香港教育大學
The Education University of Hong Kong

FACULTY OF LIBERAL ARTS AND SOCIAL SCIENCES
博文及社會科學學院

科學與環境學系
Department of Science and Environmental Studies

2024-2025 Quality Education Fund Thematic Network - Tertiary Institutes

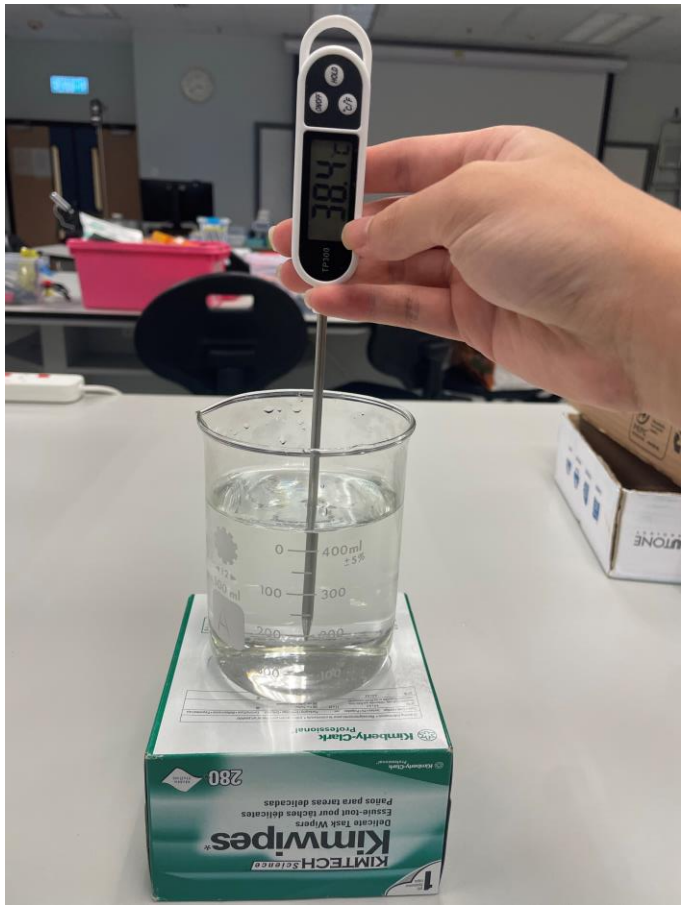
Progressive Development of STEAM Literacy through STEAM Education and Self-directed Learning

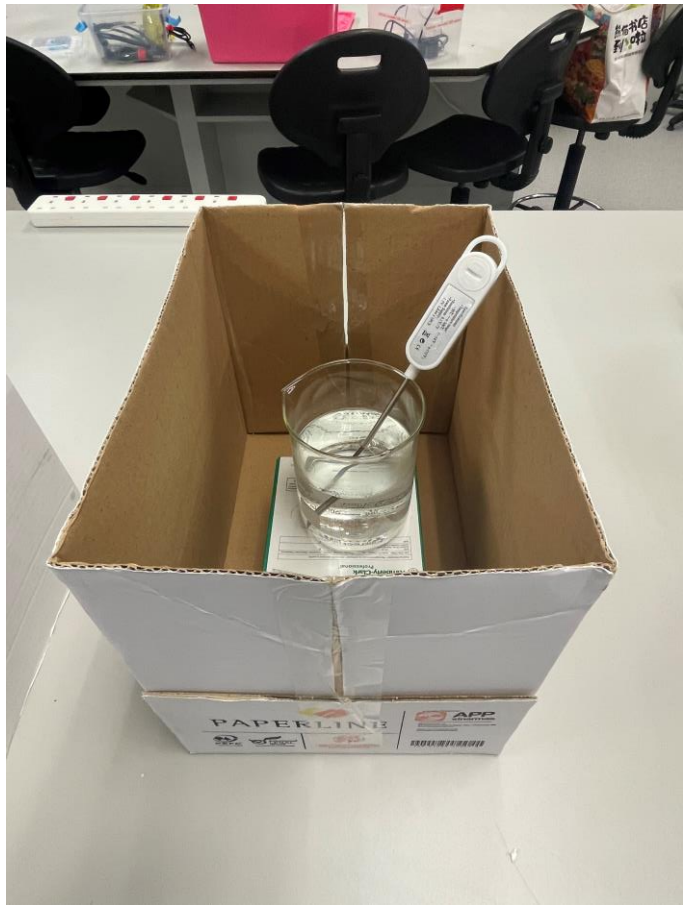
透過STEAM教育自主學習有序發展STEAM素養

動物保溫箱

神召會康樂中學

測試方式


Kimwipes
Delicate Task Wipers
Essuie-tout pour tâches délicates
Paños para tareas delicadas
280
Kimberly-Clark Professional
400ml


