



**WORLD GREEN
ORGANISATION**



Briefing Session – Tertiary Group

主辦機構



協辦機構



白金贊助機構



純金贊助機構



純銀贊助機構



社會創新發明 家居改造設計比賽



改善腦退化症患者長者的家居設計

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組別：中學生組/大專生組



www.thewgo.org/inventor

比賽專屬網頁

比賽查詢電話：2991 9122

支持機構



Competition Rules and Terms

- Each student can only join ONE team and multiple entries are not allowed.
- Participating teams must provide all information requested in the application form. * Any false information found will result in disqualification.
- Those, under the age of 18 years of age, need to submit a Declaration of Application signed by their parents or guardians or teachers.
- All finalist teams **must attend the free workshops** held by the organizer, otherwise **their competition work will be considered incomplete.**
- Participating teams, who for any reasons drop out from the competition, cannot complete the competition within the said period, or did not follow the competition rules, will be regarded as having forfeited their eligibility.
- Entries must be original designs or invention. Any plagiarism will result in immediate disqualification.

Finalists training and workshops

Date	Groups
April 11 (Saturday)	(SG & TG) 20 Teams
April 18 and 19 (Sat and Sun)	(SG & TG) 10 Teams
April 25 and 26 (Sat and Sun)	(SG & TG) 10 Teams

Communication Channels

- Webpages;
- WGO Facebook;
- Email : inventor@thewgo.org;
- Tel.: 29919122
- (Office Hour : 0930 至 1815)



Theme for this year: Dementia

- According to the Charles K. Kao Foundation for Alzheimer's Disease, Alzheimer's Disease is the most common cause of dementia, thought to be associated with 50-70% of dementia globally. In Hong Kong, a study undertaken in 2006 by the Department of Health and the Chinese University of Hong Kong estimated that one-in-three individuals over 85 years of age suffers from dementia, and thus potentially Alzheimer's. The current number of dementia sufferers in Hong Kong exceeds 70,000 people. With an aging population, the number of dementia/Alzheimer's cases is expected to grow at a rate of 100% every five years, and, by 2036, 280,000 individuals are expected to suffer from dementia.
- Alzheimer's is an incurable, degenerative and terminal disease, generally diagnosed in people over 65 years of age. As the earliest observable symptoms are often mistakenly thought to be 'age-related' concerns, it is often overlooked whilst there remains an opportunity to treat and medicate it preventatively. In early onset, the most typical symptom is an inability to acquire new memories, manifest most often as a difficulty in recalling recent observations. As the disease advances, symptoms include confusion, irritability, aggression, mood swings, language breakdown, long-term memory loss, and general withdrawal. The sufferer experiences impairment of their sensory system and, gradually, bodily functions degenerate.
- As the disease progresses, it affects the quality of life of sufferers and their caregivers. In addition, high medical costs, long-term residential care and significant psychological, practical and economic strains are great on the family. It can also contribute to economic burdens, at the community-level.



Design Requirements

2 to 3 Persons Flat in Public Estate

- To design a 21.69 square meters or 21.96 square meters flat in a public estate which can accommodate a family of 3



Living Environment

- There are a few NW facing windows in the flat (please refer to the floor plan). They can be opened. Sunshine can reach the windows for 2-3 hours in the afternoon.
- The design has to meet the following floor plan and specifications. The layout cannot be revised.

HOUSEHOLD INFORMATION

- A family of 3 live together, comprising an elderly woman, aged 70+ with early dementia, a single parent and a child, aged between 10-14 years old.
- The elderly woman visits a senior care center daily, leaving every morning and returning home in the evening.
- The flat always has people and the lights are on for around 4 hours every day.
- On average, the elderly woman cooks 2 times a day. Each family member has shower once a day.
- The total household income is HK\$15,000/month.
- Expenses on rent, water and electricity is HK\$3,500, on average.
- In winter, they spend 10% of the total household income on electricity. In summer, they spend 15%.

