Using the Whole Brain in Teaching Economics

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USING THE WHOLE BRAIN IN TEACHING ECONOMICS

Submitted to the Graduate Committee of the Department of Education and Human Development at S.U.N.Y. Brockport in partial fulfillment for a Master of Science in Education.

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Whenever anyone sets out to construct lesson plans of any kind, there is a risk that no one will ever take the time to use them. Knowing this, and willing to chance that it will be only me that uses them, I nonetheless make them available for any person interested.

I have written five [5] lesson plans on the teaching of economics. Within each lesson, two major themes arise. Firstly, each lesson contains material to enhance learning by using both the right and the left hemispheres of the brain - the whole brain. A good deal of research has indicated that indeed the two hemispheres need to be tapped, while in most situations learning has been geared toward "left-brain" learners. The jury is still out on the definitive nature of this research but we all know that different students learn differently and these lesson plans make some effort at trying to reach the optimum learning level for not just one type of student, but many. That does sound like a big order, but I think you will see, by varying the method of teaching enough to use the whole brain, many more students will benefit.

Secondly, knowing all too well how the teaching of economics is a very difficult task, I have decided to use a textbook that will make the teaching and the learning of economics all the more tolerable. The book is ECONOMICS EXPLAINED by Robert Heilbroner. This book is readable and enjoyable. Students will be able to comprehend more material from this book than most textbooks because it does not read like a textbook. The lessons may be implemented without using the text but with less success.

The layout of the lessons is modeled after a paper presented by John L. Lodge for his Master's Degree in Education. On the following page you will see a diagram of the 4-MAT system devised by B. McCarthey (1980). Each lesson will have eight [8] steps directed to a specific section of the brain.
By organizing and structuring each lesson in this manner, you will not only be better able to judge the model's validity, but also you will be set with a consistent unit study plan on economics.

I am confident that using the whole brain in lesson planning is the only way to go because it opens the way for more students. After you use one or two of these lesson plans, you might find yourself teaching your other subjects with this model in mind. Use of this model will not bring Utopia, a feeling of Shangri-la, or "sudden enlightenment", but it is a start towards meeting the needs of more students.
The Complete 4-MAT Model

Concrete Experience

1. Create an experience. Right mode

2. Reflecting/analyzing experience. Left mode

Reflective Observation

3. Integrating reflective analysis into concepts. Right mode

Abstract Conceptualization

4. Developing concepts, skills. Left mode

5. Practicing defined given. Left mode

6. Practicing and adding something of oneself. Right mode

7. Analyzing application for relevance and usefulness. Left mode

8. Doing it and applying to a new more complex situation. Right mode

Fig. 3.
GENERAL

* To have a greater understanding of how the past has affected the present in the discipline of economics.

* Apply the philosophies of A. Smith, K. Marx & J. Keynes.

SPECIFIC

a) Use and understand a timeline.

b) Create an awareness and understanding of three major economists; SMITH, MARX and KEYNES.

c) Be able to apply the economic philosophies of Smith, Marx, and Keynes to current material and present times.
QUADRANT ONE: Integrate Experience with the Self

STEP ONE: Create an Experience

TYPE OF LEARNER: Right Mode Learner

TEACHER ROLE: Motivator

METHOD: Discussion-Time Line Construction

QUESTION TO BE ASKED BY THIS STUDENT: WHY?

DIRECTIONS

Have students construct a timeline of their own past. Five entries will suffice. After that is complete, discuss the following:

* What institutions have affected their lives?
* What forces have affected their lives?
* What people have affected their lives?
* Any cause-effect relationships?
* What exists today that did not exist when you were born? How has that change affected you?

NOTE

It might be wise to try to put the responses in some type of order. Categories might be: events, institutions, people.

COMMENT

This step gets the student involved by concentrating on his/her own experience. Interacting with other students is also a desired goal, i.e., watching - listening - speaking.
QUADRANT ONE:

STEP TWO: Reflecting on the Experience

TYPE OF LEARNER: Left Mode Learner

TEACHER ROLE: Witness

METHOD: Discussion/Brainstorming

QUESTION TO BE ASKED BY THIS STUDENT: WHY?

DIRECTIONS

Begin with a brainstorming session

List the following on the board

INSTITUTIONS

EVENTS

PEOPLE

*Keeping in mind how these three factors affected the lives of the students, elicit a discussion on how these 3 factors have affected our economic history. Student background and knowledge of this discipline might be somewhat limited but not enough to restrict a brainstorming session.

