-type: none"> ➤ Smart phone apps and website version learning platforms to enhance popularity 	<ul style="list-style-type: none"> ➤ Membership login and record system allow people outside HSMC such as the general public or students from post-secondary institutions or secondary schools to use it
<p>7. Management of self-learning programme materials and the analysis of system results</p> <ul style="list-style-type: none"> ➤ Functions including recording audio materials, uploading and editing ➤ Functions including recording vocabulary materials, uploading and editing ➤ Reports showing automatic analysis of learning progress, feedback, assessment results (individual, class and overall) 	<ul style="list-style-type: none"> ➤ Invite the language centres of all Hong Kong post-secondary institutions to collaborate so that each of them can upload and share relevant teaching materials, reports, test papers, etc.

(Please indicate the information that can be uploaded onto relevant EDB websites during and after the project period.)

All information can be uploaded onto relevant EDB websites.

Beneficiaries

Expected type and number of beneficiaries of the project

1. Deployment of manpower and establishment of brand name: HSMC and its teachers
2. Number of users:
First phase: 3,000-4,000 HSMC students
Second phase: 5,000 students of local post-secondary institutions and secondary schools and the general public

(Please provide justification to support the above estimation and explain how they can be benefited from the project.)

Beneficiaries

1. HSMC: Publicity, establishment of quality teaching brand
Through introducing the feature of social platform links, students can interact among one another e.g. posting ‘like’ or sharing of their learning progress and achievements, etc. so as to promote brand awareness to achieve the viral marketing effect.
2. HSMC/teachers: Reducing resources and manpower
Online teaching can greatly reduce the manpower and resources required for out-of-class teaching. Currently, out-of-class Putonghua training and assessment are in great demand at HSMC. The number of students taking Putonghua is as high as 1,000 annually. It is expected to rise to around 2,000 in 2015-16. The number of candidates for the Putonghua Proficiency Test is 200. It will reach 1,000 in 2015-16. The Institute for Chinese Language & Culture requires at least 40 man hours every week to provide students at HSMC with individual or group tutorials. Once this project’s assessment and self-learning systems are in force, on one hand, the number of man hours on duty will be reduced to 15, reducing teachers’ workload for conducting after class tutorials. On the other hand, those students who could not receive tutorials can now be included for receiving training and assessment. This will not only enhance the overall Putonghua proficiency of the students at HSMC as a whole, but it can also provide automatic student records and reports about their learning progress in Putonghua.
3. Students at HSMC
Once this project is in operation, the amount of individual or group tutorial each student at HSMC receives per week will increase from 10 minutes to an hour. Because of the gamification of the system with targeted feedback and a quick learning mode, the number of students practicing Putonghua per week will increase creating an atmosphere for using Putonghua as a medium of

communication.

4. Other local post-secondary institutions, secondary schools and the general public

Different local post-secondary institutions and secondary schools will be invited as partner institutions. The number of users is expected to be around 5,000.

Implementation Schedule

(Please list out the implementation schedule and key milestones to be achieved on a half-yearly basis.)

Estimated start date of the project (month/year)		1/9/2014
Estimated end date of the project (month/year)		31/8/2017
Project duration (months)		36
Month	Key milestones	
	In terms of project activities and deliverables	In terms of monitoring and evaluation
1-6	<ul style="list-style-type: none"> ➤ Data collection Collect data for the writing of test papers and self-learning programmes e.g. test papers, criteria and format of the Language Proficiency Assessment for Teachers (LPAT) from HKEAA and relevant test materials of public examinations. ➤ Invite professional digital design consultant companies for public tender. Interested companies are required to submit two proposals, one technical and the other, financial. 	<p>3rd Month: The internal panel of HSMC will select data, decide different areas of content, then the number of questions and chosen answers, etc.</p> <p>6th Month: The internal panel of HSMC will review the data; confirm different areas of content then the number of questions and chosen answers.</p>

