



PBL4C: Preparing Children for the Future

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Introduction

- Willard R. Daggett

“Education is integral to maintaining the culture and structural stability of society. Society, whether it is viewed on a local, national or global scale, is in a perpetual state of flux. An effective education system is one that is adaptable to change.”



Introduction

- Stepharrie Bell-Rose and Thomas W. Payzant

“Preparing today’s students for success and eventual leadership in the new global marketplace is the most important responsibility in education today.”



Introduction

- Stepharie Bell-Rose and Thomas W. Payzant

“Entrepreneurship education is an important tool to achieving these objectives and should be universally available to provide all students with the opportunities to explore and fulfill their potential.”



Introduction

- In this global economic era, graduates from higher learning institutes are faced with the challenges of finding adequate jobs.
- Most of the employers seek graduates who have the ability to solve authentic problems encountered in the workplace. Unfortunately, the current curriculum and pedagogy employed in higher learning often fail to prepare graduates for the challenging workplace .



Introduction

- Woo (2006) indicated that most of the employees who hire fresh graduates lack of the soft skills which are the core requirement for any job.
- The soft skills can be categorized into three areas: character, interpersonal skill and critical and creative thinking .



Introduction

- Sharifah & Lee, 2005 suggested that
 - Educators/teachers may consider introducing Problem-Based Learning (PBL) approach in teaching which is believed to increase soft skills and independent learning.



PBL & PBL4C

- Hmeolo-Silver (2004)

PBL is an instructional method in which

- Students work collaboratively to find possible solutions for a problem and scenario.
- The students formulate and analyse the problem to generate hypotheses about possible solutions which leads to a brainstorming session and self-directed learning.



PBL & PBL4C

- Problem-Based Learning the 4 Core Areas (PBL4C) as one of the learning approaches that emerged in Southeast Asian Ministers of Education Organisation, Regional Centre for Education in Science and Mathematics (SEAMEO RECSAM).
- The 4 core areas are strong connections across contents knowledge, thinking processes, skills and values.



Implementation the PBL4C in RECSAM

- The representative participants from Southeast Asia member countries
- The participants were divided into four groups, each group learnt to occupy leadership roles which have helped to develop their interpersonal skills.



Implementation the PBL4C in RECSAM

- In PBL4C classroom, the teacher acts as a facilitator rather than a source of solutions.
- Context problem, Scenario 1 and Scenario 2 were distributed sequentially after a duration of time to all participants.



Activity: Making Wise Decisions

Context Problem

- You are the siblings of a family. Suddenly, your father receives the medical check-up report from the doctor.
- He is given only 4 days as preparation to leave for some very urgent matter in Japan for one month, all funded by the hospital.



Activity: Making Wise Decisions

Context Problem

- Your mother will be following to take care of his needs. Your parents will be depending on you to take charge of the family for a month.