COMMENT

This step promotes an understanding by encouraging the student to break down the whole into parts. Left Brain Type One Learner prefers to analyze, think, and express himself verbally.
QUADRANT TWO: Concept Formulation

STEP THREE: Integrating Observations into Concepts

TYPE OF LEARNER: Right Mode Learner

TEACHER ROLE: Teacher

METHOD: Informational

QUESTION TO BE ASKED BY THIS STUDENT: What?

The teacher will give the definitions of these economic terms and concepts and ask the students for a word that best fits the definition:

- competition
- Invisible Hand
- division of labor
- class struggle
- surplus value
- proletariat
- mixed economy
- capitalism
- tradition
- Industrial Revolution
- Smith
- free-enterprise
- private property
- market system
- production
- distribution
- poverty
- factors of production
- aristocracy
- command
- laissez-faire
- Marx
- Keynes

NOTE

Of course, some words will be unknown to students. The teacher shall decide whether at this time a partial list will be satisfactory.

COMMENT

To emphasize the observation aspect of this Right Mode Learner the teacher might be wise to act out some of these terms. The list could be shortened if necessary. These terms are from chapters one and two pages 3-33 in the textbook, ECONOMIES EXPLAINED Robert Heilbromer and Lester Thurow.

This activity promotes the RIGHT BRAIN Type Two Learner to use: subjective judgments - body language - participating structure.
QUADRANT TWO:

STEP FOUR: Developing Theories into Concepts

TYPE OF LEARNERS: Left Mode Learner

TEACHER ROLE: Teacher

METHOD: Informational

QUESTION TO BE ASKED BY THIS STUDENT: What?

DIRECTIONS

Have students read the text material pp 3-33 and define any terms that were not addressed in the previous step. If the book is not available, the teacher can relay the necessary information through a lecture format.

COMMENT

This is probably the most common method of instruction used today in schools. This step deals with factual information and meets the needs of a LEFT BRAIN Type Two Learner who responds favorably to written instruction, planned and structured information, memorization and single learning.
QUADRANT THREE: Practice and Personalization

STEP FIVE: Working on Defined Concepts

TYPE OF LEARNER: Left Mode Learner

TEACHER ROLE: Coach

METHOD: Facilitation

QUESTION TO BE ASKED BY THIS STUDENT: "How does this work?" Let them try it?

DIRECTIONS

The teacher should prepare for the "MATCH GAME" by writing a list of statements that either A. Smith, K. Marx or J. Keynes said or might have said, on slips of paper. There should be 10 for each person. Those 30 slips of paper are then mixed up together. Two teams are established and the game can begin. A match occurs when either

1. Your team claims that the statement does match the name (economist) drawn, or

2. It doesn’t. If you can match the correct economist with the statement drawn you can gain one point.

A) Team #1 will pick a name out of a hat (or whatever). This selection will come from a hat with only 3 names in it; Smith, Marx, Keynes.

B) Team #2 will follow by picking one of the 30 prepared statements. They have the option to play (i.e., determine whether or not a match has occurred or not) or pass. If they pass, team #1 must answer.

C) Following this, team #2 picks the economist and team #1 picks the statement. This gaming procedure continues until all the statements have been used up. Team consultation is permissible.

D) Scoring: Correct match = 2 points
   Incorrect match = -3 points
   If the team knows which person most likely made that statement = -1 point

COMMENT

This step allows students to work with established facts. The characteristics of the Left Mode are:

working on a skill - practice - common sense - use of established information
QUADRANT THREE:

STEP SIX: Messing Around

TYPE OF LEARNER: Right Mode Learner

TEACHER ROLE: Coach

METHOD: Facilitation

QUESTION TO BE ASKED BY THIS STUDENT: "How does this work?"

RECTIONS

Have students write a dialogue/play between either two or three of the economists mentioned previously, i.e., Smith, Marx, and Keynes. Students must incorporate some of the terms and concepts that these economists would have used.

OR

Have a debate between these three gentlemen. Enough preparation time will be a prerequisite here.

COMMENT

This step allows students to get involved with the thoughts and ideas of these economists. They can add something of themselves here which will helpfully make their learning more meaningful.

