Proposal to Create an Office for Outreach Activities on the UN-OOSA Platform

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by
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An ongoing theme was the need to connect-up with people concerning HSTI.

Three target groups identified were the general public including students, stakeholders, and decision makers.

Students were specifically discussed as being strongly motivated by human space exploration to enter science and technology careers, which could encourage them to pursue highly specialized skills.

The human element of space exploration uniquely captivates the imagination and fosters national self-confidence.

Organization and coordination are needed for HSTI outreach activities to be successful.

Proposal:

To create a desk office to organize and coordinate HSTI outreach activities on the UN-OOSA platform.
HSTI Outreach Activities

• The office will organize and coordinate the programs in collaboration with Agencies in developing and developed countries.

• The office will address the outreach-related observations and recommendations of the HSTI Working Groups.

• The activities will be derived from the space-related areas in which UN-OOSA is actively involved as contained in the Program on Space Applications.

• The activities will include, but not be limited to, customized space education outreach programs modeled on the ARCSSTE-E Workshop in Astronomy for Teachers template.

• Representatives from the identified target groups of general public, stakeholders, and decision makers, will be invited to participate in the workshops.

• The level of the material presented will be commensurate with that of the participants, and will be presented in such a way as to be educational and motivational.
Template for Outreach Activities

- Slide selection and sequencing to visually tell a story.
- Brief audio descriptions added for each slide.
- Documentation of brief descriptions.
- Relevant more in-depth information added to the documentation.
- PowerPoint presentation and Movie Maker video produced.
- Lecture using PowerPoint presentation.
- Educational media consisting of presentation, documentation, and video.

The template can be adapted to any target group, age range, subject matter, level, country, culture, and language, around the globe!
Methodology

Entertain - Educate - Entice

Entertain: the “hook”, entertainment - the video

Educate: the presentations, the brief descriptions

Entice: motivation to learn more - the in-depth documentation
YOUNG BLACK SCHOLARS
An educational activity of the 100 Black Men of Los Angeles, Inc.
Class of 1994 "Math--The Universal Language Workshop"
University of California, Los Angeles*Ralph Hall
Saturday* November 23, 1991 *9:00 a.m. -12 noon

AGENDA

Registration/Refreshments YBS Staff and Co-sponsors

Welcome/Greetings
YBS Alumni Scholars-Class of 1990
100 Black Men of Los Angeles, Inc.
UCLA "University Express" Presentation

"Mathematics: Cultural Connection to our Past, Present, and Future"
Keynote Speaker: Leroy D. Larry, Jr.
Jet Propulsion Laboratory Special Projects
California Institute of Technology

Workshop Sessions
(Rolfe 2134, 2125, 2203, 3115, and 3235)
a. "Meeting the Academic Challenges"
   M.B.A. Student Panel - UCLA Anderson School of Management
   Rod Dick, Phillip Gray,
   Evan Haine, and Karen Walker
b. "Brain-teasers: Practical Problem-Solving Applications"
   Lloyd Ferguson, Jr., Ph. D.
   Professor, California State Polytechnic
   University, Pomona
c. "Career Connections in Engineering"
   John Heath
   Los Angeles Council of Black Engineers
d. "Career Connections in Business"
   Rick Hodge, Outreach Counselor
   CSU Northridge
e. "Math Resources and Study Skills"
   Wilfred Smith
   LAUSD "Homework Hotline"

Evaluation/Adjournment
Vertical lines, equally spaced, are used in the sketch in a manner reminiscent of our common graph paper. The height of the vertical lines gives the desired height at the horizontal location indicated by the

Fig. 4A. Scale-drawing of the curve whose particulars are indicated on the ancient diagram shown in Fig. 4B.

Lumpkin — Fig. 4A.
Natural Physics!

Caveman Physics!

What Made the Hulk the Hulk?!

Ancient Physics Keys to Modern Astrophysics Locks!

