

Federation for Self-financing Tertiary Education (FSTE)

Intensive Teacher Training Programme Module 3: Understanding student learning and the design of learning activities

Lesson Three: Teaching and Learning Methods

Brief Notes and Suggested Reading

This brief note intends to give participants the blueprints of the contents covered in the module. Suggested readings are listed to facilitate participants in accessing the sources and to obtain more detail information.

1. What basic factors underpin the design of learning activities?

In the context that learning activities can be defined as '*specific interactions of learners with other people, using specific tools and resources, oriented towards specific outcomes*'. According to the analysis of Huang Jeng Jye (黃政傑, 1996), there are six basic elements or factors underpinning the design of learning activities. They are listed as follows, with special arrangement by myself.

1) Teaching Objectives or Learning Outcomes

All teaching or learning activities must have teaching objectives (teacher-centred) or learning outcomes (outcome-based learning). With the objectives or outcomes, contents, methods and evaluations can be designed accordingly.

2) Learners (Students)

Learners are the principal participants. They come from different backgrounds, have different ages, experiences and learning styles. The degree of participation and performance affect directly the process and results of teaching and learning. The necessary condition for effective teaching is attracting the participation of the learners and inciting the interaction of teacher and students in the learning process.

3) Tutor (Teacher)

Tutor is the designer of teaching and learning activities. Besides transmitting

knowledge and skills, a good tutor has to understand the backgrounds, mindsets, experiences and learning abilities of the learners in order set teaching objectives and learning outcomes, strategies and environment.

4) Environment (including resources)

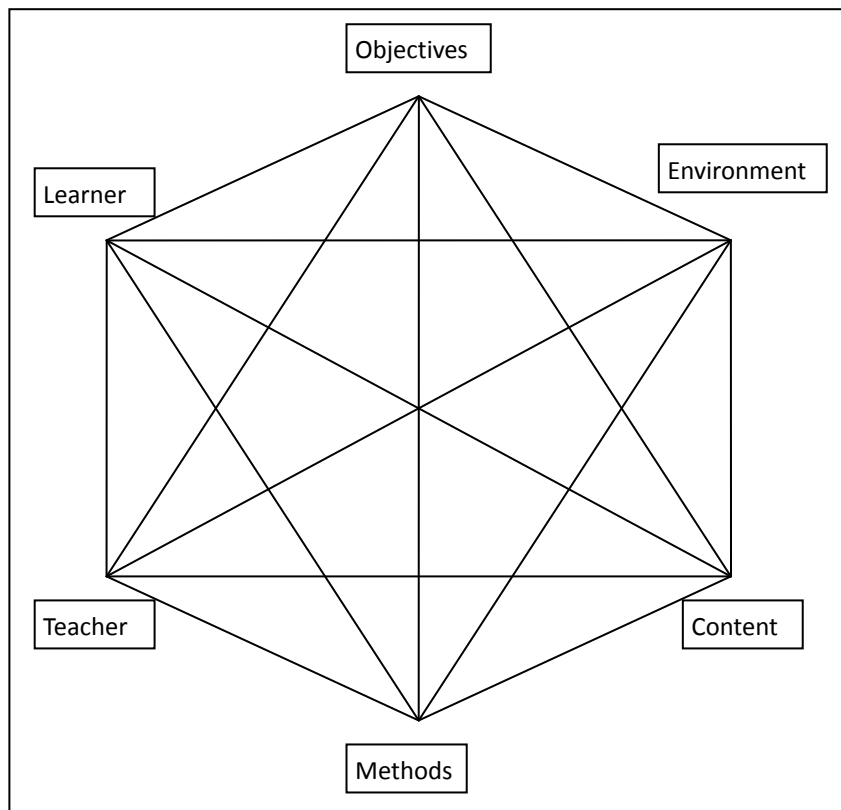
Teaching or learning environment implies not only the site where the activities are performed, but also the atmosphere and resources. With different environments, there must be different teaching and learning strategies to incite learning interaction between tutor and learners, which will affect the results of teaching and learning.

