A study in General Education: How a field trip for Chinese Tea Tasting Motivates Students’ Learning

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Introduction

- GE course:

The “Health Maintenance and Food Therapy in Chinese Medicine” (HMFTCM) is a GE course which offered to students at HKBU.

- The purpose of GE course:

To provide students with a basic understanding of Chinese medicine and to impress on them the importance and relevance of Chinese medical to their daily lives.
Challenges on GE course

HMFTCM faced challenges:

- How to motivate non-majors’ students’ learning motivation?
- How to engaging students whose main motivation in taking the class might be the credit they obtain by passing it?
Learning Motivation

- Intrinsic learning motivation
- Extrinsic learning motivation

For GE courses, students typically have greater extrinsic than intrinsic motivation.
Active Teaching & Learning

An active teaching approach:

- It refers to any class activity in which students do things and think about what they are doing during or after the process.

- Students are more likely to develop deep and rich understanding of the course content. They are more likely to view their learning experience as personally rewarding.

- Using innovative methods and holding the teaching in different environments to engage students, thereby increase their intrinsic motivation.
Field trip for Chinese tea tasting (FTCTT) was conducted as an teaching activity aimed to stimulate students’ learning motivation, to enrich students’ understanding of Chinese medicine (CM), and to help them see the relevance of CM in their daily lives.
Why students selected FTCTT?

- The majority of the students is Chinese, tea drinking is a common habit of most Chinese people.

- Tea drinking, which have definable and significant health benefits, particularly in the context of Chinese medicine theory.

- FTCTT was a good bridge between students’ daily lives and the academic environment, between what they know from their life experiences and what they are learning in class.
The FTCTT process (I)

- FTCTT was held in a teahouse outside the campus of the university. All HMFTCM students (n=156) were invited to attend, who were divided into groups (about 10 persons per group).

- The teachers and the teahouse manager spoke briefly about the different varieties of tea, how it is prepared, and how to use different tea to maintain health, which is common in the daily life.
The FTCTT process (II)

Students were showed different types of tea leaves, watched a demonstration of how to prepare tea, and tasted various Chinese teas together with some refreshments.
The FTCTT process (III)

Students also discussed how to select tea based on an individual’s constitution or preferences and the tea’s special characteristics.
Method (I)

Participants:

The experimental group: students enrolled in the HMFTCM (n=156).

The control group: students from another health-related GE course at HKBU, Diseases and Medicine” (DM) were set as the control group (n = 97).

DM is similar to HMFTCM in that both are about medicine; DM focuses on Western medicine while HMFTCM presents TCM concepts and practices. Both are GE courses.
**Method (II)**

- **Instrument:** learning motivation is measured by a section of the Motivated Strategies of Learning Questionnaire (MSLQ).

- It has five subscales and 26 items. Both intrinsic and extrinsic motivation were evaluated in MSLQ:

  - Intrinsic Goal Orientation (IGO),
  - Extrinsic Goal Orientation (EGO),
  - Task Value (TV),
  - Control of Learning Beliefs (CLB)
  - Self-Efficacy Learning Performance (SELP).
The subscales of MSLQ (I)

- **Intrinsic Goal Orientation (IGO):** To focus on the degree to which students perceive themselves to be participating in an educational program for reasons such as mastery, challenge, and/or curiosity.

- **Extrinsic Goal Orientation (EGO):** To focus on the degree to which students perceive themselves to be participating in a course for reasons such as rewards, grades, and evaluation by others.

- **Task Value (TV):** To refer to students’ attitudes a course and reflects students’ evaluation as to how interesting, important and/or useful the course was taught.
The subscales of MSLQ (II)

- Control of Learning Beliefs (CLB):
  To measure one’s belief that the learning outcome was contingent on his/her effort, and the effort to study makes a difference in learning.

- Self-Efficacy Learning Performance (SELP):
  To assess students’ performance expectations related to a specific task and self-appraisal of ability to master a task, including judgments of confidence.
### Data collection & analysis

Comparison of means (Paired sample T-Tests), Crosstab (Chi-Square), and ANOVA were used to test the score difference and determined whether these differences were significant or not. Significance was set a priori as $P \leq 0.5$. All data analysis was tested by SPSS software (SPSS version 15.0, SPSS Inc., Chicago, IL, 2007).

<table>
<thead>
<tr>
<th>Surveys</th>
<th>Time</th>
<th>Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Control survey</td>
<td>In the middle of the term (break of a lecture)</td>
<td>DM (n=97)</td>
</tr>
<tr>
<td>2 Pre-Experimental survey</td>
<td>One week before FTCTT (break of a lecture)</td>
<td>HMFTCM (n=156)</td>
</tr>
<tr>
<td>3 Post-Experimental survey</td>
<td>Immediately after FTCTT</td>
<td>HMFTCM (n=156)</td>
</tr>
</tbody>
</table>
Results (I)

1. The response rates:

<table>
<thead>
<tr>
<th>Surveys</th>
<th>N</th>
<th>No. of students attending the lectures/field trip</th>
<th>Response (rate)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control survey</td>
<td>97</td>
<td>79 (81%)</td>
<td>60 (75.9%)</td>
</tr>
<tr>
<td>Pre-experimental survey</td>
<td>156</td>
<td>124 (79%)</td>
<td>91 (73.4%)</td>
</tr>
<tr>
<td>Post-experimental survey</td>
<td>156</td>
<td>156 (100%)</td>
<td>137 (87.8%)</td>
</tr>
</tbody>
</table>

- Compared to normal lectures, FTCTT was more interesting to students.

