Pei Hwa Presbyterian Primary School
Singapore
24 June 2008
Outline

- Background and Rationale
- I & E Framework
- Fractured Fairy Tale cum ICT
- Student Outcomes
- Key Learning
- What’s next ?
"Singapore’s vision for meeting this challenge for the future is encapsulated in four words: **Thinking Schools Learning Nation**. It is a vision for a total learning environment, including students, teachers, parents, workers, companies, community organisations and the government."

*SM Goh Chok Tong, then Prime Minister, 2 June 1997*
New Focus
Innovation and Enterprise (I & E)

“Indeed, innovation and enterprise will have to start in school. “
This position is articulated by former Minister for Education, Teo Chee Hean:
“Innovation will be absolutely critical to the creation of wealth in the 21st century … “
“To develop an innovative work force, we will need to start in school by
training our students to be enterprising and creative thinkers. The education
system in Singapore has thus far emphasized the acquisition of factual
knowledge. We will need to shift our focus to creative thinking skills. Instead
of just being followers, our young must be prepared to experiment, to make
mistakes, to learn and to innovate, in order to be leaders in their own fields.”

(TEO, 1998).
“We need to give I & E more emphasis, and more focus. It is part and parcel of what we all know as Thinking Schools, Learning Nation. It is not a new Programme; it doesn’t replace existing programmes. It is the way we will take Thinking Schools, Learning Nation forward in the new era. Innovation and enterprise is an attitude of mind, developing habits of mind… it is firstly about developing intellectual curiosity amongst all our children, a willingness to think originally. Second, a spirit of initiative, and willingness to do something differently, even if there is a risk of failure. And third, it’s about developing strength of character. The ability to bounce back, try again and the willingness to stand in a team …”

Mr Tharman Shanmugaratnam, Education Minister, 2004
And third, it’s about developing strength of character. The ability to bounce back, try again and the willingness to stand in a team … to lead a team and to fight as a team. So these attitudes, put together, are what we are trying to achieve in education as we go forward. They are intangible factors, but these intangibles ultimately will be what remakes Singapore, and allow Singapore to stay relevant.

Mr Tharman Shanmugaratnam, Education Minister, 2004
IT Masterplan in Education

- Initiated in late 1990s in several phases.
- Aim:- To equip students with the necessary skills to meet the challenges of the 21st century
  - To produce a workforce of excellence.
- Target:- An approximate of 30% of curriculum time to leverage on IT to enhance teaching and learning.
Innovation and Enterprise Framework in PHPPS

School Leadership

R3: Reflect, Refine, Reward

Problem Identification

E3: Explore, Experiment, Execute

Learning Culture

ID E A L

Education

Pupil-Centred

Passion Performance

School Values
Problem Identification

Nowadays, children prefer to communicate in English than in Mandarin.

Composition writing is an area of concern. There are missing links between paragraphs and children find it difficult to develop the plot well.

Some pupils find problem solving a challenge.
Some Issues to Tackle

- What Approach??
- Which Target Group??
- What Pedagogical Use??
PETALS Framework

Experiences of Learning
Use of Pedagogies
Learning Content
Student Centredness
Assessment for Learning
Supportive School Leadership
One of Environment
Learning content

- Use of :-
  - Past tense
  - Present tense in Direct Speech
  - Punctuation
- Concord
- Organisation - coherence, flow and linkage of ideas
- Creativity and Imagination
Use of Pedagogies

- Leverage on **Gaming** which is popular amongst young people and children
- **Transform Gaming** into a useful tool to teach and motivate children to write

Approach: Fractured Fairy Tale
What is Fractured Fairy Tale?

• FFTs are traditional fairy tales, rearranged to change the characters, settings, points of view or create new plots.

• FFTs involve a unique twist that allow readers to interpret the tale from another perspective.
THE TRUE STORY OF
THE 3 LITTLE PIGS!

AS TOLD TO JON SCIESZKA
ILLUSTRATED BY LANE SMITH
"Everybody knows the story of the Three Little Pigs. Or at least they think they do. But nobody knows the real story, because nobody has ever heard my side of the story. I'm Alexander T. Wolf. I don't know how this whole Big Bad Wolf thing got started, but it's all wrong. Maybe it's because of our diet. Hey, it's not my fault wolves eat cute little animals like bunnies and sheep and pigs. That's just the way we are. The whole big bad wolf thing is all wrong. The real story is about a sneeze and a cup of sugar."
Fractured Fairy Tale

Objectives
To provide a:

- Structured strategy to enable pupils to write creatively
- Multimedia approach to increase pupils’ interest in writing
Experiences of Learning

- Children can **role play** in the gaming activities or become directors themselves by creating their own stories or modifying original stories.
4-Stage Model of ZPD

- **Capacity begins**
- **Capacity developed**

**ZONE OF PROXIMAL DEVELOPMENT**

- Assistance provided by more capable others:
  - Parents
  - Teachers
  - Experts
  - Coaches
- Assistance provided by the self
- Internalization, automatization, "fossilization"
- De-automatization: recursiveness through prior stages

Time: Stage I | Stage II | Stage III | Stage IV

Recursive loop
Experiences of Learning

Learning is a social process according to the social constructivism theory.