5) Content

Content refers to the knowledge the tutor is supposed to have, and to impart to the learners through teaching materials and activities. Contents are usually set by the training bodies, and very often in the form of books or notes. The contents should match the learning outcomes and teaching strategies.

6) Methods

Method refers to the teaching or learning strategy or pedagogy. If the tutor wants to achieve the intended teaching objectives, he/she must base on the backgrounds, ages and experiences of the learners to select pertinent teaching methods or learning activities.



2. Excellent Teacher

What are the attributes of an excellent teacher?

An excellent teacher must be:

- Subject matter expert – knowledgeable of the content to be taught clearly and thoroughly.
- Pedagogical expert – has good skills of teaching.
- Excellent communicator – should be able to communicate with students fully, empathetically and understandingly.
- Student-centred mentor – should care for students and give them timely advice in an affective way.
- Systematic and continual assessor – knows how to plan and enforce proper and effective assessments.

3. What is pedagogy?

- 1) Pedagogy is the study of being a teacher or the process of teaching
- 2) The term generally refers to strategies of instruction, or a style of instruction
- 3) Pedagogy is also occasionally referred to as the correct use of instructive strategies

Pedagogy refers to:

- the art of teaching - the responsive, creative, intuitive part
- the craft of teaching - skills and practice
- the science of teaching - research-informed decision making and the theoretical underpinning.

It is also important to remember that all these are grounded in ethical principles and moral commitment – teaching is never simply an instrumental activity, a question just of technique (General Teaching Council for England, June 2010).

4. Adult Learning Theories

- 1) Adults are internally motivated and self-directed
 - (1) Graded learning program
 - (2) From more to less structure and direct supervision
 - (3) From less to more responsibility
 - (4) At an appropriate pace, challenging yet not overloading
 - (5) Develop rapport with the student to optimise your approachability
 - (6) Encourage asking of questions and exploration of concepts.
 - (7) Show interest in the student's thoughts and opinions
- 2) Adults bring life experiences and knowledge to learning experiences
 - (1) Lead the student toward inquiry before supplying them with too many facts

- (2) Provide regular constructive and specific feedback (both positive and negative)
- (3) Review goals and acknowledge goal completion
- (4) Encourage use of resources such as library, journals, internet and other department resources
- (5) Set projects or tasks for the student that reflect their interests
- 3) Adults are goal oriented
 - (1) Adults like opportunity to:
 - use their existing knowledge and experience gained from life experience
 - apply it to their new learning experiences
 - (2) Find out about your students - their interests and past experiences (personal, work and study related)
 - (3) Assist them to draw on those experiences in problem-solving exercises
 - (4) Assist them to examine existing biases or habits based on life experiences
- 4) Adults are goal oriented
 - (1) Provide meaningful learning experiences that are clearly linked to personal, client and fieldwork goals as well as assessment and future life goals.
 - (2) Provide real case-studies as a basis from which to learn about the theory, methods, functional issues, implications of relevance.
 - (3) Ask questions that motivate reflection, inquiry and further research.
- 5) Adults are relevancy oriented
 - (1) Ask the student to do some reflection on:
 - what they expect to learn prior to the experience
 - what they learnt after the experience
 - how they might apply what they learnt in the future
 - how it will help them to meet their learning goals.
 - (2) Provide some choice of fieldwork project by providing two or more options, so that learning is more likely to reflect the student's interests
- 6) Adults are practical
 - (1) Clearly explain your reasoning when making choices about assessments, interventions and when prioritising needs.
 - (2) Be explicit about how useful the student's learning is and applicable to the job
 - (3) Promote active participation by allowing students to try things rather than observe
 - (4) Provide plenty of practice opportunity in learning processes with ample repetition in order to promote development of skill, confidence and competence
- 7) Adult learners like to be respected
 - (1) Taking interest
 - (2) Acknowledging the wealth of experiences that the student brings to

classroom discussions

- (3) Regarding them as a colleague who is equal in life experience
- (4) Encouraging expression of ideas, reasoning and feedback at every opportunity (Lieb, 1991)

5. The DO's in Teaching Adults (HKU SPACE)

The following points are from the HKU SPACE Handbook on Effective Teaching compiled by Dr. Lee Wai Choi. It was available on the web before <http://www.hku.hk/space/publications/et/content.html> but is now removed. It is also available in hardcopy. This is a very good and informative book which is very worthwhile to study.

