# 2014 Evergreen Education Foundation Small Project Report

Beginning in 2009, Evergreen Education Foundation started supporting partner school/public/community libraries via small projects. The small projects, initiated and implemented by the local schools and libraries, focuses on transparency and accountability of the process, and "learning by doing". In 2012, to support development of grassroots libraries to serve the local needs, Evergreen small projects application was opened to the Grassroots Libraries Association and its affiliated libraries with limitations. In 2013, after the success of an oral history pilot project in TianZhu No.1 High School from 2009 to 2012, Evergreen promoted Oral History and Local Culture Study among other partner schools.

The new trend of this year is the piloting of science & technology creativity (STC) projects for Evergreen's Science & Technology Creativity (STC) program. STC Program facilitates STC Centers, physical spaces with shared resources, in rural China from proposals made by rural schools, libraries, and communities. The projects within the STC are focused on science, technology, and creativity learning and education. Inspired by Makerspaces, these innovative and science-based projects couple the resources of library and academic research with design and fabrication.

From November 2014 to December 2015, 9 school libraries, 3 public / community libraries completed 26 small projects, in the following areas:

#### **READING AND WRITING**

In reading and writing projects this year, teachers conducted a careful design and guidance, resulting in excellent outcomes with common topics.



Teachers guiding students to appreciate the couplet, "Couplet Show Booth", Tongwei No. 1 High School, Gansu

In "Couplet Show Booth" project, Tongwei No. 1 High School, Gansu, the teacher trained and guided two classes of 134 students in couplet appreciation and creation. Students created more than 230 couplets, among which 150 are valid, and wrote 125 couplet reviews and reflection articles, among which 30 outstanding ones were rewarded. The teacher also organized students to participate in the "Student Couplet Arena Contest" held by "Story of Folk Couplets" magazine,

the only officially issued magazine on couplets by the publishing industry of China; and 122 couplets from 70 students were shortlisted. Through this process, students made progress in their sense of language and thinking, and their interest in and understanding of this literary genre and traditional art increased. One student, Niu He experienced the growth from pasting the spring couplet backwards on his gatepost to publishing 6 couplets in the contest. In his article, he recalled the happy moments during boring evening self study time, brought by couplet creation practice and couplet review by the teacher and the students. Many students also shared their own stories of how they became interested in this folk art and gained pleasure and sense of achievement from their couplet creation.

In the "Growing Up with Reading" project, Tongwei No. 1 High School, Gansu, considering the limited time that Grade 12 students had, the teacher encouraged students to show the relationship between reading and their growth with working products in flexible forms. Students produced recommended reading list, book reviews, reflections, and interviews, and reviewed the influence of several key books at the turning points of life, or the influence of books of different genres on their growth. Through this, we see the individualized reading and growth curve of each student, and the role of books in it. For instance, "The Earth Altar and Me", with its contemplation on suffering, helped a hard-pressed student return to calmness. "Bacon Essays" brought the insight of methodology to a student. "The Discourse Upon the Political History of the Tang Dynasty" showed a student what historical insights were, and their enlightening power on the presence and the future.

## INQUIRY-BASED LEARNING

Extra-curricular community-centered inquiry is the main form of inquiry-based learning this year. The projects cover the humanistic inquiry and scientific inquiry. Oral history and local cultural study is the core form of humanistic inquiry. For scientific inquiry, this year we started piloting science and technology maker projects focusing on creative electronics, hoping that the making element can be combined with the applied science inquiry that addresses community/real life problems.

## ORAL HISTORY AND LOCAL CULTURAL STUDY

Two oral history projects this year which both began as inquiries about folk customs and art, have developed into inquiries about the relationship between traditions and life. Through life history interviews of the related community, teachers and students explored the marks the traditions left on people's lives.



Entertainment between the tents in Daocheng Horse Race Festival (Left), Horse traders preparing for horse tryout (Right), "A Life with Walking Horse", Tianzhu No. 1 High School, Gansu

The "A Life With Walking Horse" oral history project of Tianzhu No. 1 High School, Gansu is a follow-up to the "Tianzhu Walking Horse Culture "oral history project in 2011. In August 2015, two teachers with several horse traders from Tianzhu drove to Shangri La County, Yunnan, and Daocheng and Litang Counties, Sichuan to sell horses, attend traditional Horse Race Festival and conduct interviews and recordings along the way. The journey lasted 11 days and covered more than 5000 kilometers. Supplementary interviews to these horse traders were done upon return. These interviews and recordings vividly captured the hardships of the horse trading trips, and the sophisticated relationships between man and horse, man and man, and between man and the trade. Through this process, the teachers' understanding of folk culture has entered a new realm. The teachers explored the depth that folk culture oral history can possibly reach, and accumulated interview and recording experience. All these will be used as a base for teachers to design subsequent oral history projects for students on similar topics.