“Meaningful learning occurs when individuals are engaged in social activities.”

- Mc Mahon, 1997

- Students can work in pairs or teams.
- Students learn to be team players.
- Students acquire decision making and problem solving skills.
- In line with school values - Responsibility, Respect, Perseverance
“Scaffolding requires the teacher to provide students the opportunity to extend their current skills and knowledge. The teacher must engage students’ interest, simplify tasks so that they are manageable, and motivate students to pursue the instructional goal”

-Hausfather, 1996
Experiences of Learning

- Teachers will provide scaffolding to guide children in learning and organising their ideas through **story mapping**.
- Teachers guide students in recording their narration in their oral presentation, intonation and expression.
Tone of Environment

- Warm
- Positive and encouraging
- Allow room for mistakes
- Freedom to explore, imagine and create
- Pupils are encouraged to think and question
Brainstorm common elements on fairy tales

Identify typical characteristics of a fairy tale using literary terms such as character, setting and plot

Create a story board based on the selected fairy tale, *The Frog Prince*.

Rewrite *The Frog Prince*, changing the literary elements to make it a modified version of the original fairy tale.

Animate their new fractured fairy tale with The SIMS 2 - PETS expansion pack game
Leverage on gaming tools to teach and motivate children to write

Use Machinima to create movie clips, complete with narration, background music and 3D animation

Use SIMS 2 as a platform to create 3D animation based on the plot the pupils had created

Children can become directors themselves by creating their own stories or modifying original stories.
Achievement of Pupils

- 44% of students showed improvement by 10% to 20% in their composition scores.
- 33% showed improvement by 5% in their composition scores.
- 23% showed no improvement.
The sunrise was glorious that morning, all rosy and salmon-pink. It was a perfect day for hiking, Jake told himself. He, along with his two pals, Lucas and Tom, planned a morning hike up Bukit Timah Hill. At Bukit Timah Hill, they marvelled at the fabulous flora and fauna and tried to identify their names.

After a long hike, they felt exhausted. Jake saw Lucas drinking some water, asked, “Can I possibly have a drink?”

“Never in your life, Jake! I do not share a bottle with anyone!” replied Lucas.

Tom, the most mischievous of the three, threw a stick to hit a branch, not knowing if a beehive hanging on it.

As I scrutinised him, I realised that the boy was from a school near mine.

“Hello, are you alright? Do you need help?” I asked.

“I have missed my school bus and I do not know how to get to school. What should I do?” the pitiful boy’s eyes welled up in tears.

Without hesitation, I decided to help him. “Do not worry. I will bring you there.” I assured him and told him of my plan. We would take a bus there and arrive before the school bell rang. Upon hearing this, the boy let out a sigh of relief.
The sunrise was glorious that morning, all rosy and salmon-pink. It was a perfect day for hiking, Jake told himself. He, along with his two pals, Lucas and Tom, planned a morning hike up Bukit Timah Hill. At Bukit Timah Hill, they marvelled at the fabulous flora and fauna and tried to identify their names.

After a long hike, they felt exhausted. Jake, who saw Lucas drinking some water, asked Jake, “Can I possibly have a drink?”

“Never in your life, Jake! I do not share my water bottle with anyone!” replied Lucas. Meanwhile, Tom, the most mischievous of the trio, was using a stick to hit a branch, not knowing there was a beehive hanging on it.
As I scrutinised him, I realised that the boy was from a school near mine.

“Hello, are you alright? Do you need help?” I asked.

“I have missed my school bus and I do not know how to get to school. What should I do?” the pitiful boy’s eyes welled up in tears.

Without hesitation, I decided to help him. “Do not worry. I will bring you there.” I assured him and told him of my plan. We would take a bus there and arrive before the school bell rang. Upon hearing this, the boy let out a sigh of relief.
Key Learning Points

- Creativity and Perspectives
- Attention to Details
- Narration and Speech
- Teamwork, Respect for other’s opinions & Decision Making
What’s Next?

- Encourage more teachers to adopt this approach
- Character Education
  - cyber wellness programme
  - pros and cons of online gaming
  - Safe and Responsible use of Internet
  - Respect for self and others (Netiquette)
- Explore and experiment with other approaches and pedagogies to teach composition writing e.g. Blogging, Podcasting
Thank You