- 1) Have an overall plan
- 2) Find out students' background
- 3) Be punctual
- 4) Dress appropriately
- 5) Be confident
- 6) Introduce yourself in the first lesson
- 7) Be enthusiastic
- 8) Understand and respond to students' needs and expectations
- 9) Regard students as peers who may lead to valuable contributions in class
- 10) Learn students' names and address them by name
- 11) Smile a lot and instil a friendly yet stimulating learning atmosphere
- 12) Organise teaching lessons systematically
- 13) Maintain good time management
- 14) Vary teaching methods
- 15) Engage as many of the students' senses
- 16) Include a break of 5 to 10 minutes if the lesson is over an hour
- 17) Encourage students to express their views
- 18) Respect different views and opinions
- 19) Acknowledge your ignorance regarding questions you cannot answer
- 20) Take up the task of finding out the answer or invite the class to find out the answer together
- 21) Source: HKU SPACE Handbook on Effective Teaching
<http://www.hku.hk/space/publications/et/content.html>

6. The DON'Ts in Teaching Adults (HKU SPACE)

Again, the points here are taken from the HKU SPACE handbook on Effective Teaching. It was available on the web at <http://www.hku.hk/space/publications/et/ech2.pdf> but is now removed.

- 1) Don't talk down to the students in a patronising manner
- 2) Don't impose your opinion on the class
- 3) Don't evade questions
- 4) Don't lose your temper when handling difficult students
- 5) Don't pretend to know everything
- 6) Don't joke about sensitive issues
- 7) Don't engage one type of classroom activity throughout
- 8) Don't read out loud directly from your notes (unless you are quoting)
- 9) Don't restrict your attention to "star students"
- 10) Don't cram too much content into one lesson
- 11) Don't overrun for 5 minutes

<http://www.hku.hk/space/publications/et/ech2.pdf>

7. Teaching Methods and Learning Activities

1) Common Teaching Methods (McCarthy, 1992)

(1) Lecture	(2) Lecture with Discussion
(3) Panel of Experts	(4) Brainstorming
(5) Videotapes	(6) Class Discussion
(7) Small Group discussion	(8) Case Studies
(9) Role Play	(10) Report-back Sessions
(11) Worksheets/Surveys	(12) Index Card Exercise
(13) Quest Speakers	(14) Value Clarification Exercise

2) Teaching Methods by 歐哲華

(1) 講述法 (Lecture)	(2) 討論法 (Discussion)
(3) 觀察法 (Observation)	(4) 練習法 (Practice)
(5) 啟發法 (Heuristics)	(6) 問題教學法 (Problems)
(7) 發表法 (Presentation)	(8) 設計法 (Design)
(9) 單元教學法 (Unit Teaching)	(10) 自學輔導法 (Self-study Counselling)
(11) 社會化教學法 (Social)	(12) 探究教學法 (Exploration)

Teaching)	
(13) 五段式教學法 (5-stage Teaching)	(14) 演繹法 (Deduction)
(15) 歸納法 (Induction)	(16) 編序教學法 (Programmed Teaching)
(17) 個別化教學法 (Individualised Teaching)	(18) 合作學習法 (Cooperative Teaching)
(19) 協同教學法 (Collaborative Teaching)	(20) 分組教學法 (Grouping)
(21) 小組討論 (Small-group discussion)	(22) 道德討論法 (Moral Discussion)
(23) 價值澄清法 (Value Clarification)	(24) 角色扮演法 (Role Play)
(25) 問題解決教學法 (Problem-solving)	(26) 創造思考教學法 (Creative Thinking)
(27) 集思法 (Brainstorming)	(28) 個案研究 (Case Study)
(29) 專家討論 (Panel discussion)	(30) 問卷調查 (Questionnaire Survey)
(31) 益智遊戲 (Games)	(32) 模擬 (Simulation)