This activity fulfills the need of RIGHT BRAIN MODE. Type Three Learners like to have material personal, open ended, multi-variable and free with feelings.
QUADRANT FOUR: Integrating Application and Experience

STEP SEVEN: Analyzing for Usefulness and Application

TYPE OF LEARNER: Left Mode Learner

TEACHER ROLE: Evaluator/Remediator

METHOD: Self discovery

QUESTION TO BE ASKED BY THIS STUDENT: What can this become? What can I make of this?

SESSIONS

*Students are to find examples of Smith's philosophy in the newspaper. They should also find articles pertaining to Marx and Keynes, as well. Based on information, they should be able to identify either what solution has been suggested or which one the student thinks most appropriate to the problem.

* You might also incorporate some international flavor here by omitting the U.S. and concentrate more on other countries and how they answer basic economic problems.

* Have students collect and bring to class a short description of a specific economic problem. Compile them, make copies and then pass out the list of articles having each student determine which of the three economists would be answering the problem stated and why. After this is finished, class discussion could prove very interesting as some discrepancies should occur between students which pick a different economist to solve a set problem.

COMMENT

This step shows whether students are able to apply what they've learned in a meaningful way. The LEFT BRAIN MODE Type Four Learner uses verbal explanations, problem solving by parts, objective judgment, language and reading reliance.
QUADRANT FOUR:

STEP EIGHT: Do It Themselves. Share what they do with others.

TYPE OF LEARNER: Right Mode Learner

TEACHER ROLE: Evaluator/Remediator

METHOD: Self discovery

QUESTION TO BE ASKED BY THIS STUDENT: How Can I Apply This? How Does It Work?

RECTIONS

Now you will find a brief description of four hypothetical countries. After reading about each one, answer the questions provided at the end of the descriptions. These questions might be better answered orally.

Country A: Rich in natural resources, i.e., oil, uranium, chrome, copper etc. Most economic activity agriculture in nature. Distribution of income lopsided (90% of the people own 5% of wealth). Very little usable land. PCI $1,000. Illiteracy high.


Country C: Distribution of income very good. Agricultural output poor. Literacy, education and health care very good. PCI $10,000.


QUESTIONS:
1. What suggestions would Marx have for Country A?
2. What suggestions would Keynes have for Country A?
3. What suggestions would Smith have for Country A?
4. Which country most closely represents the U.S.?
5. Which country most closely represents the USSR?
6. Which country most closely represents El Salvador?
7. Which country most closely represents Ethiopia?
8. Which economist is most concerned with justice? Explain.
9. Which country is most just or fair? Explain.
10. Which country is most dependent on others?

COMMENT

This step concludes the unit. Students can now see how their acquired knowledge in steps 1-7 can be applied to real-life situations. Students have upgraded their opinions by improving their fact base. The RIGHT BRAIN 9E Type Four Learner uses:

- Right brain - spontaneous subjective thought - open-ended possibilities
LESSON TWO

OBJECTIVES

GENERAL
To be able to understand what "trends" are and how important they can be when studying economics.

SPECIFIC
* Students will look at specific economic trends in our country and be able to know which ones are most prevalent.
* Students will learn how to make sound predictions of our future.
* Students will demonstrate those skills orally and by written assignments.
QUADRANT ONE: Integrating Experience with the Self

STEP ONE: Create an Experience

TYPE OF LEARNER: Right Mode Learner

TEACHER ROLE: Motivator

METHOD: Discussion

QUESTION TO BE ASKED BY THIS STUDENT: Why?

RECTIONS

Have students list three different trends that have occurred during their lifetimes. They can be personal or otherwise. You might have to present an example to get them going. Then have them go around the room and look for other students that have listed the same trends. After 5-10 minutes, have them return to their seats and discuss the following:

* Why were some trends more obvious than others?

* Do you think your trends were more accurate? Why?

* Why are trends important?

COMMENT

This step fosters various RIGHT BRAIN MODE Type One Learners by listening - interacting - and speaking.
QUADRANT ONE:

STEP TWO: Reflecting Upon the Experience

TYPE OF LEARNER: Left Mode Learner

TEACHER ROLE: Witness

METHOD: Discussion

QUESTION TO BE ASKED BY THIS STUDENT: Why?

To expand on Step One have students make 5 predictions on which way they think America, as a society is heading. To emphasize the concept of ends will be beneficial. Crucial here is that they demonstrate some type of support for their claims. Some degree of "cause-effect" would be appropriate.

