Learning and Teaching Practices in Economics – Example 1
Catering for Learner Diversity: facilitating students’ mastery of complicated macroeconomic models

Introduction

Many students have difficulty in mastering complicated abstract macroeconomic models which consist of various variables, for instance, how an increase in people’s wealth affects the market interest rate. The underlying hurdle that students face may be one or some of the following:

- identifying the relevant independent, dependent and constant variables involved;
- identifying the relevant relationship between any two variables involved;
- identifying the correct chained cause-effect relationships (i.e. with correct sequence) given a change in the independent variable in a problem; and
- presenting these chained cause-effect relationships in texts and graphs, etc.

Appropriate supports provided by teachers in accordance with the difficulties faced by students are important for helping them to overcome their problems.

Basic information of the school

- It is an aided, co-educational school;
- Most students are weak in analytical and writing skills;
- Chinese is the medium of instruction in Economics.

Details of the methods

(a) The topic
Factors affecting the market interest rate

(b) The learning and teaching stage at which the method is practised
After completing the topic of money market including money demand, money supply and the determination of equilibrium market interest rate, the teacher intended to consolidate and assess students’ learning through a short quiz. The question is “以圖輔助，解釋當人們的財富增加對市場利率的影響。” Six versions of the learning task have been designed to cater for learners’ diversity.

(c) The various versions
題目：以圖輔助，解釋當人們的財富增加對市場利率的影響。(7分)

當人們的財富 **增加** (增加/減少)，人們會 **增加** (增加/減少)消費。這會導致交易性貨幣需求 **上升** (上升/下降)。

因此，貨幣需求會 **上升** (上升/下降)，貨幣需求曲線會向 **左** (左/右) 移動。最終，市場利率會 **上升** (上升/下降)。

- **The skeleton of the answer (analysis) is provided**: That is,
  - all relevant variables (independent and dependent) are provided;
  - the variables forming a relationship are put together;
  - the sequence of the chained cause-effect relationships is provided.
- **Students are only required to choose the correct cause-effect relationship between two variables.**
- **It is relatively easy for students to identify the answers in this version. This helps students develop their sense of achievement and maintain motivation. Hence, this version can be the first step for helping the weakest students.**
以圖輔助，解釋當人們的財富增加對市場利率的影響。（7分）

原因
[財富]
當人們的財富增加，

影響
#1
[消費] (↑ / ↓)
人們會增加/減少消費。

影響
#2
[交易性貨幣需求] (↑ / ↓)
這會導致交易性貨幣需求上升/下降。

影響
#3
[貨幣需求] (↑ / ↓)
貨幣需求會上升/下降。

供需圖
利率
M₃
N₂
N₁
貨幣數量
M₁
Md

結果
[市場利率] (↑ / ↓)
最終，市場利率會上升/下降。
題目：以圖輔助，解釋當人們的財富增加對市場利率的影響。(7 分)

例子：
題目：以圖輔助，解釋當人們的儲蓄意欲增加對市場利率的影響。(7 分)

圖中顯示
• 市場利率的改變 (1 分)
• 垂直的貨幣供應曲線 (1 分)
• 貨幣需求曲線向左移 (1 分)

文字解釋
• 當人們的儲蓄意欲增加，他們會減少消費。(1 分)
• 這會導致交易性貨幣需求下降。(1 分)
• 貨幣需求會下降。(1 分)
• 貨幣需求曲線會向右移動。最終，市場利率會下降。(1 分)

In version C, a parallel question with answer is provided. Students have to identify the similarities and differences between the parallel question and the question they need to tackle. They then transfer their knowledge acquired from the parallel question to construct their own answer.
題目：
以圖輔助，解釋當人們的財富增加對市場利率的影響。(10+10 分)

評分準則 | 分數
--- | ---
原點 | 1
X 軸 (變項) | 0.5
Y 軸 (變項) | 0.5
貨幣供應曲線 | 1
貨幣數量：M₁ | 1
貨幣需求曲線 (舊) | 1
貨幣需求曲線 (新) | 1
箭號(貨幣需求曲線的改變) | 1
市場利率(舊：N₁) | 1
箭號(市場利率的改變) | 1
市場利率(新：N₂) | 1

當人們的財富增加，人們會增加消費。
這會導致交易性貨幣需求上升。
貨幣需求會上升。
貨幣需求曲線會向左移動。
最終，市場利率會上升。

文字解釋總分 /10

Compared to version C, the clues provided in version D are less obvious. Students are not given with any sample but just the variables and curves relevant to the analysis. They need to think how the variables and curves are affected as well as write out the textual analysis on their own.
題目：以圖輔助，解釋當人們的財富增加對市場利率的影響。(7 分)

當人們的財富增加，人們會增加消費。這會導致交易性貨幣需求上升。因此，貨幣需求會上升，貨幣需求曲線會向左移動。最終，市場利率會上升。

The supports provided in version E are less than that in versions A to D. Students are only hinted that (i) changes in some factors such as increase in people’s wealth will affect the Md and/or Ms; (ii) changes in Md and/or Ms will lead to a new equilibrium in the money market, in where the market interest rate is determined. Students need to fit the variables to the framework provided, organize their own analysis and answer with a well-labeled diagram.
The question

The required diagram with the x-axis variable and y-axis variable provided. Students are required to draw the red parts.

Key words which are also the independent and dependent variables are provided.

The supports provided in this version are the least. Students are required to identify the independent variable, the cause-effect relationship between two variables, the sequence of the cause-effect relationships, the information to be included in the diagram and the textual presentation of the analysis. This version is suitable for the higher achievers.
Remarks
(a) Apart from the six versions suggested in this example, teachers may also break down the question into several parts for helping students to reach the final answer. One possibility is:
   (i) In which market the market interest rate is determined?
   (ii) Will an increase in people’s wealth affect the money demand? If yes, how?
   (iii) Will an increase in people’s wealth affect the money supply? If yes, how?
   (iv) In light of the above analysis, with the aid of a diagram, explain how an increase in people’s wealth affects the market interest rate.

Teachers may further break down each of the above part into sub-parts according to the readiness of the students.

(b) Teachers may notice that the above methods can be applied to topics which emphasize chained cause-effect relationship like demand and supply analysis in microeconomics and AS-AD analysis in macroeconomics.