- Relatively more students who attended the field trip completed the questionnaire. This higher rate suggests either a greater willingness to cooperate or an eagerness to record their positive experiences, or both. Students felt engaged and involved in the course after the field trip.
2. Comparison of students learning motivation between DM & HMFTCM

Student’s ratings on learning motivation shared little difference between DM and HMFTCM before FTCTT ($P > 0.05$, but showed significant increase after the field trip(Figure 2), $P < 0.05$.)
3. Comparison of HMFTCM students learning motivation before and after the field trip.

The FTCTT has had a significantly positive effect on students learning motivation toward the HMFTCM course, students’ rating on IGO, TV, CLB, and SELP showed significant increasing after the field trip.
Teaching evaluation for this GE course

12. Describe some good points about the course.
   Student 1: The course content was very practical and helpful for our daily life. Quite knowledgeable.
   Student 2: The lecturers were all patient, responsible and explained their points thoroughly.
   Student 3: Activities outside lecture.
   Student 4: The content is very interesting for a non-China student and they are quite useful to apply in daily life.
   Student 5: It is a very good science elective subject for students who have not taken any science subjects before. It is fun and enables us to fulfill the graduation requirement.
   Student 6: Bringing us to get the first taste of learning Chinese, lecturers can really teach us like we are beginners.
   Student 7: Very interesting.
   Student 8: Very interesting.
   Student 9: It is a useful and interesting course.
   Student 10: The course has provided some related activities which are free that can stimulate students' interests and participation.
   Student 11: There is some basic concept, and has enhance my interest towards Chinese Medicine.
   Student 12: Provides some special events like BBS... Quite interesting.
   Student 13: The activities are very exciting.
   Student 14: Notes given in BUoodle are well enough for students to learn main ideas.
   Student 15: LectureAccording to the feedback, I have a lot of suggestions.
   Student 16: Relate to our health. Some interesting food therapy.
   Student 17: Good to try to take outdoor lessons such as the food dining and Tea Lecture is interactive and great.
   Student 18: The teaching assistant is always well prepared and informed us about the details and reminders, excellent.
   Student 19: The teacher gives thorough explanations to students. They are so kind.
   Student 20: The lecture is well-prepared, and the knowledge is useful.
   Student 21: Intereting topics included, with activities.
   Student 22: Different activities are provided for students for free to experience the types of Chinese medicine.
   Student 23: The content of this subject is very interesting.
   Student 24: - easy to understand.
   Student 25: - very interesting and useful for daily life.

13. Describe some areas of the course that could be improved.
   Student 1: More interactions between students and lecturers.
   Student 2: More graphs and videos.
   Student 3: More interaction in class.
   Student 4: More interaction in class is better.
   Student 5: The computer should be upgraded before the class.
   Student 6: Smaller scope of material, there now being too much making our heads swirl.
   Student 7: 對於不太熟練的同學來說是好消息。
   Student 8: None.
   Student 9: There can be more materials about things that can be used in daily life.
   Student 10: The amount of lecturers could be eliminated.
   Student 11: It would be better if we can form our own group for projects instead of being assigned.
   Student 12: Some of the lecturers do not present the course materials in a very good manner, such as always using difficult terms to explain, which would be impossible for a beginner to understand the concept behind and would be a little bit boring.
   Student 13: Small class is preferable.
   Student 14: Instructors cover the main ideas ONLY based on the notes given in BUoodle, quite boring.
   Student 15: 對於不太熟練的同學來說是好消息。
   Student 16: More interaction in class is better.
   Student 17: More activities to learn.
   Student 18: There are too many students in one class, it would be more difficult for lecturer to build a closer relationship with the students.
   Student 19: The presentation can be scheduled in a more organized way.

14. Other comments:
   Student 1: As a student major in Chinese Medicine, I am very grateful for what I have learnt in this course, which has effectively aroused my interest in my major. I hope I can keep on exploring in this field through my future study. Thank you again for organizing this course.
Discussion (I)

Influences of the FTCTT on learning motivation in the GE course:

- Students’ learning motivation improved after the field trip, particularly in the intrinsic learning motivation.

- Students strongly felt they could use what they had learned from this GE course for improving health.
Discussion (II)

Influences of the FTCTT on learning motivation in the GE course:

- Students experienced stronger positive emotions in intrinsic learning motivation while the extrinsic learning still occupies an role when students attend a GE course.
Several key features in this GE course

- The topic of this field trip (FTCTT) gave students knowledge they can linked to their daily life.

- Small groups & student-centered teaching and learning.

- FTCTT brought students to an environment very different from an academic lecture room.
The field trip (FTCTT) increased students engagement and also made them know the importance of maintaining by tea drinking, which may impact long-term benefit on their health.

The results of this study are consistent with the theory that active learning can enhance students’ learning motivation.

Future research should be towards examining the long term effect of the field trip.
Thank you very much!