PAPERLINE

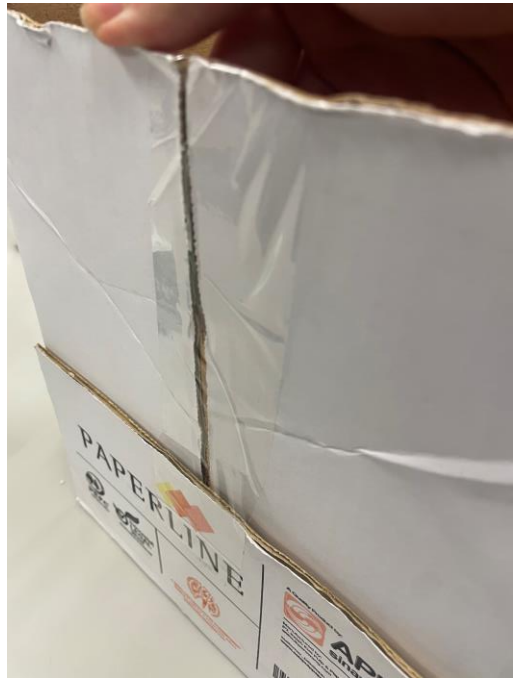

A4
21x29.7 cm
5x500 SHEETS
TRUTONE
PAPERLINE
80 GSM
PAPERLINE
A4
21x29.7 cm
5x500 SHEETS
80 GSM
FAST COPYING

不同層數紙箱


PAPERLINE

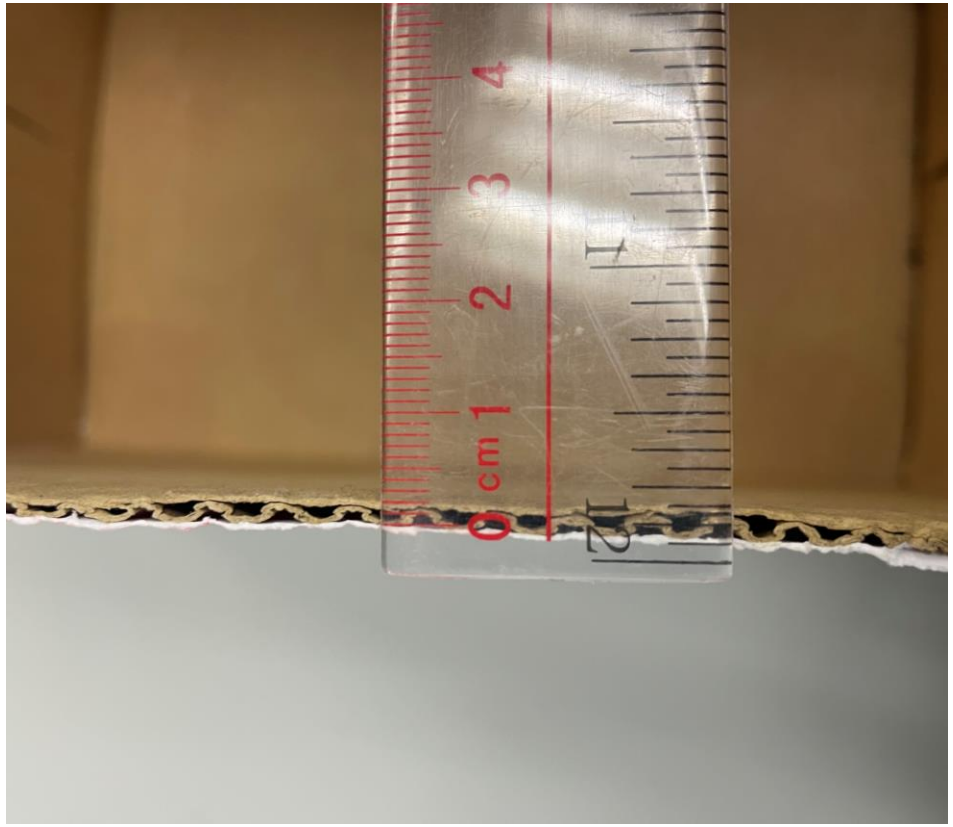

PAPERLINE
APP

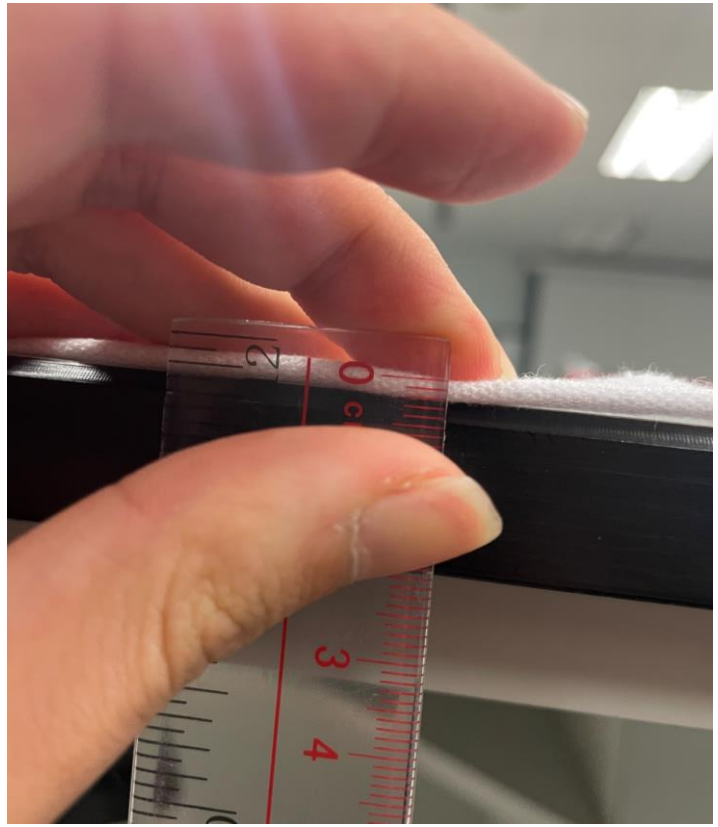

PAPERLINE
PAPERLINE
A4
80

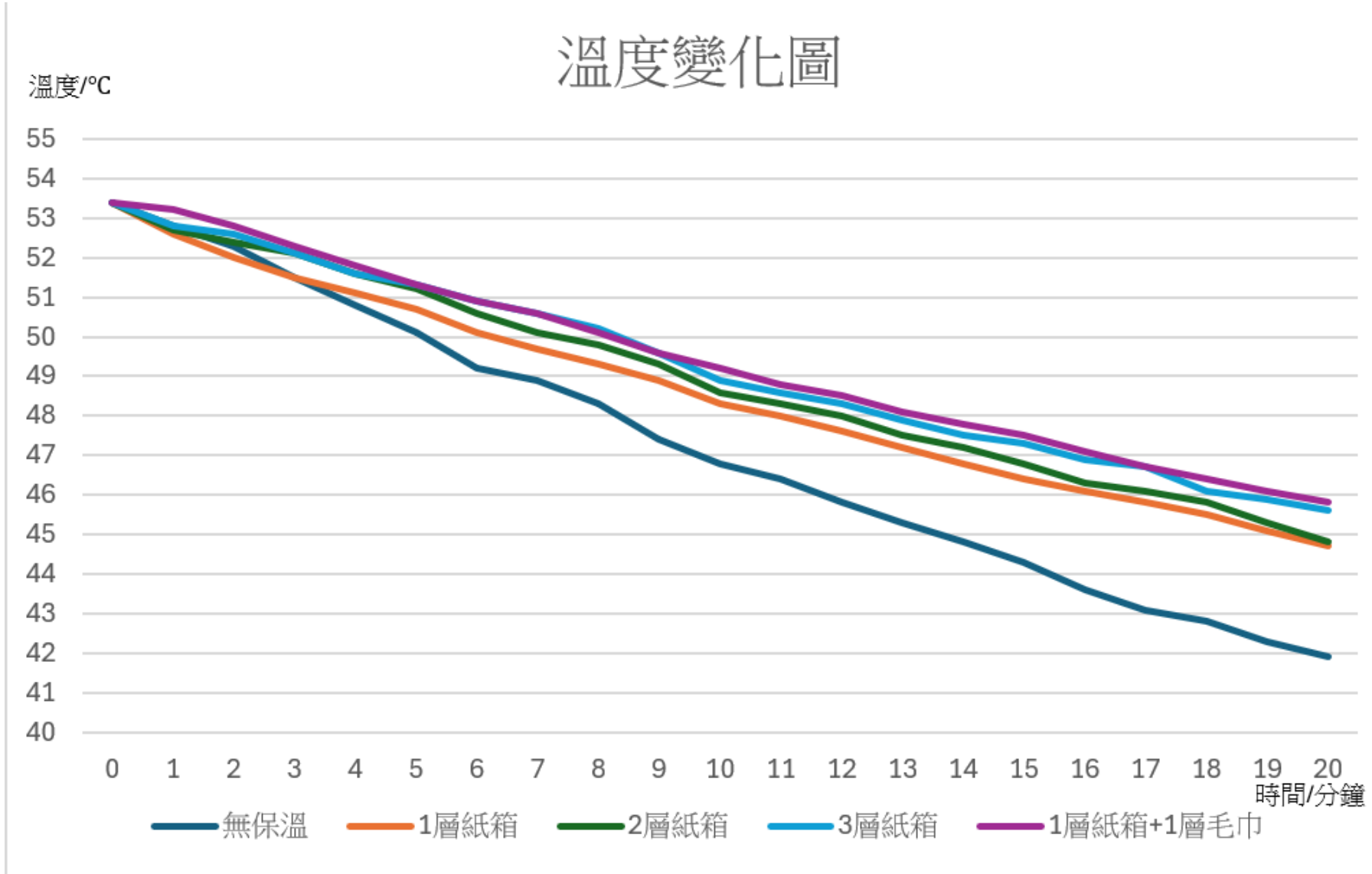

PAPERLINE

紙箱和毛巾

纸箱&毛巾厚度（0.2cm）






溫度變化圖
溫度/℃
55
54
53
52
51
50
49
48
47
