



Role of 2nd year students of environmental health to waste and solid management by quartering method in Walailak university

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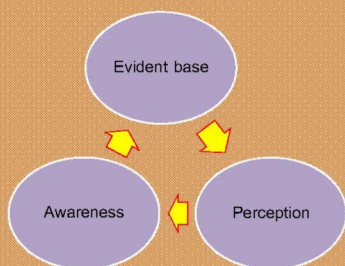


Overview : Environmental health is the branch of public health concerned with all aspects of the natural and built environment affecting human health. Environmental health is focused on the natural and built environments for the benefit of human health. The major subdisciplines of environmental health are: environmental science; environmental and occupational medicine, toxicology and epidemiology. (https://en.wikipedia.org/wiki/Environmental_health)

Aims and objectives

1. To practice skill waste and solid management in community .
2. To perceive and aware of people living in community to prevent and control waste in community.

Concept



Activities

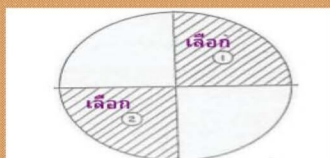
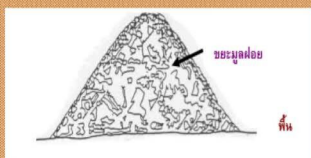
In classroom

1. Lecture; quartering method, waste categories, material and method etc.
2. Demonstration
3. Assignment and responsibility

Out classroom

Planning to data collection for 5 days
Morning : Monday Friday, Saturday
Afternoon: Wednesday, Sunday

Quartering method



Evaluation

- Participatory i.g. peer review, group discussion (interpretation)
- Assignment i.g. presentation, report

Result

Type of waste	Percentage	Waste and solid waste per day (in Walailak u)		Total waste /day	Application	1 year	Waste and solid waste per day (in Walailak)	Price (baht)	Total price/year
Plastic bag	24.80	5,000	100	1,240.00	Sale	365	452,600.00	2	905,200.00
Paper	23.30	5,000	100	1,165.00	Sale	365	425,225.00	2	850,450.00
Food waste	21.40	5,000	100	1,070.00	Animal feed/ Fertilizer	365	390,550.00	-	-
Plastic	10.30	5,000	100	515.00	Sale	365	187,975.00	2	375,950.00
Plastic bottle	9.00	5,000	100	450.00	Sale	365	164,250.00	2	328,500.00
Glass	6.90	5,000	100	345.00	Sale	365	125,925.00	2	251,850.00
Can	2.20	5,000	100	110.00	Sale	365	40,150.00	2	80,300.00
Tube and plastic spoon	1.00	5,000	100	50.00	Burnt/ Landing drum	365	18,250.00	-	-
Wood	0.80	5,000	100	40.00	Burnt	365	14,600.00	-	-
Foam	0.20	5,000	100	10.00	Burnt	365	3,650.00	-	-
Cloth	0.10	5,000	100	5.00	Burnt/ Landing drum	365	1,825.00	-	-

Out comes : The primary goals of sustainable waste management are to protect human health and the environment and to conserve resources. Additional goals include prevention of the export of waste related problems into the future (e.g. 'clean' cycles and landfills requiring little after care. and socially acceptable waste management practices.

Impact : Economic aspects are an important factor because money, in combination with available technology, is generally the limiting factor for a sophisticated, properly functioning waste management system. Economic aspects are mentioned on a business (micro-economic) level or on a public (macro-economic) level.

Future work : Based on the results of this review, we recommend the following considerations when assessing waste management systems: (i) a mass balance approach based on a rigid input–output analysis of the entire system, (ii) a goal oriented evaluation of the results of the mass balance, which takes into account the intended waste management objectives; and (iii) a transparent and reproducible presentation of the methodology, data, and results.

Selected references:

- Brunner PH and Ernst WR (1986) Alternative methods for the analysis of municipal solid waste. Waste Management & Research 4: 147–160.
- Wilson DC, Smith NA, Blakey NC and Shaxson L (2007) Using researchbased knowledge to underpin waste and resources policy. Waste Management & Research 25: 247–256.