	<p>The offer will go to the one with the highest combined score on both proposals.</p>	
<p>7-12</p>	<ul style="list-style-type: none"> ➤ Write test papers and self-learning programme materials (including audio recording) ➤ The successful tenderer starts the preparation work for the digital online platform. 	<ul style="list-style-type: none"> ➤ 8th Month: The professional digital design consultant company submits the interface design and wireframe of websites and smart phone apps versions, the management and analysis system of self-learning programme materials, the feature list and the wireframe. ➤ 9th Month: The professional digital design consultant company submits the trial version of the automatic pronunciation assessment system. ➤ 10th Month: The professional digital design consultant company submits the trial version of the online virtual chat room. ➤ 12th Month: The internal and external panels of HSMC approve the final trial run, programme sequence, answers, question format, quantity, etc. They will also approve the trial version provided by the professional digital design consultant company and offer initial feedback.
<p>13-18</p>	<ul style="list-style-type: none"> ➤ Establishment of online digital platform The professional digital design consultant company starts developing the front-end for both website and smart phone apps versions as well as the back-end of the management and analysis system of self-learning programme materials. ➤ Compose, revise and update test papers and self-learning materials. 	<ul style="list-style-type: none"> ➤ The internal panel monthly monitors the progress of the set-up system. ➤ 15th Month: The professional digital design consultant company finishes the trial run of the assessment of the self-learning system (including the mechanism of gamification and its function). ➤ 16th Month: The professional digital design consultant company finishes the assessment record, reports and gives

		<p>feedback on the learning of the self-learning system.</p> <ul style="list-style-type: none"> ➤ 17th Month: The professional digital design consultant company submits the online virtual chat room and chat room assessment of the self-learning system. ➤ 18th Month: The internal panel of HSMC approves the final trial run and the operation of the system.
<p>19-24</p>	<p>Launch of the digital online platform (first phase)</p> <ul style="list-style-type: none"> ➤ Roll out the assessment function of the system for students of HSMC for trial run in class and for promotion outside the classroom. ➤ Roll out the self-learning function of the system for students of HSMC for trial run in class and for promotion outside the classroom. ➤ Student Assistants to collect feedback. ➤ Compose, revise and update test papers and self-learning programme materials. 	<ul style="list-style-type: none"> ➤ 19th – 24th Months: The Institute for Chinese Language & Culture assists in the publicity of the system. ➤ 19th – 21st Months: Students of HSMC taking any Putonghua programmes have to take the online assessment test once. ➤ 22nd – 24th Months: Students of HSMC taking any Putonghua programmes have to take one kind of self-learning programme. ➤ Invite both teachers and students to give feedback and comment. ➤ Set up the online visitors' count to find out the usage of students outside the classroom.
<p>25-30</p>	<ul style="list-style-type: none"> ➤ Internally, review the operation of the system, assessment test and the revision of self-learning programme. ➤ Make preparations for external publicity; invite partner institutions to use the system outside HSMC. ➤ Student Assistants to collect feedback. <p>Launch of digital online platform (second phase)</p> <ul style="list-style-type: none"> ➤ Officially roll out for public use in the 30th month. ➤ Student Assistants to collect feedback. ➤ Compose, revise and update test 	<ul style="list-style-type: none"> ➤ 25th – 28th Months: The internal and external panels of HSMC review the operation of the system, assessment test and the second revision of self-learning programme. ➤ 28th – 29th Months: The professional digital design consultant company reviews the interface design, the operation of the system, assessment test and the revision of self-learning programme. ➤ 29th – 30th Months: HSMC and the Institute for Chinese Language & Culture make preparations for external publicity, invite partner institutions to

	<p>papers and self-learning programme materials.</p>	<p>use the first revised version outside HSMC. The internal and external panels of HSMC review the system before its official public release.</p> <ul style="list-style-type: none"> ➤ 30th Month: Official public release
<p>31-36</p>	<ul style="list-style-type: none"> ➤ Trial run and revise website and smart phone apps; collect feedback on the system, assessment test and self-learning programmes from people inside and outside HSMC and make corresponding revisions. ➤ Compose, revise and update the final test papers and self-learning programme materials. ➤ Prepare a final report of this project. 	<ul style="list-style-type: none"> ➤ 31st Month: After one month's operation, the internal panel reviews the operation of the system, assessment test and the final revision of the self-learning programme materials. ➤ 32nd – 35th Months: The professional digital design consultant company fine-tunes the interface design, the operation of the system, assessment test and the revised self-learning programme according to the final revisions of the internal panel. ➤ 36th Month: The internal panel of HSMC reviews the operation of the system, assessment test and the contents of the self-learning programme, evaluates and concludes the project.

Publicity Plan

(Please describe all the publicity activities to be organised and materials to be produced to acknowledge the support of Quality Enhancement Support Scheme. Please suitably reflect the publicity activities as key milestones in the implementation schedule above.)

