**HERO Initiative**

Make Every Child a HERO in the Digital Age

UNESCO APEID Consultative meeting, 19-21/11/13, Bangkok

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Director (Academic Projects), Nanyang Technological University
Infollution = information + Pollution
THE NEXT-GENERATION OF POLLUTION

<table>
<thead>
<tr>
<th>Cyber-Bullying</th>
<th>Obscene Content</th>
<th>Violent Video Game</th>
<th>Technology Addiction</th>
<th>Privacy Invasion</th>
<th>Viral Rumors</th>
</tr>
</thead>
</table>

- Violent Video Game
- Obscene Content
- Technology Addiction
- Cyber-Bullying
- Privacy Invasion
- Viral Rumors
iZ HERO Project is a UNESCO ICT Education Prize-winning educational entertainment program to empower kids with the 21st century DIGITAL LEADERSHIP

By enjoying the iZ HERO Project, children can naturally learn about various cyber-risks as well as moral character values through fun story-telling with animated characters and games.
Research-based & Research-generating Digital Citizenship Education
Game-based fun storytelling approach

iZ HEROs have the ultimate power to defeat Infollmons.

INFOLLMONs try to destroy the iZ HERO spirit of kids through the Internet and Mobile Phones
Cyberbullying
- Privacy invasion
- Online Predators
- Video game addiction

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Mission
We help to find the unique HERO in every child in the digital age!

- **WISDOM** to create benefits for others
- **GRATITUDE** to not take things for granted
- **RESPECT** for all
- **COURAGE** to speak up
- **EMPATHY** to understand others
- **DISCIPLINE** to use new ICT tools
- **CREATIVITY** to solve problems from a different angle
- **RESPONSIBILITY** to complete tasks with ownership
- **RESPONSIBILITY** to try and continue
- **WISDOM** to create benefits for others
- **GRATITUDE** to not take things for granted
- **RESPECT** for all
- **COURAGE** to speak up
- **EMPATHY** to understand others
- **DISCIPLINE** to use new ICT tools
- **CREATIVITY** to solve problems from a different angle
- **RESPONSIBILITY** to complete tasks with ownership
- **RESPONSIBILITY** to try and continue
iZ HERO Exhibition is the world’s first exhibition to teach kids about digital leadership.
2013 International Mobile Safety Tips for Children

**BE SAFE**
- Lock your device with a strong password
- Do not tell your password to anyone except your parents or guardian
- Keep your app and device software updated
- Turn off Wi-Fi, Bluetooth and location service when not in use

**BE SMART**
- Think carefully before downloading any apps, music or videos
- Avoid sending your personal or private information
- Be careful to avoid clicking links or attachments from people you don’t know
- Do not talk to strangers online and never meet them in person

**BE ALERT**
- Learn to identify online tricks and scams
- Get your friends permission before you share their photos or videos
- Be mindful that your messages could spread anywhere like across the entire school
- Think again before posting your photos or videos

**BE KIND**
- Don’t say anything online that you would not say in person
- Send encouraging and uplifting messages to friends and family
- Avoid using harsh or hurtful words
- Do not forward anything unpleasant or mean about others

**BE IN CHARGE**
- Take control of your mobile time
- Use your devices at the right time - not in class, with your family or after bedtime
- Stand up for victims of cyber-bullying
- Keep your promise with your parents about how and where you use your phone

**BE AN iZ HERO!™**

STOP THINK CONNECT
The iZ HERO Teachers’ Guide

• **Awareness of Various Cyber-Risks**
  – Cyber-bullying
  – Privacy invasion
  – Online predators
  – Inappropriate content
  – Video game addiction

• **Classroom Activities to Learn Five Key Messages**
  – Be Safe – Privacy invasion
  – Be Smart – Online predators, Privacy invasion
  – Be Alert - Online footprint
  – Be Kind – Cyber-bullying
  – Be In Charge – Video game addiction, Inappropriate content

• **Peer Mentoring Programs**
Ex: Cyber-bullying

Definition: Cyber bullying

The use of electronic communication to bully a person, typically by sending messages of an intimidating or threatening nature.
The iZ HERO Project is comprised of several, integrated learning programs across various multimedia formats.

- Comic Books
- Character Encyclopedia
- Online Game
- Interactive Exhibition
- Peer-mentoring Program
- Social Networks
- On-/Offline Quest
Learning “Digital Leadership” behind Story and Characters

Defeating bad messages through game-based story quest

Immersive Gamification Experiences Enhancing Children’s Learning Cycle

Communicating & Practicing “Digital Leadership”

Digital Interactive Exhibition

Social Networks

On-/Offline Quest
Developed a peer-mentoring program with a local partner: TOUCH Cyber-wellness Community, Singapore
Character Building Education:
Kids Acquire Strong Values Through Character Game Items Obtained By Completing the Quests

RESPECT For Yourself
You are precious just as you are...

RESPECT For Others
Realize the power of your words

RESPECT For All
Realize the powers of your mind

Legendary Warrior of RESPECT
Understand the feelings of others and have the power of belief!
Recognitions about iZ HERO Project

- 2012 The UNESCO King Hamad Bin Isa Al Khalifa Prize for the use of ICTs in Education

- 2013 Eisenhower Fellowship

- 2013 Honourable Commendations - UNESCO Wenhui Award for Educational Innovation

- 2013 Ashoka Fellowship


- An experimental study by the National Institute of Education (NIE) measured statistically significant changes in attitude toward cyber-risks among youth who experienced the iZ HERO Project
iZ HERO Experimental Study Design

Flowchart of the experimental research design.