3) Teaching Methods collected from Teachers attending my course

(1) ETV 教學電視	(2) 一生一體藝
(3) 小老師	(1) 小組討論
(4) 互相評核	(5) 互動教學法
(6) 互聯網	(7) 五環法
(8) 公證	(9) 引導
(10) 比較	(11) 比賽
(12) 白板	(13) 示範
(14) 在職訓練	(15) 自學
(16) 助教教學法	(17) 投射教學
(18) 角色扮演	(19) 函授
(20) 宗教教學法	(21) 表演
(22) 活動教學	(23) 研討會
(24) 胎教	(25) 軍訓
(26) 音樂教學法	(27) 個人表演
(28) 全班表演	(29) 個別指導

(30) 個案研習	(31) 專題研習
(32) 個案討論	(33) 展示
(34) 師徒制	(35) coaching
(36) Internship	(37) 討論
(38) 做功課	(39) 參觀
(40) 唱歌	(41) 專家(業)講座
(42) 訪問	(43) 報告
(44) 提問	(45) 視聽教學
(46) 集思	(47) 填鴨式教學法
(48) 搜集資料	(49) 經驗分享
(50) 資料搜集	(51) 運動教學法
(52) 遊戲	(53) 遊戲小組
(54) 電影播放	(55) 實地勘察
(56) 實務示範	(57) 實習
(58) 工作坊	(59) 演講
(60) 網上教學	(61) 網上學習
(62) 罰抄	(63) 遙距教學
(64) 領袖訓練	(65) 模仿
(66) 模擬考試	(67) 獎勵教學法
(68) 閱讀	(69) 閱讀報告
(70) 歷奇訓練	(71) 親子活動
(72) 戲劇教學法	(73) 禪修
(74) 講授	(75) 「齋喻」
(76) 單向教學法	(77) 雙向教學法
(78) 懲罰教學法	(79) 辯論
(80) 體能教學法	

8. Mnemonics and other memorising devices

Mnemonics are useful devices to help people to remember important facts. They can be used to determine the order of arrangement of certain things, or the contents that constitute certain things. Examples of using Mnemonics to help memorising factual contents

1) Music Mnemonics: Alphabets

- ABCDEFG HIJK LMNOP QRS TUV W XYZ

2) Name Mnemonics: Rainbow Colours

- ROY G BIV = Red Orange Yellow Green Blue Indigo Violet

3) Association with motions or emotions

- Mississippi

- 4) **Story or situation:** Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus, Neptune, Pluto
 - My Very Excellent/Educated Mother Just Sent Us Nine Pizzas
 - My Very Easy Method Just Simply Uses Nine Planets
 - 水，金，地，火，木，土，天，海
- 5) **Associations:** Activity Series in Chemistry
 - K, Na, Ca, Mg, Al, Zn, Fe, Sn, Pb, H, Cu, Hg, Ag, Au, Pt
 - 鉀, 鈉, 鈣, 鎂, 鋁, 鋅, 鐵, 錫, 鉛, 氫, 銅, 汞, 銀, 金, 鉑
- 6) **Associations:** Elements of Periodic Table
 - H, He, Li, Be, B, C, N, O, F, Ne, Na, Mg, Al, Si, P, S, Cl, Ar
- 7) **Rhyme:** Electricity in Physics
 - 火線零線並排走，零線直接進燈頭；
 - 火線接進保險盒，再過開關進燈座。
- 8) **Comparisons:** English phonic components
 - Ace, ake, ale, ame, ane, ase, ate
 - Ece, eke, ele, eme, ene, ese, ete
 - Ice, ike, ile, ime, ine, ise, ite
 - Oce, oke, ole, ome, one, ose, ote
 - Uce, uke, ule, ume, une, use, ute

References:

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http://en.wikipedia.org/wiki/Learning_styles

<http://www.learning-theories.com/addie-model.html>

<http://www.nwlink.com/~donclark/hrd/styles.html>

http://www.sos.net/~donclark/history_isd/addie.html

<http://www2.honolulu.hawaii.edu/facdev/guidebk/teachtip/adults-2.htm>

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