Internal publicity:

1. All Putonghua teachers will promote this project in class and introduce the system as part of their teaching during tutorials.
2. The Institute for Chinese Language & Culture will promote this project to students at HSMC through seminars, sharing sessions with exchange students, extra-curricular activities, etc.

External publicity:

1. Different secondary schools will be invited as partner institutions. They will encourage their students to register to use the system. Initially, the following schools will be included on the invitation list: Lam Tai Fai College, Po Leung Kuk Vicwood K.T. Chong Sixth Form College, Ning Po College, Ma On Shan Tsung Tsin Secondary School, Shun Tak Fraternal Association Yung Yau College, etc.
2. All the language centres of local post-secondary institutions will be invited as partner institutions. They will encourage their students to register to use the system. The initial contact list will include: the Independent Learning Centre, CUHK, the Centre for Language in Education, HKIED, and the Chinese Department, Chu Hai College, etc.
3. The Institute for Chinese Language & Culture will promote this project to students and the general public outside HSMC through seminars and sharing sessions.
4. Online advertisements or linkage will be posted on different online learning or social platforms e.g. specially targeted YouTube groups or Facebook banners.

Cash Flow and Budget

Project Expenditure

Period	Amount in HK\$			
	Year 1	Year 2	Year 3	Total
Manpower	275,000	263,000	266,000	804,000
Equipment / Facilities	To be borne by HSMC			
Services	1,090,428	40,428	40,428	1,171,284
General Expenses	To be borne by HSMC			
Others (e.g. auditor's fee)			20,000	20,000
Total	1,365,428	303,428	326,428	\$1,995,284

Project Income (if any, e.g. fees received)

Period	Amount in HK\$			
	Year 1	Year 2	Year 3	Total

	Total			
Grant Sought under the Quality Enhancement Support Scheme			\$1,995,284	
Funding from the Applicant			\$0	
Funding from Other Sources			\$0	
Total Project Value			\$1,995,284	
<p><i>(Please specify the amount to be funded by each funding source (e.g. donations, contributions from applicant / its parent organisation) and whether the funding has been secured. If not, please provide the plan to obtain the funding.)</i></p>				
<p><i>(Please provide the duty lists of manpower to be funded by this project.)</i></p>				
Post		Duties		
Full-time Senior Research Assistant (with Putonghua Proficiency Test Level 1 or above and experience in teaching Putonghua)		<ol style="list-style-type: none"> 1. Draw up the structure of the design of online assessment and self-learning programme system, module outlines, teaching materials, test papers, revise the self-learning materials that have been put on trial, prepare the final report of the project, etc. 2. Communicate with students online, correct exercises, and provide students with professional guidance and feedback. 3. Supervise student assistants to collect and handle data, distribute questionnaires, etc. 		
Part-time Senior Research Assistant		<ol style="list-style-type: none"> 1. Record online teaching materials. 		
Part-time Student Assistants		<ol style="list-style-type: none"> 1. Collect data and distribute questionnaires, etc. 		
<p>Project Sustainability</p> <p><i>(Please estimate the amount of recurrent expenditure and describe how you will commit the resources to ensure sustainability of the project. Please put supplementary information (e.g. proof of financial support) at appendix.)</i></p>				

Recommended manpower in the project:

- Professional digital design consultant company's cost of providing the platform including updating and maintenance is estimated to be HK\$40,000-50,000 to be borne by the Putonghua Education and Assessment Centre of the Institute for Chinese Language & Culture, HSMC.
 - Make suggestions on the software (interface design, programme materials and programming) and hardware (server) for the self-learning platform and update them based on the internal and external panels' advice at different stages of the project.
 - Provide a monthly report and analysis of the self-learning platform system and server.
 - Provide a monthly report and analysis on the self-learning platform (smart phone apps and website version)'s web site usage and users (e.g. Google Analytics and smart phone analytics) together with professional advice.
- Hiring of part-time research assistants or teaching staff (to be borne by HSMC)
 - Regularly review the programme contents of the platform's Putonghua self-learning reports (individual learning report, usage and overall learning path) and correspondingly update and revise them.
 - Oversee the website and manage the self-learning platform's daily operation including system maintenance, monitoring of website and users' conduct (whether they observe the platform regulations and rules or not), and, daily maintenance and updating.