

**1. What is our purpose?**

**To inquire into the following:**

- **transdisciplinary theme**

**How the World Works**

An inquiry into the natural world and its laws; the interaction between the natural world (physical and biological) and human societies; how humans use their understanding of scientific principles; the impact of scientific and technological advances on society and on the environment.

- **central idea**

Basic Scientific principles provide a foundation for technological development.

**Summative assessment task(s):**

**What are the possible ways of assessing students' understanding of the central idea? What evidence, including student-initiated actions, will we look for?**

Students present their understanding of the central idea and their inquiries using a variety of media (Rubric)

**Class/grade:** 6

**Age group:** 11-12

**School:** Sekolah Ciputra

**School code:** 7179

**Title:** Exhibition

**Teacher(s):** Diana, Yudi, Idayu, Paul, Merry, Palupi, Justine

**Date:** February 18<sup>th</sup> – April 19<sup>th</sup>, 2008

**Proposed duration:** number of hours      over number of weeks



PYP planner

**2. What do we want to learn?**

**What are the key concepts (form, function, causation, change, connection, perspective, responsibility, reflection) to be emphasized within this inquiry?**

All concepts are addressed

**What lines of inquiry will define the scope of the inquiry into the central idea?**

- Scientific principles
- How humans use their understanding to develop technology
- The impact of technological development on our lives

**Note:** These are teacher's lines of inquiry that will be used for a framework of student's own inquiry.

**What teacher questions/provocations will drive these inquiries?**

Find any issues or problems related to your interest.

What is basic scientific principle?

How do humans use the basic scientific principles to create technology?

What are the impacts of technological development on our lives?

What are your lines of inquiry?

What are your key questions?

What have you found out about the lines of inquiry?

What have you done to answer the lines of inquiry?

What important thing you'd like other people to know?

What is your exhibition project?

Why did you choose it? How can it answer the lines of inquiry?

**3. How might we know what we have learned?**

***This column should be used in conjunction with "How best might we learn?"***

**What are the possible ways of assessing students' prior knowledge and skills? What evidence will we look for?**

Students brainstorm what 'basic scientific principle' is.

Students brainstorm any related technological development.

Students collect and discuss any related issues or problems in regards with their inquiry.

**What are the possible ways of assessing student learning in the context of the lines of inquiry? What evidence will we look for?**

Students create a journal of their learning (English)

Learner Profile self-assessment

Attitudes continuum –self-assessment

Concepts self-assessment

Skills self-assessment

Learning Performance checklist - teacher assessment

Students' inquiry self-assessment

Student-teacher conference

**5. What resources need to be gathered?**

**What people, places, audio-visual materials, related literature, music, art, computer software, etc, will be available?**

Each student group will have different primary and secondary resources – see attachment.

Mentor guidance book

Exhibition video

PowerPoint presentation

Last year exhibition record

Science tools

**How will the classroom environment, local environment, and/or the community be used to facilitate the inquiry?**

Each student group will use different resources (see attachment).

Group the students based on the 4 science strands.

Adjusted time table for the Exhibition unit.

Informative display for students organization on main PYP 6 corridor.

Set up bulletin board on the school main entrance.

**4. How best might we learn?**

**What are the learning experiences suggested by the teacher and/or students to encourage the students to engage with the inquiries and address the driving questions?**

**The teacher provides the context for inquiry**

Students watch last year Sekolah Ciputra PYP exhibition video and PowerPoint presentation to get a picture what PYP exhibition looks like.

Discuss about what are good Central Idea and Lines of Inquiry, then the students will analyze teacher's Central Idea and give inputs in order to improve it.

Introduce PYP planner template to students and discuss how to use it.

Discuss in a small group that has the same interest, create conceptual questions to form lines of inquiry, then they follow the inquiry cycle stages (Tuning in, Finding info, Sorting out, Going Further, Reflection, Action). \*Planner attached

Class discussion on the central idea and some examples of related issues.

Students do experiments to find evidence.

Students do some outings to get more information.

Students watch a video to get more information.

Students interview some primary resources.

Students do research from secondary resources (books, internet, etc.).

Students analyze information they have collected and record it in a variety of ways.

Students write weekly journal.

