

Serving the House of Tomorrow:

Villa Park High School's Rotary Sponsored First Annual
Pre-Chemistry Workshop to encourage STEM enrollment
for ELD and Disadvantaged Youth

“Your children are not *your* children,
They are the children of Life's longing for itself.
You may house their bodies but not their souls,
For their souls dwell in the House of Tomorrow
Which you may not visit, not even in your dreams.”

Kahlil Gibran
The Prophet

It's a Saturday morning in Villa Park, the sun is rising, the air crisp, with weekend silence blanketing the Villa Park High campus . . . until 7:30am; then Rotarians, students, parents and teachers begin to filter onto campus. Who does this on a Saturday morning? Where but Villa Park does education happen at sun-up on a weekend? The students were there for a series of four hour Saturday workshops. The **target** was ELD and disadvantaged learners, the **timing** was spring of the year at the time of course enrollment for the following year, **subject matter** was Pre-Chemistry transitioning to Particle Physics, and the **primary goal** was to encourage their enrollment in college preparatory STEM coursework, to reach into their futures.

The intent of the Saturday class was to reinforce and structure the periodicity of the Periodic Table, which underlies and flows from atomic theory covered in middle and high school textbooks¹; the next step was to then link it with particle physics whose language occurs *constantly* in current publications and electronic media. Because *a person's advancement as a scholar should be unimpeded by language constraints*, 2nd language learners and disadvantaged youth were provided extra support through the workshops, to enable them full access to STEM programs through materials and teachers in English *and* Spanish³. Costs for the program were provided by a cooperative Grant between **Rotary District 5320** and **Villa Park Rotary Club**. Materials, provided free of charge for all learners included books, period tables, expanded periodic tables, bilingual instruction, writing materials, facility and all other materials for the program. Even breakfast was included!

The advancement of **world understanding and peace begins with self-respect and opportunities to lift oneself out of poverty. Education is the pathway which can accomplish both.** The ability to resolve problems begins with respect and common goals; the sciences reach across disciplines, across cultures, across the world! Chemists in any country use the same words in the same context, and with the same measurements; the sciences bridge differences²! This is the beginning of true understanding on Earth.

These students represent our future, it truly belongs to them. They will indeed live in the “House of Tomorrow”, but perhaps we *can* visit the future in some small way, through programs like this one. We hope to fund this workshop on an annual basis through cooperative grants, and reach into the future through opportunities like this one to our youth. *A leg up to success in science is really a leg up for students to envision themselves as successful working partners in our local and world community.* From understanding comes enjoyment, and from enjoyment comes career commitment. *Where else would we expect such supportive intellectual programs to originate except Villa Park?*

Citations

1. Ausubel, D.P. (2000). The Acquisition and Retention of Knowledge: A Cognitive View. *Springer, online.* (Original- *Ausubelian Psychology*, 1977)
2. Hamrick (Bartrom-Olsen), Harty, Ault, (2010 published online). Concept Structure Interrelatedness Competency (ConSic): A Tool for Examining and Promoting Cognitive Structure. *School Science and Mathematics.* (Original- 1985)
3. Hagan, Elsa Cardenas. (2011). Response to Intervention: Implications for Spanish-Speaking English Language Learners. *University of Houston, RTI Action Network.*