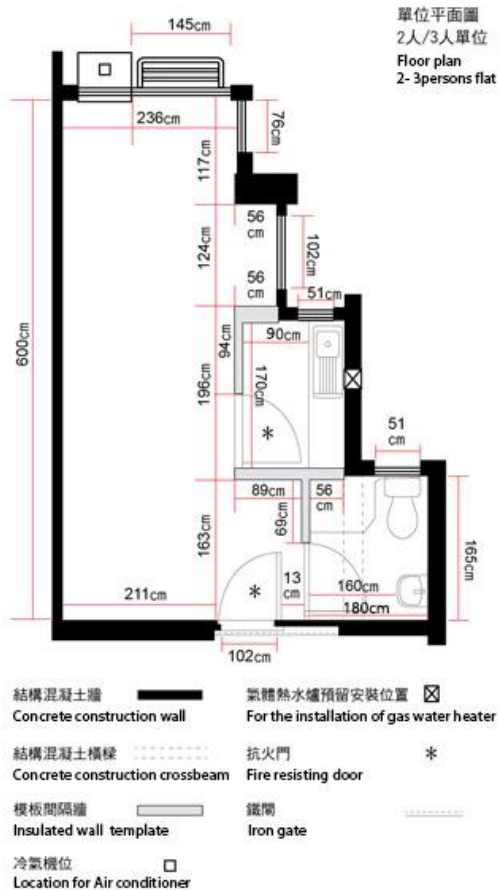
Background Information of the Elderly Woman:

- When the elderly woman was of working age, she used to work hard in a factory.
- As a traditional woman, she puts family in the first place.
- She loves her grandchild above all else. She enjoys very much living with and talking to her relatives. She also enjoys cooking meals for them.
- After being diagnosed of dementia, she often gets confused when cooking from a recipe, often providing a limited variety of dishes, struggling to manage the ingredients properly and forgetting to turn off the water tap after washing vegetables.
- She misplaces things. For example, she has put the iron in the freezer and sometimes places her watch in the sugar tin.
- She is often disorientated, getting confused about times and places. She has been known to wander the streets at night. Fortunately, she has been located by her family before anything happened to her.

Criteria to be considered

- Provide a safe and tailor-made home design which helps to bring happy memories back to the elderly woman and works towards lessening and slowing the effects of her degenerative dementia.
- Submission of designs has to consider the aspect of spatial planning, lighting design, use of materials and furniture layout. It has to be energy efficient, offer sufficient ventilation and make effective use of natural and artificial lights.
- Feel free to put ideas into practice, however feasibility and production costs have to be considered.
- There is a need to meet health & safety criteria, for example, maintaining abiding standards for space use for cooking and washing.
- The design has to be easy to assemble and dismantle for transportation purpose.
- Environmentally friendly or recycled materials are strongly encouraged to adopt.

Floor Plan



Source of information: Hong Kong Housing Authority (there are variations of the actual sizes of different flats)

Full units and Kitchen Videos

<https://www.youtube.com/watch?v=e25Z8fyfxcM>

Tung Wui Estate 2 to 3 Persons Unit

Judging Standards

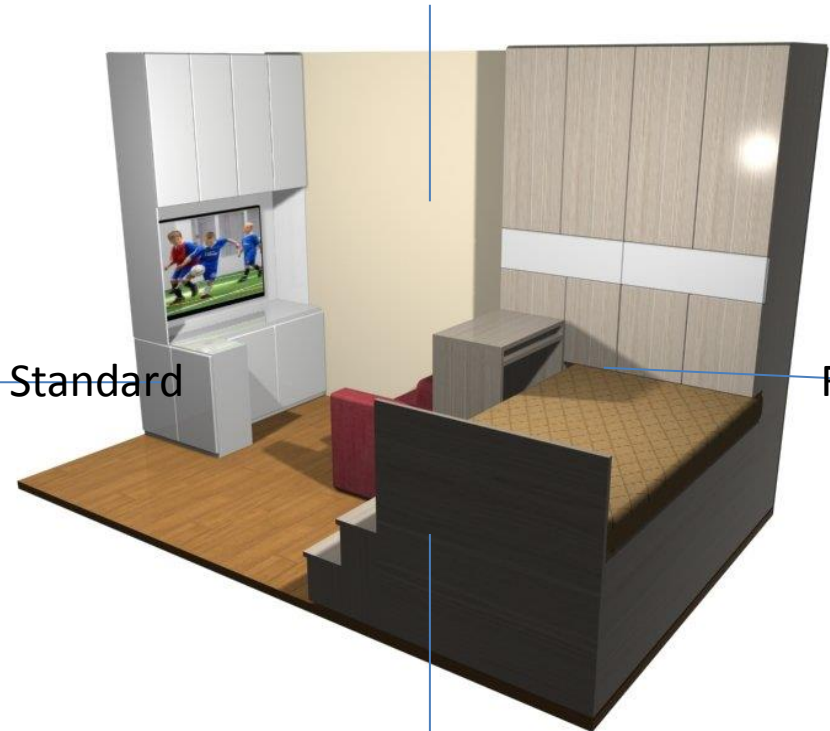
- Creative Concept
- Safety Standard
- Energy Efficiency
- Space Usage
- Environmental Effectiveness
- Cost-effectiveness
- Recall of Happy Memory
- Caring Design
- Feasibility
- Convenience