**What opportunities will occur for transdisciplinary skills development and for the development of the attributes of the learner profile?**

During the exhibition, the students will show all the transdisciplinary skills, learner profiles and attitudes.

6. To what extent did we achieve our purpose?

**Assess the outcome of the inquiry by providing evidence of students' understanding of the central idea. The reflections of all teachers involved in the planning and teaching of the inquiry should be included.**

Most of the students could understand the Central Idea. Their Lines of Inquiry reflect the Central idea.

The students used a variety of ways to show and share their understanding, such as conducting experiments, writing reports, making visual presentations. Besides, they also kept record in their folders.

Student-teacher conference as a means to assess their overall understanding.

The displays of learning and the oral presentation reflected their understanding.

**How you could improve on the assessment task(s) so that you would have a more accurate picture of each student's understanding of the central idea.**

The student's assessment tasks should refer more on the concepts and the transdisciplinary theme, not only to answer lines of inquiry.

Students had too many assessment instruments, next time some of them can be put in the journal (profiles and attitudes), so from the journal we can get the overall understanding of the student's progress.

**What was the evidence that connections were made between the central idea and the transdisciplinary theme?**

The central idea is a manifestation of the Transdisciplinary theme, however the students needs more time to explore more about the central idea and the elements in the TT.

Students generated own lines of inquiry and conceptual questions which connected to the central idea and the TT.

7. To what extent did we include the elements of the PYP?

**What were the learning experiences that enabled students to:**

- **develop an understanding of the concepts identified in "What do we want to learn?"**
- **demonstrate the learning and application of particular transdisciplinary skills?**
- **develop particular attributes of the learner profile and/or attitudes?**

**In each case, explain your selection.**

Students classified their own inquiry questions based on the concepts.

Students got info to understand the concepts more by applying research and thinking skills. While writing their journal, students applied their metacognitive and communication skills.

Working collaboratively in the group and with the teachers and mentors enable the students to exercise all the transdisciplinary skills and address the learner profile and attitudes.

8. What student-initiated inquiries arose from the learning?

**Record a range of student-initiated inquiries and student questions and highlight any that were incorporated into the teaching and learning.**

Students record their inquiry questions in their own planner (see attachment)

***At this point teachers should go back to box 2 “What do we want to learn?” and highlight the teacher questions/provocations that were most effective in driving the inquiries.***

What student-initiated actions arose from the learning?

**Record student-initiated actions taken by individuals or groups showing their ability to reflect, to choose and to act.**

Students recorded their inquiry questions in their own planner (see attachment).

Steven (6B) took the initiative to continue the presentation by himself, even with disadvantaged circumstances.

9. Teacher notes

**Positive**

- The explanation of 4 science strands from the students to the audience
- Students work collaboratively – develop leadership skills, sharing tasks, clear time table for students help them to apply their self-management skills.
- Some mentors have been excellent resources.
- Oral presentations showed their learning journey, not only focus on the end product.
- The rehearsal with PYP 5 and MYP 7 gave opportunity for the students to improve their displays/presentations for the day.
- Inquiry based – students work through the inquiry stages (learning cycle).
- Many volunteers were involved in setting up the stages, the decorations, the corners and technology.
- It's good to have everyone in one area – MPH.
- Visitors feedback was a good idea.
- Parents support was apparent on the Exhibition day.
- The communication system between PYP 6 and mentors was improved.

**Suggestions**

- One thing that we need to have next year, we need to update more the parents during the process, so they can help and support their child throughout the process, not only on the Day.
- Teacher-in-charge needs to take initiative to communicate more frequently with the mentors.
- The management of visitors feedback can be improved.
- The organization was a bit late this year because the starting point was a bit late, and it was a challenging unit, so the teachers also need to update the knowledge and not only depend on each other.
- Next year Exhibition can start as the 4th UOI – have the first meeting about Exhibition at the beginning of the school year, involving the single subject teachers (collaborative work), includes the collection of resources.
- Introduction to the Exhibition can be done in PYP 5.
- For grouping the students, emphasize more on the teamwork.
- Using the PYP planner template needs to be discussed further.
- All teachers involved in the Exhibition should read and understand the PYP Exhibition guidelines.
- The quality of the folders needs to be addressed.
- School needs to think about providing better resources for display.
- Mentors need to be informed how to fill in each inquiry stage – have a user-friendly folders.