Date: November 5, 2015
Time: 5 pm to 6 pm
Location: UCR Planetarium

presented by M.Sc. LeRoy Larry

UCR CINESPA Astrophysics Doctoral Candidate
UCR Department of Physics Professor
NASA Galileo Jupiter Space Probe Mission Project
NASA Space Shuttle Plasma Physics
Fermilab High-Energy Particle Accelerator Physics
Noche de las Estrellas
28 de noviembre de 2015

Préndete con la luz del Universo

PLANETARIO DE SAN JOSÉ
3:00 pm a 10:00 pm - Entrada Libre

Telescopiada · Conferencias · Presentaciones · Talleres
Programa
NOCHE DE ESTRELLAS
Dedicado al Año Internacional de la Luz
Planetario de San José, Universidad de Costa Rica
28 de Noviembre:

15pm-17:30pm:

Nuevas Misiones del Sistema Solar - Mag. Leonardo Herrera (15pm-15:40pm)
Nueva luz sobre Plutón - Dr. Daniel Azófeifa (15:40pm-16:20pm)
Light from the Galactic Plane - MSc. LeRoy Larry (16:20pm-17pm)
La luz de remanentes de supernovas - Dr. Miguel Araya (17pm-17:40pm)

17pm-18pm: (2 talleres para 15 personas)
Taller de Telescopios - Tec. Eric Sanches

18pm-22pm:
Telescopiada en acera

18pm y 20pm:
Programa Fulldome en el Planetario*

*Las actividades son gratuitas, solo el programa fulldome tiene un costo especial de c2000 y requiere la reservación.
The National Workshop on Astronomy for Teachers is designed to promote the teaching of Sciences, Technology, Engineering and Mathematics (STEM) by introducing Astronomy, in a simplified and readily comprehensible format, to primary and secondary school teachers in Nigeria.

Using the ARCSSTE-E Workshop in Astronomy for Teachers as a template will provide additional access to the target groups at an even more basic level.

The knowledge and enthusiasm about astronomy acquired by the teachers from the Workshop is in turn transmitted to their students.

The students are the children of the general public, stakeholders, and decision makers.

To observe such knowledge and enthusiasm in their children will capture the interest of the parents and inspire them to get further involved.
Template Adaptation to ARCSSTE-E Workshop

• Slide selection and sequencing to visually answer the question posed.
• Brief audio descriptions added for each slide.
• Documentation of brief descriptions.
• STEM and topics from the Nigerian curriculum added to the documentation.
• PowerPoint presentation and Movie Maker video produced.
• Lecture using PowerPoint presentation.
• Computer interactive exercises involving SLOOH and Stellarium.
• Quiz to evaluate teachers’ knowledge of material learned.
• Resource materials consisting of presentation, documentation, and video.
Velocity of light = 186,000 miles/sec = 298,000 km/sec

1 light-year (ly) = 6 trillion miles = 10 trillion km
Obstacles Encountered and Surmounted

Funding is the major obstacle and constraint because the agencies organizing the Workshop are funded by the Federal Government of Nigeria:

• The Centre for Space Research and Applications (CESRA), Federal University of Technology, Akure (FUTA)

• The African Regional Centre for Space Science and Technology Education in English (ARCSSTE-E), Obafemi Awolowo University campus, Ile-Ife

• The Organization of Women in Science for the Developing World (OWSD), FUTA Chapter.

• Slooh Community Observatory, USA
Proposed Office Implementation

• Organize collaboration between the individual organizers on funding needs.

• Coordinate collaboration between the organizers and the Federal Government on funding needs at an early stage.
Conclusions

• The successful results of the ARCSSTE-E Workshop in Astronomy for Teachers emphasize the need to organize and coordinate HSTI outreach activities.

• The obstacles encountered in organizing and coordinating the ARCSSTE-E Workshop in Astronomy for Teachers emphasize why it is necessary to conduct these activities from the UN-OOSA platform.