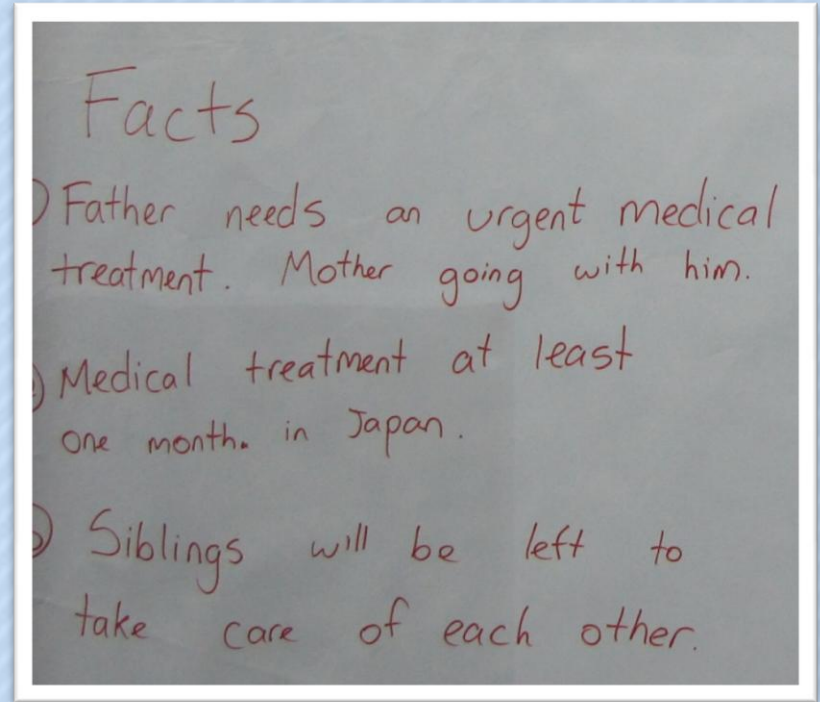
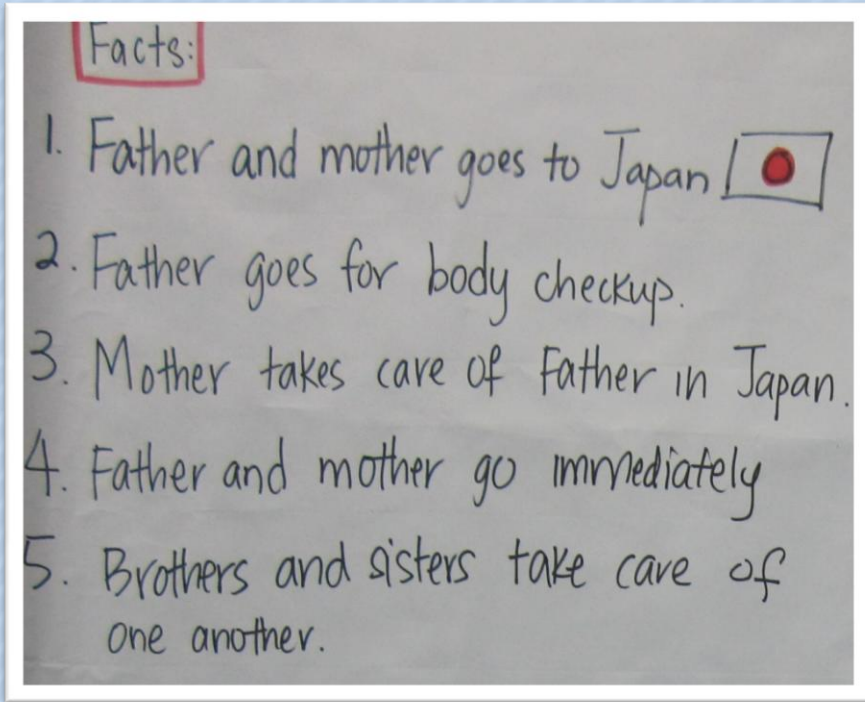


PBL4C Learning Process

- The context problem provided the opportunities to examine and try out what do they know
- The participants discussed the context problem and list its facts/information parts.
- For example, Facts/Information



PBL4C Learning Process



What do we know?



PBL4C Learning Process

What do we need to know?

facts

What's given and what we already know)

- The parents will go Japan for medical treatment for 1 mo
- The family is depending all the siblings to take care each other.
- Treatment may be longer or shorter than a month.

(thinking, researching & discussing)

- How old are the children?
- What kind of treatment does the father take?
- How to take care of each other (siblings)?
- How to live independently?
- The Financial situation



PBL4C Learning Process

- The problem statement should come from their group's analysis of what they need to know to solve it.
- The problem statement is often revisited and edited as new information is discovered, or "old" information is discarded.



Activity: Making Wise Decisions

Scenario 1

- Your parents gave you RM2,000 (Two thousand Ringgit) as expenditure (food, groceries, utilities, house rental, electricity, transportation, and so on) for the time they are not around.



Activity: Making Wise Decisions

Scenario 1

- Your responsibility is to plan to use this amount of money effectively in one month. You must explain your plan to your parents before they leave their house. They want to know how you can maximize the benefit of the amount of money.



PBL4C Learning Process








- In scenario 1, the participants may be repeated and reviewed as new information becomes available and redefines the problem.
- They listed out all possible solutions, then order from strongest to weakest. Choose the best one, or most likely to succeed.