Mock interview (Left), Student interviewing Manla Zhang, a Hua'er collector after retirement (Right), "A Life with Hua'er", Tianzhu Xinhua Middle School, Gansu

"A Life with Hua'er" oral history project of Tianzhu Xinhua Middle School, Gansu is the sequel of a 2013 project with the same name of this folk ballad. After establishing trust and rapport with the elderly amateur group in the County Square and the middle-aged amateur group on QQ (a social media platform in China), the teachers and students went to the two groups and interviewed Hua'er singers, composers, and collectors of different background. The interview data profiled various enthusiasts who were rooted in the soil of northwest highland, and resonated with the soul of this ballad. Among them were a music worker who devoted his life to collecting Hua'er after retirement, a coal field driver who used Hua'er to express his melancholy feelings when working in Inner Mongolia afar from home, a taxi driver who trained himself to be a professional keyboard player for Hua'er, an old cadre who grew up in a destitute farmer's family, fell in love with Hua'er in his miserable childhood, failed to fit with the society around him, and found his solace in Hua'er after his retirement... The stories and feelings between these figures and Hua'er revealed the rich connotations of this traditional local ballad. Although the extent to which middle school students understood these connotations depends largely on their accumulation, the students prevalently mentioned that the entire process, from the interview outline to the transcript making, greatly helped their communication skills and working ethics.

#### Applied Science Inquiry

The applied science inquiry centered around real community problems, due to the gap between its professional requirement and the secondary school textbook knowledge, set up a threshold for secondary school inquiry-based learning. Applied science inquiry projects this year tried to cross this threshold by partnering with local professional institutions.





Students collecting water samples (Left), Students testing water quality (Right), "The Study of Water Quality in Changjia River", Tongwei No. 1 High School, Gansu

"The Study of Water Quality in Changjia River" project of Tongwei No. 1 High School, Gansu was initiated by a history teacher who worried about this mother river of his hometown, he later collaborated with physics, chemistry, IT teachers, and the County Water Conservation Bureau. Together, the team designed a water quality test set for high school students based on the professional standard (For 3 out of 15 tests in this set, students borrowed professional testing equipment because the tests cannot be done by high school lab). 22 students, after being trained in field study, water sampling, photography, and interview methods; hiked through the Changjia

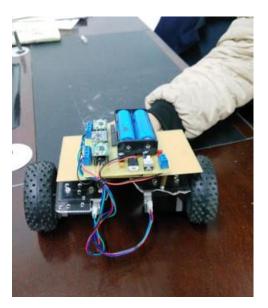
River basin, inspected the possible causes of water mineralization, collected 20 samples of main stream, tributaries, stream, and seepage of the river, and performed water quality tests on these samples. Based on the test data and field study observations, the students wrote two reports, "The Analysis of the Causes of Water Mineralization of Changjia River" and "The Improving Measures of Changjia River Basin (Preliminary)", under the guidance of experts.

#### Science & Technology Creativity (STC) Pilot Projects – Arduino Science Projects

Evergreen encouraged schools to apply for a small project using the Arduino microcontroller as pilot to develop a STC project model. By doing an Arduino science pilot project, we sought to learn the school's capability to run a STC project and to find out what other resources are needed. Arduino science projects aimed to improve students' application of science methods and technology; and at the same time, these project-based programs unleashed all participants' creativity.

There were 5 schools which applied for 6 projects including: using an Arduino in water level measuring, monitoring classroom air quality, building a robot, designing a self-balanced motor, and even making a smart car. Schools developed their own plan and formed teams to do the Arduino projects. Students were excited in putting their hands on building materials, computer coding, getting it work, letting it move, and most importantly, learning by fixing it when it broke.





"Pairing..." (Left), "Balancing..."(Right), "Self-balanced two wheels motor", Tongwei No. 1 High School, Gansu

Tongwei No. 1 High School, Gansu: Self-balanced two wheels motor

Lingbing Cui, Tongwei No. 1 high school teacher, coached the Arduino team building a self balanced two wheels car. It was really challenging for students first time touching computer and Arduino materials. They enlisted help from an alumni student who is college freshman. This mentorship method was shared and spread to other Evergreen STC teams at other schools.



"Train to be smart" (Left), "Smart move!" (Right), "Smart Car", HuaiAn No. 1 School, Jiangsu

HuaiAn No. 1 School, Jiangsu: Smart Car

HuaiAn No. 1 school initiated this smart car project. Student Yang Cao as the project leader not only built the team to build the smart car but also trained other students for coding an Arduino application. It was challenging for coding, sensor detecting, and debugging. They had to keep on redesigning circuit and rebuilding car to be "smart" when missing key components.