46
45
44
43
42
41
40
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20
時間/分鐘
無保溫
1層紙箱
2層紙箱
3層紙箱
1層紙箱+1層毛巾

Time/min	無保溫	1層紙箱	2層紙箱	3層紙箱	1層紙箱+1層毛巾
0	53.4	53.4	53.4	53.4	53.4
1	52.8	52.6	52.7	52.8	53.2
2	52.3	52	52.4	52.6	52.8
3	51.5	51.5	52.1	52.1	52.3
4	50.8	51.1	51.6	51.6	51.8
5	50.1	50.7	51.2	51.3	51.3
6	49.2	50.1	50.6	50.9	50.9
7	48.9	49.7	50.1	50.6	50.6
8	48.3	49.3	49.8	50.2	50.1
9	47.4	48.9	49.3	49.6	49.6
10	46.8	48.3	48.6	48.9	49.2
11	46.4	48	48.3	48.6	48.8
12	45.8	47.6	48	48.3	48.5
13	45.3	47.2	47.5	47.9	48.1
14	44.8	46.8	47.2	47.5	47.8
15	44.3	46.4	46.8	47.3	47.5
16	43.6	46.1	46.3	46.9	47.1
17	43.1	45.8	46.1	46.7	46.7
18	42.8	45.5	45.8	46.1	46.4
19	42.3	45.1	45.3	45.9	46.1
20	41.9	44.7	44.8	45.6	45.8

结论：

1.相同條件下，紙箱厚度越厚，保溫效果越好。

2.相同條件下，毛巾的保溫效果比紙箱效果好。

3.實驗發現，1層0.2cm厚度的紙箱加1層0.2cm厚度的毛巾保溫效果大於3層0.2cm厚度的紙箱。

4.實驗四分鐘左右，不同層數紙箱的溫度差異較為明顯。