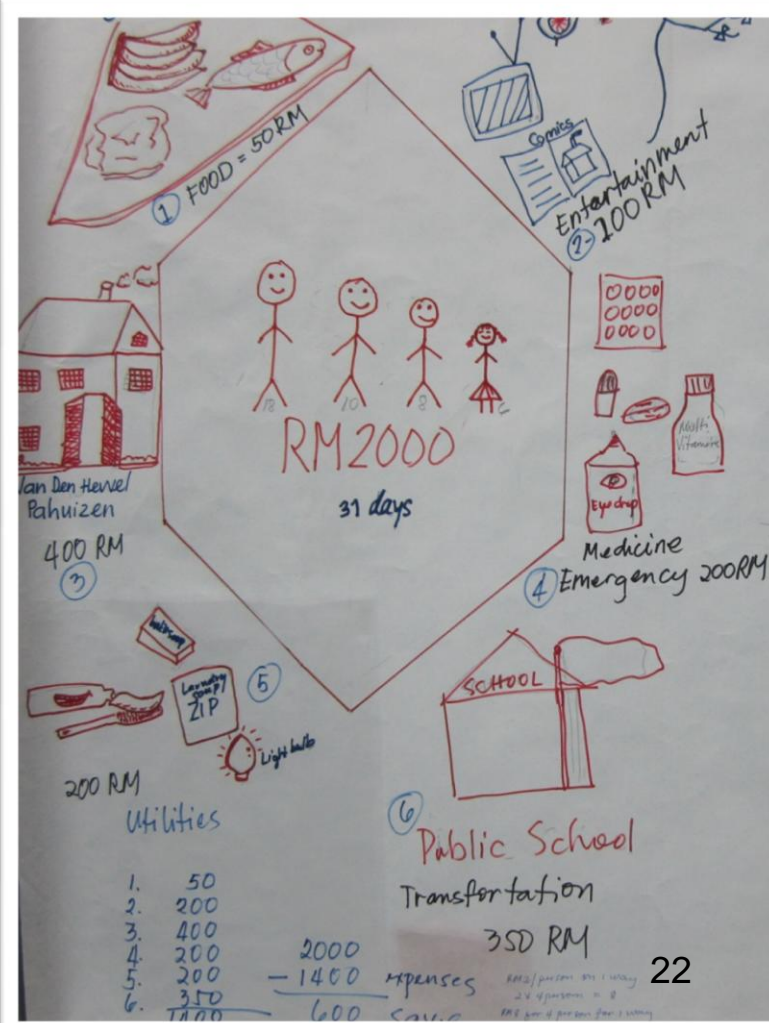


PBL4C Learning Process

One month planning

Our plan for 1 month.

- \$ - House rental → 500 RM.
- Food  → 500 RM.
- House
 - Water 
 - Electric 
 - telephone bil 
 → 100 RM
-  - transportation → 300 RM
-  - medicine / clinic visit → 100 RM
-  - stationary / book → 100 RM
- * - Emergency → 400 RM.



RM 2000
31 days

1. FOOD = 50 RM

2. Entertainment = 200 RM

3. Medicine = 200 RM

4. Emergency = 200 RM

5. Utilities = 200 RM

6. Public School Transportation = 350 RM

2000
- 1400 expenses
600 savings



PBL4C Learning Process

One month planning

What we did: Come up with a ranking of expenditures then we had a budget based on some assumptions

1) House rent	RM 500
2) Food	RM 720
3) Utilities	RM 70
4) Medical	RM 200
5) School-related expenditure	RM 100
6) Tuition	RM 200
7) Transport	RM 50
8) Entertainment	RM 60
9) Others	RM 100
	<u>RM 2000</u>

* * 4 children
30 days

PLAN FOR 1 MONTH
(Scenario 1)

A. BUDGET FOR 1 MONTH (RM 2,000)

House rental	—	RM 500
Electric bill	—	100
Water bill	—	20
Transportation	—	240
Food	—	500
Gas	—	50
Tuition fees	—	300
Medication	—	20
Entertainment	—	80
		<u>RM 1,710</u>
Back-up Money	—	RM 290

B. Prepare / Cook Economized food.
C. Big brother uses his bicycle in going to and from school.



PBL4C Learning Process

- Each group presented their plan and/or recommendations to a group and classmates.
- Include the problem statement, questions, data gathered, analysis of data, and support for solutions or recommendations based on the data analysis: in short, the process and outcome..



Activity: Making Wise Decisions

Scenario 2

- Life is unpredictable. While you are watching TV and expecting your parents to return tomorrow, the news announcer reports that a huge earthquake and a tsunami hit Japan.