"Beep!" (Left), "And lighting!" (Right), Water Level Monitor, Danfeng High School, Shaanxi

Danfeng High School, Shaanxi: Water Level Monitor

There is a strong STC faculty coaching team in Danfeng high school. Teachers were heavily involved during the Arduino project. They came out with several projects related to using an Arduino. Two of them were selected to proceed as Evergreen Small Projects in 2015. The water level monitor is one of them. Ping Liu, one coach teacher, encouraged students to explore their own design and learn coding from failures.

Evergreen Education Foundation was thrilled with the progress at these schools during the pilot year, and we are planning to expand STC small projects in the future.

#### **Health Education**

For secondary school students, psychological health education, growth education and sex education are inseparable. These types of education are acutely lacking in schools, but rural students with huge pressure to go to college and mostly with migrant working parents not around to guide them are in great need of this. We explored psychological health education in Tongwei No. 1 High School, in the 2009-2012 "Health Education" extended projects, but have not yet formed mature model. A small project this year experimented sex education for high school students. Though it is not completed yet, it is promising to find a mature and feasible model for secondary school sex education.

In "Building a Safe Place for Youth -- Adolescent Sex Education" of Kaili No. 1 High School, Guizhou, teachers and students first did survey and interviews to find out the needs. The result showed that 1) Students had very weak understanding of sex and sexuality; 2) Number of abortion incidences is increasing among high school students; 3) Parents and teachers wanted sex education but without good understanding of it were worried about its negative influence. The teachers continued to explore sex education design. The student groups searched and sorted out the sex education information domestically and from abroad, attended expert seminars, and watched video on AIDS prevention, and attended teachers' lectures. Realizing that the lectures and seminars did not work well because the students were in a passive role, the teachers found the empowerment sex education framework advocated by Dr. Fang Gang, and decided to leverage the rich secondary school teaching cases collected by Dr. Fang, and the lesson plans using 20+ classic mainstream movies as materials for teacher-led group discussion developed by Dr. Fang, to conduct the sex education. Therefore, the project team applied for half year extension to try out this framework, and is actively preparing for the new semester. We will sort out the sex education model suitable for rural secondary schools according to the final result of the project.

## COMMUNITY EDUCATION

The core of community education services this year is reading, including reading promotion and reading services for people with disabilities.



Reading buddy (Left), Story time is about to start in the village book corner (Right), "Reading Promotion", Luxi Library, Tiandeng County, Guangxi

In the "Reading Promotion" project of Luxi Library, Tiandeng County, Guangxi, the volunteers (mainly local middle school students), after trained by the librarian, carried out the following

activities using small project resources: exhibitions of reading programs including a painting exhibition and a poster exhibition, updating the collection of 60 classroom book corners at the local high schools, updating the collection of leprosy rehabilitation in the village elderly book corner and reading books for the elderly, children's reading promotion activities for 41 village book corners. These activities helped cultivate interest in reading among these community groups, especially children. Moreover, the project improved the student volunteers' teamwork, critical thinking ability, communication ability, and social responsibility, which will benefit the local society in the long run.



The Party – Let's Try Our Best Together, "I Am Your Eyes", National Museum of Modern Chinese Literature

In "I Am Your Eyes – Recording Audio Book for The Blind" project of National Museum of Modern Chinese Literature, collaborated with the local orphanage for the blind, the museum staff purchased books desired by the blind children, set up special shelves, and recruited 20 students in a primary school in Haidian District, Beijing to be volunteers. The volunteers attended seminars of children's radio presenters on how to read children's songs, stories and poems, recorded 60+ pieces of audio materials which were recorded on to CDs. Student volunteers also rehearsed programs for a party with the blind children where the CDs were donated to them. Follow-up interviews showed that the blind children loved the audio materials. In response to their needs, the project team is going to recruit more young student volunteers to record audio materials for the blind children, and rich forms of reading will be used such as reading with role play.

#### CONCLUSIONS

For the future, inquiry-based learning and community education are still the focus of school library service and community library service respectively, and two of the most important directions of Evergreen Small Projects. Inquiry-based learning, oral history and local cultural study has become the main direction of humanities inquiry, in which the "History Around Us" interview and writing project, due to its profound impact and great feasibility, has become an important branch of secondary school oral history. We will develop the support framework for oral history teaching, based on current status of rural students. A project this year has provided a

useful reference for local river water quality testing, a common applied science inquiry topic, and we are looking forward to more scientific inquiry reference topics. The piloting of Science and Technology Creativity (STC) projects this year established the STC projects as a main line of scientific inquiry. We will focus on the training and guidance of STC projects in the next two years.

In addition, we pay close attention to the school psychological health education related topics. We are looking forward to the final outcome of the high school sex education project of Kaili No. 1 High School. If an effective and feasible model is found, we will promote this model in the Evergreen schools.