This should be followed by students breaking into 5 groups and each person then would read his/her predictions and why those predictions were made. As a group, 5 trends should be decided upon by consensus. The group leaders then would read aloud their respective conclusions to the class.

Each student is involved in this process-activity. This enhances the BRAIN Type One Learner by stressing the following:

* talking
* thinking
* analysis of the parts
* logical problem solving
QUADRANT TWO: Concept Formulation

STEP THREE: Integrating Observations into Concepts

TYPE OF LEARNER: Right Mode Learner

TEACHER ROLE: Teacher

METHOD: Informational - Brainstorming

QUESTION TO BE ASKED BY THIS STUDENT: What?

DIRECTIONS

Use the overhead projector and show these graphs-charts. They also are found in the book, ECONOMICS EXPLAINED.

- p. 46 Value of GNP 1900-1980
- p. 47 Real GNP 1900-1980
- p. 50 Percent of families with different income layers 1950-1979
- p. 51 Poverty 1959-1979
- p. 52 Largest Manufacturing 1948-1975
- p. 54 Labor Unions

Discuss with the student the meaning of each of these graphs or charts and try to incorporate some type of cause-effect relationship. Also, have students make predictions as to trends foreseen based on graph data. By now, students should be demonstrating a more sophisticated approach to seeing what trends lead to and how to see what a trend is.

COMMENT

The visual material acts as a base for a better understanding of various trends in economics. This step encourages the RIGHT BRAIN Type Two learner to:

* approach a problem by looking at the whole.
* make subjective judgments.
* use uncertain information.
* be free with feelings.
DIRECTIONS

Have students read chapter IV in the text, ECONOMICS EXPLAINED. The chapter title is "The Trend of Things" pp. 45-60. Copy it if the text is not available. As students read, have them list 5 major economic trends described in the chapter. Some examples:

* economic growth
* income distribution
* poverty
* bigness in business
* bigness in government

SUPPLEMENT

A pertinent source to use in addition to the text would be John Naisbets's MEGATRENDS (Warner Brother, Inc., 666 Fifth Avenue, New York, New York, 10010). The relevant chapters are:

* Industrial-Informational
* National Economy - World Economy
* Short Term-Long Term
* Centralization vs. Decentralization
* Republican Democracy vs. Participatory Democracy and
* Heirarchies vs. Networking

Additionally, Martin L. Weitzman's new book entitled THE SHARE ECONOMY provides a plan that proposes a fresh look at dealing with the inflation-unemployment problem. The "share-trend" is at least worthy of discussion.

COMMENT

This is the traditional public school method of presenting material. This information fulfills LEFT BRAIN Type Two Learners by have them respond to planned and structured information - planned studies - problem solving by breaking down into parts - and reliance on written stimuli.
QUADRANT THREE: Practice and Personalization

STEP FIVE: Working on Defined Concepts

TYPE OF LEARNER: Left Mode Learner

TEACHER ROLE: Coach

METHOD: Facilitation

QUESTION TO BE ASKED BY THIS STUDENT:
How does this work?

DIRECTIONS

Prepare a vocabulary list from the terms below. These words are found in chapter IV, "The Trend of Things".

- economic growth
- GNP
- per capita
- distribution of income
- poverty
- mergers
- unions
- "safety net"
- transfer payments
- "entitlements"
- "rugged individualism"
- regulatory agencies
- CAB - Civil Aeronautics Board
- EPA - Environmental Protection Agency
- FRB - Federal Reserve Board
- FCC - Federal Communication Commission
- ICC - Interstate Commerce Commission
- NLRB - National Labor Relations Board
- OEO - Office of Economic Opportunities
- NSF - National Science Foundation
- FTC - Federal Trade Commission

So over vocabulary words/concepts and then to check their understanding. Play a "Bingo-Vocab Game". Prepare a bingo grid with all the terms/concepts of the chapter. Each student will get one copy. You take one copy and cut up all the terms (squares) and place them in a box. To start, you select one piece of paper and read to the class what that term or concept is. If they have it, they mark it on their card. You continue this selection process until someone yells "bingo". Unlike regular bingo, this game has one additional characteristic. The student that has bingo must now define all the words/concepts that he/she has in the bingo line. If answered correctly, he/she is the winner and the game is over. If answered incorrectly, the game continues.
An example of what the card might look like:

<table>
<thead>
<tr>
<th>T</th>
<th>R</th>
<th>E</th>
<th>N</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trend</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Entitlements</td>
<td>F.T.C.</td>
<td>CAB</td>
<td>per capita</td>
<td>growth</td>
</tr>
<tr>
<td>Mergers</td>
<td>ICC</td>
<td>FREE</td>
<td>NLRB</td>
<td>rugged individualism</td>
</tr>
<tr>
<td>Unions</td>
<td>NSF</td>
<td>Mergers</td>
<td>&quot;safety net&quot;</td>
<td>EPA</td>
</tr>
<tr>
<td>FTC</td>
<td>Regulatory agencies</td>
<td>distribution of income</td>
<td>transfer payments</td>
<td>FCC</td>
</tr>
<tr>
<td>CAB</td>
<td>&quot;safety net&quot;</td>
<td>GNP</td>
<td>OEO</td>
<td>FRB</td>
</tr>
</tbody>
</table>

**Comment**

This step allows students to respond to established facts. This activity encourages the LEFT BRAIN Type Three Learner by using the intellect, established information, and practicing defined givens.
QUADRANT THREE:

STEP SIX: Messing Around

TYPE OF LEARNER: Right Mode Learner

TEACHER ROLE: Coach

METHOD: Facilitation

QUESTION TO BE ASKED BY THIS STUDENT:

How does this work?

DIRECTIONS

Students are to list 5 trends they would like to see in the FUTURE. Three of the five trends must be of an economic nature. After students have completed their lists, they should exchange their lists with one other student. The student receiving the list must write one example of why that trend will either become a reality or fail to be realized. Then the lists should be returned to the creators.

COMMENT

This step allows students to add something of themselves and make it relevant to them. This activity meets the needs of the RIGHT BRAIN Type Three Learner by making the material personal, open ended, multi-variable and free with feelings.

SUPPLEMENT

Show the movie, FUTURE SHOCK. Discuss which trends have been realized and which have not. Try to determine why some were successful and why others failed.
QUADRANT FOUR: Integrating Experience and Application

STEP SEVEN: Analyzing for Usefulness or Application

TYPE OF LEARNER: Left Mode Learner

TEACHER ROLE: Evaluator/Remediator

METHOD: Self-Discovery

QUESTION TO BE ASKED BY THIS STUDENT:
What can this become?
What can I make of this?

DIRECTIONS

Write a description of a "future society". In each description, either similar or identical vocabulary words/concepts of this lesson must be incorporated. Additionally, each paper should include some type of trend analyzing in order to make the future predictions more realistic. Sound criteria should be demonstrated as well as a logical cause-effect analysis.

COMMENT

This step allows students to use new information in a new situation.
LEFT BRAIN Type Four Learner benefits from:

written instructions - single approach to solving a problem -
language and reading - and problem solving by parts.
QUADRANT FOUR:

STEP EIGHT: Do it themselves - share what they have done with others.

TYPE OF LEARNER: Right Mode Learner

TEACHER ROLE: Evaluator/Remediation

METHOD: Self Discovery

QUESTION TO BE ASKED BY THIS STUDENT:
- How can I apply this?
- What can this become?

DIRECTIONS

Students are to write to either the local PAPER, a CONGRESSPERSON, GOVERNOR or the PRESIDENT OF THE UNITED STATES explaining what trends they foresee in the future. Included in the letter should be some type of request for a reply to your projections.

At least two trends should be of an economic nature.

CONCLUSION

This final activity asks students to synthesize previous material. For students to get a chance to use new information - gain from this lesson - communicate that information in writing - and hopefully receive a response to their ideas will be invaluable.

COMMENT

Students are giving their own opinions based on newly acquired information. The RIGHT BRAIN Type Four Learner is stimulated because of open ended questions - experimenting with less restraint - spontaneous problem solving - and self acting and intuitive thought.
LESSON THREE

GENERAL

To gain an understanding of inflation and how it affects us.

SPECIFIC

* Students will be asked to learn and respond to five specific solutions to solving the problem of inflation.

* Written work and research skills will be called upon in developing a greater understanding of inflation.

* A class demonstration will take place at the end of the lesson with the intent to show full understanding of the five solutions to inflation.
QUADRANT ONE: Integrating Experience with Self

STEP ONE: Create an Experience

TYPE OF LEARNER: Right Mode Learner

TEACHER ROLE: Motivator

METHOD: Role Play

QUESTIONS TO BE ASKED BY THIS STUDENT: Why?