Sample of Design: Design Concept

Creative Concept



Safety Standard



Feasibility

Convenience

Environmental Effectiveness: XXXXXXXXXXXX
Cost-effectiveness : XXXXXXXXXXXX
Feasibility : XXXXXXXX

Creative Concept : XXXXXXXXXXXX
Safety Standard : XXXXXXXXXXXX
Convenience : XXXXXXXX

What Recall of Happy Memories & Caring Design (500 words)

Recall of Happy Memories

Recall of Happy Memories can get from cooking in the kitchen,

E.g : cooking with family remember, recall their cooking memories and other living memories

Caring Design (For 10 major issues of Dementia)

1. Loss of short term memory, affect the self-care ability
2. Perform familiar work also troubled
3. Language expression or comprehension difficulties
4. Characters, time and azimuth confusion
5. Judgment weaken
6. Thinking and calculation difficulties
7. Misplacing things everywhere
8. Become very emotional and behavioral
9. Personality change
10. Lost the initiative to do things

References :

老年癡呆症照顧篇(二) 中度至嚴重程度

<https://www.youtube.com/watch?v=tsG4lCi2E8o>

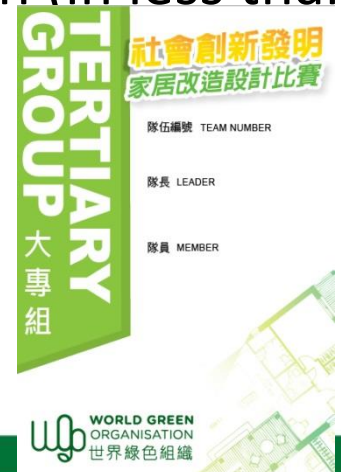
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老年癡呆症照顧篇(二) 中度至嚴重程度 家居安全

<https://www.youtube.com/watch?v=h6-oc5xRdZA>

Submission of Design

- Participating teams shall prepare their designs according to the instructions and guidelines to be provided in the Briefing Session, and submit their design layouts in **ONE** PDF format, **(E.g. file name TG001)** together with their Participating Team Permit by email to inventor@thewgo.org on or before 5:00 pm on the 27th of February 2015.
- "The concept design " may be, including hand-drawn sketches, AutoCAD 2D / 3D form design plan / perspective view of / perspective archive submitted in PDF format.
- Teams are required to elaborate on how happy memories can be recalled and which part of the idea is for caring design (in less than 500 words).




TERTIARY GROUP
大專組


**社會創新發明
家居改造設計比賽**

隊伍編號 TEAM NUMBER

隊長 LEADER

隊員 MEMBER



 WORLD GREEN
ORGANISATION
世界綠色組織

Champion

- Attend the University of Cambridge Five-Days study tour:
- Cambridge is a vibrant town, you can often see street artists improvisation on the road such as the Cambridge Summer Music Festival, Arts Festival, Cambridge Folk Festival, Cambridge Shakespeare Festival and other summer activities. In addition, there are museums, art galleries, artists' studios everywhere in Cambridge. You can experience local customs such as the United Kingdom and most authentic pure English style paintings.



Result of Preliminary Round

- By mid March 2015, the finalist 10 teams from each group will be selected as finalists for the final round of the competition. Each finalist team will be informed by e-mail in mid March 2015. The finalist team number will be posted on the Webpage page and Facebook
- However, the losing team will not be informed!

Q & A



Thank You
