Be an active learner: Through reflective journal and self-learning courseware

Cheung-Ming Chow & Ka-Man Carmen Cheng, School of Life Sciences, CUHK

Course: UGEB2350 Plants for Treasure & Pleasure, CUHK

Introduction

- To promote active learning and encourage students to appraise, integrate and apply scientific knowledge on daily life issues, students of UGEB2350 Plants for Treasure & Pleasure have been asked to write their reflective journals and participate various self-learning **activities** supported by 2 courseware and a new learning platform:
 - 1. Interactive Virtual Plant Dissection Lab, a website for learning floral anatomy and dissection
 - 2. PlantWalk@CUHK, a smart phone-compatible website for observing and learning plants on campus
 - 3. Visual Narrative, integrated learning platform for the eight University General Education courses offered by the School of Life Sciences (SLS)

The marking scheme is set to encourage students to integrate their knowledge and record their self-learning process.

Reflective Journal

Students are asked to reflect what they have learnt from the lecture and selflearning tasks with guidelines.

Examples of quality work from students

蕊細瓣黃重九香,百金爭艷在中央。 自遵流轉閉開律,何恐今秋風夜涼!

瓣黃重九香」與古人對菊花之觀察無異,然而古人卻大多忽略 多而小的管狀花;故「蕊細」及次句「百金」正是突出一朵 有數以百計的金色小花。第三句則是指這些小花遵循輪流 值時間更長;而眾小花亦透過集合起來以更易吸<u>引</u> 花自有自己開閉的規律,不必害怕如寒風般 的小人之言,正是遺世而獨立,與中國文化中菊花孤芳自賞的形象相 喚應

陳文諾 Chan Man Nok





Guidelines

To show your understanding/appreciation of a

• the mechanism/causality (HOW, WHY) • its significance, impact and/or implication (SO WHAT)

You can a

 integrate it with your previous knowledge/personal experience present the knowledge under a framework of your own.

our inspiration should be shown

- with corresponding knowledge (purely personal feeling is not convincing) (WHAT INSPIRES YOU)
- by expressing not only your personal feeling but also new thoughts/view/prediction the motivation to explore the topic further integration with current issues

To show vour ability to lear

- what you have learnt from the courseware illustrated with details and examples
- discuss the relevance of the reference as a potential new topic of the introductory session, or to your enrichment of knowledge

To present your idea well, there should be

 well-organized text fluent written language • photos/pictures that facilitate the understanding of the author's idea from the readers. creativity



Visual Narrative

o

A





VisualNarrative is an integrated learning platform through which students are motivated to integrate the knowledge of what they learnt from the course with their personal experience as students can make use of their imagination, creativity, logical thinking and learning experience to analyse and describe the photo in form of the narrative to show their unique personal

Journal

interpretations. Peer-to-peer learning is also boosted as students rate and comment works from his/her classmates and students of other UGEB courses offered by SLS.

Interactive Virtual Plant Dissection Lab

http://www.cuhk.edu.hk/bio/IVPDL/ CTIVE VIRTUAL PLANT DISSECTION LAB 3 The structures of 4 Dissec



INTERACTIVE VIRTUAL PLANT DISSECTION LAB

Through IVPDL, students can learn the basic terminologies of flowers in a friendly learning environment, with well-illustrated information. Moreover, they can actively participate in the virtual experiments by deciding the dissection methods and judging the type of structural features exhibited by the specimens accompanied with interactive visual references.

Some UGEB students clearly demonstrate their self-learning ability by applying the newly learnt terminologies to describe the floral features of the dissected flowers.

Selflearning task



(°)



PlantWalk@CUHK



PlantWalk@CUHK is a smart phone-compatible website that aims to engage the students from botanic courses to authenticate and study selected plants in CUHK campus on five selected site, including learning spots in United College, Central campus, Herbal Garden, Alumni Garden and Chung Chi College. As guided by the built-in interactive map, students can visit these spots and examine the highlighted plants in a stepwise manner by interactive questions.

MARKJNG SCHEME

<u>Understanding</u> of the lecture materials [*Reflective Journal*] (10 marks) **Unspiration** from the lectures [*Reflective Journal*] (8 marks) **Formats, organization and presentation (incl. creativity) (4 marks)** Ability of self-learning [Visual Narrative & Self-learning task] (4+4 marks) **Total mark: 30 marks**

LEARNJNG OUTCOMES

Students will be able to:

- reflect on their learning progress,
- integrate the newly acquired knowledge with their personal experiences,
- explore new topics/ knowledge, and
- polish their skill in expressing your opinions logically and sensibly in the written form.

The courseware is supported by

- Courseware Development Grant Scheme (2010-11), CUHK;
- UGC-Funded Teaching and Learning Related Initiatives (2012-2015 Triennium) (as a part of the project "Establishment of New Paradigm with Feasible Models in Teaching and Learning Science for Problem Solving and Future Development").
- Teaching Development and Language Enhancement Grant (TDLEG) for 2016-19, CUHK.