2014 STARTALK STEM-Integrated Chinese Learning Program by HUAYUAN CHINESE ACADEMY

Presented by
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HUAYUAN CHINESE ACADEMY

Huayuan Chinese Academy
Preparing Today’s Students for Future Global Success

- A 5-day a week, non-profit after-school Chinese language & culture program supplemented with Math and Science
- Program in 8 Montgomery County Public elementary schools
- Over 90 students --10% non-heritage students
BOARD OF DIRECTORS

- Haiying Qin, President
- Wendy Wang, Principal
- Dr. Liu Na, Director of Instruction
- Wilbur Friedman, Esq., Secretary/Treasurer
- Dr. Alan Cheung, Chairperson
APPROACH TO TEACHING

- Language Immersion
- Learning is fun
- Introducing Math & Science
- Guidelines for teachers selection & professional development
- Monitoring classroom instruction
STANDARDS & GUIDELINES

- Adopt ACTFL 5-C Standards
- Follow /learn from STARTALK/NFLC curriculum & lesson plans, guidelines & communication modes
- Apply MSDE World Languages Elementary STEM Modules
HUAYUAN’S AFTER-SCHOOL PROGRAM

- Adopt & modify standardized textbooks
- One teacher for every 7 students
- Differentiated instruction
- At no costs to schools and school districts
HYCA 2014 STARTALK PROGRAM

- TITLE: 2014 STARTALK STEM-Integrated Chinese Learning Program
- THEME: Explore Water, An Essential Element of Life
- STUDENTS: 45 rising grade 2-5 students with 87% non-heritage students
- 3-week summer program with 2 days a week after school extension for 10 weeks in the Fall
UNIQUENESS OF THE PROGRAM

- Mandarin Chinese Immersion
- Offering fun & hands-on STEM activities as a vehicle for language learning
- Learning through story-line with a fictional character, “Water Baby” -- his/her fun life & adventures
UNIQUENESS OF PROGRAM (cont’d)

- Meeting Water Baby’s family & friends
- Learning the 3 physical states of water & water cycle
- Experiencing different water bodies & water pollution
- Instructions are supported by hands-on science & cultural activities
UNIQUENESS OF PROGRAM (cont’d)

- Lesson plan for each day of program
- Learning objectives are shared with students
- At the end of the day, each student would do a self-reflection – what learned, likes & dislikes
UNIQUENESS OF PROGRAM (cont’d)

- Staff reflection at the end of the day – what worked, what needed for improvement, lesson for the next day
- Use of computers to reinforce teaching and learning
- Introduction of robots for fun learning
UNIQUENESS OF PROGRAM (cont’d)

- Collaboration & mentorship from another STARTALK program – Asian American Center of Frederick (Elizabeth Chung)
- Joint professional development
- Quality of teacher training is of UTMOST IMPORTANCE (Dr. Mimi Met)
UNIQUENESS OF PROGRAM (cont’d)

- Focus on scientific (STEM) concept to stimulate innovative/creative thinking
- Focus on communication of common phases & basic sentences
- Focus on understanding of cultural practices, products, & perspectives related to “Water”
UNIQUENESS OF PROGRAM (cont’d)

- Formative & summative performance-based assessments were designed to check student’s language development (3 communicative modes)

- Examples of some assessment tasks include paired conversations, role-plays, information gap activities (Interpersonal & Interpretive)
UNIQUENESS OF PROGRAM (cont’d)

- Other assessment activities include classroom presentation (Presentational), student-made recordings using Scratch, check list with can-do statements, & total physical responses

- Teachers also use worksheets to determine whether the instructional goals were met
UNIQUENESS OF PROGRAM (cont’d)

- A graduation ceremony was held at the end of the program
- Students presented what they learned from the program
- Students performed skits designed by the teachers, sang Chinese songs, & performed martial arts & Chinese dances
SUGGESTION FOR IMPROVEMENT

- Summer program stimulated students’ interest to learn language & culture – Continuity?
- Close to one-half of students in the summer program signed up for the extension programs, 2 days a week for 2 hours after-school for ten weeks in the Fall semester
Our students came from 22 different elementary schools in Montgomery County, Maryland.

Our priority of enrollment is for non-heritage students & Title 1 students.

71% of students were ethnic minorities.
PROFESSIONAL DEVELOPMENT

- Huayuan offers regular teachers training & formal STARTALK professional development in collaboration with Asian American Center of Frederick
- 2-day training by Dr. Mimi Met on lesson planning
- 2-day training on STARTALK-endorsed principles & instructional strategies by Chiachyi Chiu & Dr. Dali Tan
1. Our curriculum was THEMATICALLY designed & aligned with ACTFL 5-C STANDARDS. In addition, language, culture, & content (especially science subject knowledge) were well integrated
STARTALK-ENDORSED PRINCIPLES (CONT’D)

2. Teachers facilitated STUDENT-CENTERED learning by designing a variety of hands-on classroom activities and project-based activities
STARTALK-ENDORSED PRINCIPLES (CONT’D)

3. Chinese (TARGET LANGUAGE) was used in the classroom for at least 90% of the class time, complemented with visual aids, physical movements, facial expressions, & technology, to provide comprehensible input for students.
4. STEM-based activities, with age-appropriate differentiation, allowed students to interact with teachers & peers in the target language in a meaningful way
5. Small group activities, facilitated by teaching assistants & junior teachers, ensured ample opportunities for students to communicate with each & ensure instruction differentiation
STARTALK-ENDORSED PRINCIPLES (CONT’D)

6. Both formative & summative PERFORMANCE-BASED ASSESSMENT tasks were designed to ensure the students made progress toward instructional goals. Feedback from assessments were used to guide next steps in learning and instruction.
STARTALK-ENDORSED PRINCIPLES (CONT’D)

7. Students enjoyed cultural enrichment activities in Chinese crafts, martial arts, dancing, & a field to the Freer Asian Art
WHAT WORKED WELL

- Team Building – Admin Team, Instructional Lead, Lead Teachers, Teaching Assistants, Graduate Volunteer & Junior Volunteer students worked together in a congenial way.
WHAT WORKED WELL (cont’d)

- Integration of language, culture and STEM content was interesting to students
- Collaboration with a veteran program in Frederick was tremendously inspiring
WHAT WORKED WELL (cont’d)

- Volunteer graduate students from the Chinese Teachers Certification & Development program at the University of Maryland made contributions to the team.
- The STARTALK program offered teaching experiences for these graduate students, thus nurturing the next generation of qualified teachers.
WHAT WORKED WELL (cont’d)

- The host school, Gaithersburg Elementary School from the principal, to the teachers, and to staff at every level was very supportive
WHAT WORKED WELL (cont’d)

- The City of Gaithersburg & Montgomery County Public Schools were also very supportive of our program