Table 1. Characteristics of Primary 4 participants or juniors by data collection point.

<table>
<thead>
<tr>
<th></th>
<th>Pre-test</th>
<th></th>
<th>Post-test</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>n</strong></td>
<td>146</td>
<td>(47.7%)</td>
<td>115</td>
<td>(48.5%)</td>
</tr>
<tr>
<td><strong>Male</strong></td>
<td>160</td>
<td>(52.3%)</td>
<td>122</td>
<td>(51.5%)</td>
</tr>
<tr>
<td><strong>Experimental</strong></td>
<td>172</td>
<td>(56.2%)</td>
<td>136</td>
<td>(57.4%)</td>
</tr>
<tr>
<td><strong>Control</strong></td>
<td>134</td>
<td>(43.8%)</td>
<td>101</td>
<td>(42.6%)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>306</td>
<td></td>
<td>237</td>
<td></td>
</tr>
</tbody>
</table>

Percent (%) indicates percent of total sample in each phase.

Table 2. Characteristics of Primary 5 and 6 participants or mentors by data collection point.

<table>
<thead>
<tr>
<th></th>
<th>Pre-test</th>
<th></th>
<th>Post-test</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>n</strong></td>
<td>76</td>
<td>(56.7%)</td>
<td>42</td>
<td>(52.8%)</td>
</tr>
<tr>
<td><strong>Male</strong></td>
<td>58</td>
<td>(43.3%)</td>
<td>27</td>
<td>(47.2%)</td>
</tr>
<tr>
<td><strong>Experimental</strong></td>
<td>76</td>
<td>(56.7%)</td>
<td>69</td>
<td>(100%)</td>
</tr>
<tr>
<td><strong>Control</strong></td>
<td>58</td>
<td>(43.3%)</td>
<td>0</td>
<td>(0)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>134</td>
<td></td>
<td>237</td>
<td></td>
</tr>
</tbody>
</table>

Percent (%) indicates percent of total sample in each phase.
Preliminary Research finding (I):
Students’ perceptions regarding the usefulness of the iZ Hero exhibition and the web based game:

Students’ perceptions regarding the iZ HERO Project were very positive:
• 92% found the exhibition activities helpful in helping them use the Internet safely.
• 89% found that the exhibition made learning more interesting.
• 93% found the exhibition experiences helpful.
• 86% found that playing the game at the exhibition was fun.
• 92% found the game at the exhibition interesting.
• 87% like the infollmon and iZ Titan characters at the exhibition.
Research finding (II):
Did students’ attitudes towards online risky behaviours improve from the pre-test to the post-test?

There were significant improvements in their attitudes for 5 of the 6 attitudes examined comparing pre- and post- exposure, namely:

- Attitude towards online disclosure of personal information
- Attitude towards offline meetings
- Attitude towards playing online games for more than 3 hours
- Attitude towards playing online games instead of completing homework
- Attitude towards watching online pornography
Easy-to-plug-in: iZ HERO Programs

Government Agencies

Interactive Exhibition

HERO Campaigns
- Campaign packet
- Posters
- Public Service Announcement

Schools & NGOs

Teachers’ Material

Peer-mentoring materials

Parents and Children

Mobile App / Website

Educational Products
**EASY-TO-PLUG-IN:**
How to bring iZ HERO to your country!

<table>
<thead>
<tr>
<th>Preparation (3 months)</th>
<th>Pilot Program (3 months +)</th>
<th>National Campaign and Education Roll-Out</th>
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<tbody>
<tr>
<td>Localization of the content (optional)</td>
<td>Pilot program for 2-3 schools</td>
<td>Campaign</td>
</tr>
<tr>
<td>• Based on advice from local experts</td>
<td>• Peer-mentor training [video-record for nation-wide roll-out]</td>
<td>• Online campaign</td>
</tr>
<tr>
<td>Translation of materials</td>
<td>• Teachers’ training [video-record for nation-wide roll-out]</td>
<td>• PSA</td>
</tr>
<tr>
<td>• Exhibition panels</td>
<td>• Pilot test iZ HERO Content with school students</td>
<td>National school roll-out</td>
</tr>
<tr>
<td>• Peer-mentoring book</td>
<td>• Survey and research efficacy among local students</td>
<td></td>
</tr>
<tr>
<td>• Teachers’ guide</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Campaign brochure</td>
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Install the iZ HERO exhibition (travel ver. or permanent ver.)
**Potential Collaborations : HERO Initiative**

- **2014 Theme**: ZERO Tolerance for Cyber-Bullying!
- **Slogan**: Be an iZ HERO!
- **2014 Plan**:

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<tr>
<td>• HERO Campaign</td>
<td>• HERO Summit</td>
<td>• HERO Implementation</td>
</tr>
<tr>
<td>• Goal: Raise public awareness of infollution</td>
<td>• Goal: Set global standard for online children’s protection</td>
<td>• Goal: Implement recommendations produced at the HERO Summit</td>
</tr>
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Potential Collaborations: HERO Initiative

UNESCO:
• Co-organize HERO Summit
• Co-develop UNESCO-infollutionZERO Recommendation for digital citizenship education policy

SEAMEO:
• Co-develop eXCELS and GURO21 (MT4T Mobile Technology Resources Kit for SEA Teachers) – Digital Citizenship program

Companies:
• Be part of HERO Initiative
• Co-branded iZ product: e.g., TOMS

Universities:
• Participate in research: 1) infollution status, 2) Effective digital citizenship programs

Local Not-for-Profit Organizations:
• 1. Any form of collaboration! – Counseling, sharing resources, co-campaign