Activity: Making Wise Decisions

Scenario 2

- The airport will be closed and your parents will not be back for at least another week. What are your plans? How do you further take care of your siblings?



PBL4C Learning Process

- Scenario 2 enables participants to learn about the changes and experience the financial crisis that nowadays it is happening in families, local, national and global.
- The decision-making involves problem solving skills. Decisions made with due considerations can be discussed that can make learning meaningful.



PBL4C Learning Process

RM 600 — to spend for another week for food and school transportation.

Scenario 2. 😊
(from emergency fund)*

- House rental → 125 RM
- food → 125 RM
- transportation → 75 RM
- Emergency → 75 RM.

Decision Making



PBL4C Learning Process

(Scenario 2)

A. Use the back-up money
(RM 290)

B. Budget :

Food - 100

Transportation - 120

Medication - 5

Total RM 225

Extra Money RM 65

→ House rental
Electric bill
Water bill
tuition fees } payment is made
on monthly basis

→ Entertainment will be cut off

→ Economized food will be prepared.

1. Use RM 100 (from others) → food or materials for sale
2. Eat bread / biscuit for a week. (Ration)
3. Use money left from previous weeks → Food
4. Borrow money from relatives.
5. Ask parents if parents leave more at home
6. No need to pay for rent, utilities, tuition, transport, entertainment.
7. Ask parents if can sell some unwanted things in the house.
8. Make jewellery & sell food for money
9. Ask, teacher / school to help. collection, share, etc.
10. Councelling. for emotional needs
11. Follow house rules & carry out responsibilities



The 4 Core Areas Embedded in Learning Process

- Implementation, class activities are constructed around open-ended problems.
- Problems were used as a stimulus for students to start the learning process.
- Teachers no long lectures.
- Students have to take the initiatives to inquire and during their self-directed learning must be applied back to the problem with reanalysis and resolution.



The 4 Core Areas Embedded in Learning Process

- It is through this active and reflective thinking process that students become responsible for their own learning.
- Motivating students to participate in the learning process and enhancing learners' problem solving skills including general analysis/synthesis skills.



The 4 Core Areas Embedded in Learning Process

- Enhancing students understanding of and positive attitude toward PBL4C process can help prepare students to face the challenges of real life problem.



Preparing Children for the future

- In a role as parents, teachers or educators, we should ask ourselves “What do we want children to be when they grow up?” and “How do we prepare children for the future?”



Preparing Children for the future

	20TH CENTURY	21ST CENTURY
Number Jobs / Lifetime	1-2 jobs	10-15 jobs (US Department of Labor 2004)
Job Requirement	Mastery of one field	Simultaneous mastery of many rapidly changing fields
Job competition	Local	Global
Work Model	Routine; hands-on; fact based	Non-routine; technical; creative; interactive
Education Model	Institution centered; formal degree attainment is primary goal	Learner centered; self-directed, lifelong learning is primary goal
Organizational Culture	Top down	Multi-directional (bottom-up, top down, side to side, etc.)



Preparing Children for the future

- As Abraham Lincoln once said; the children are the message that we send to the future, and today is the future of yesterday and the young adult community today was once the children of yesterday so with the increasing social, cultural, economics, religious and environmental issues and problems we can start rethinking of education that brought this present young adult generation's now.



Preparing Children for the future

- If we are preparing to send and new batch of generation to the future do we still insist of the same outcomes of learning as was we have today.
- Or if we want something to change in the near future, we need to do something for it. We need to redefine and transform the education system in such away it will be more relevant and it will serve the needs of the young generation.



Preparing Children for the future

- What to teach
- Where to teach
- Who should teach
- How to teach



Conclusion

- The PBL4C has changed learning process, increased motivation, helped participants learn more in content knowledge, thinking processes, skills including harmonious peaceful values and created a feeling of excitement about coming to class.



Conclusion

- They have more self-directed learners after has experienced in the PBL4C implementation and it is effective in giving participants to see the connection between the 4 core areas and the real world problem, and improving higher order thinking skills as well.



Conclusion

- All participants with the opportunity to attain increasing levels of individual achievement that prepares them for success in teaching.
- This approach has influenced the pedagogical developments in entrepreneurship education that preparing children for the future.



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Thank You
For your attention
Q & A