DIRECTIONS

Simulation Game: This is a simple game to show how inflation works. It will be used as a means to introduce the problem of inflation.

RULES: Hand out counters or chips and auction off a record album and a pen. Note the price reached. Then hand out twice as many chips and do the same thing. Note the sale price.

More money issued by the government or the banks may do three things. Try to elicit the following responses:

* It may put unemployed people to work;

* It may help businesses to build new plants (capital investment);

* It may in the short term, raise prices and definitely will raise them in the long term.

COMMENT

The object of this step is to get students actively involved. This simulation game meets the needs of the RIGHT BRAIN Type One Learner by encouraging these skills: listening - speaking - interacting - and responding to kinetic stimuli.
QUADRANT ONE:

STEP TWO: Reflecting Upon Experience

TYPE OF LEARNER: Left Mode Learner

TEACHER ROLE: Witness

METHOD: Discussion

QUESTION TO BE ASKED BY THIS STUDENT? Why?

DIRECTIONS

Debrief students on the simulation game.

* Do we feel richer when we have more money?
* Does more money necessarily mean we can buy more?
* Why did the price of album and the pen go up?
* What determined a "fair price" for the two items?
* How might the outcome be any different if the items sold (auctioned) were different?

COMMENT

Students are asked to reflect and analyze the simulation game. This skill calls on the LEFT BRAIN Type One Learner to analyze the parts—remembering specific language—control feelings—and express oneself verbally.
QUADRANT TWO: Concept Formulation

STEP THREE: Integrating Observations into Concepts

TYPE OF LEARNER: Right Mode Learner

TEACHER ROLE: Teacher

METHOD: Informational - Brainstorming

QUESTION TO BE ASKED BY THIS STUDENT: What?

DIRECTIONS

Describing what inflation is and what it does is much easier than trying to successfully remedy it. This exercise is geared to discussing possible solutions and at what costs those solutions would force upon us.

Below are listed five possible remedies for inflation found on pp. 138-144 in the text, ECONOMICS EXPLAINED. List all five on the board and have the students discuss the plus and minus of each.

* BALANCE THE BUDGET
* TIGHT MONEY SUPPLY
* MAJOR RECESSION
* VOLUNTARY CONTROLS
* MANDATORY CONTROLS

COMMENT

This step allows students to expand upon their observations in Step Two, to formulate concepts used later in this lesson. This activity is aimed at the RIGHT BRAIN Type Two Learner using: subjective judgment and participation.
QUADRANT TWO:

STEP FOUR: Developing Theories and Concepts

TYPE OF LEARNER: Left Mode Learner

TEACHER ROLE: Teacher

METHOD: Informational

QUESTION TO BE ASKED BY THIS STUDENT? What?

DIRECTIONS

Have students read the two chapters concerned with inflation (chapters 12 & 13, pp. 124-144). When students read this selection, have them pay close scrutiny to the following:

* Criticize the author’s definitions and claims by finding (coming up with) an explanation or example that refutes a certain statement in the book. Two per chapter.

* Have students write down three questions about the reading that they do not know the definitions of.

* Have them write five words that they come across in the reading that they do not know the definition of.

COMMENT

This step gives students factual information about the issue at hand. This activity fulfills the needs of the LEFT BRAIN Type Two Learner who uses: problem solving by breaking down into parts - established information - written instruction - and the single approach.

ADDENDUM

Students will turn in questions and vocabulary lists to the teacher; the questions and words will be organized and compiled by the teacher and then handed back to students to work on. They will be used in the following lesson.
QUADRANT THREE: Practice and Personalization

STEP FIVE: Working on Defined Concepts

TYPE OF LEARNER: Left Mode Learner

TEACHER ROLE: Coach

METHOD: Facilitation

QUESTION TO BE ASKED BY THIS STUDENT:
How does it work?

DIRECTIONS

Students will receive a handout based on the compilation of the previous lessons questions and terms. The teacher will lead the discussion of the terms and questions derived from the reading.

COMMENT

This step promotes a better understanding of material on inflation in the text. Students examine factual material which accommodates the LEFT BRAIN Type Three Learner who uses: intellectual structure established information and visual stimuli.
QUADRANT THREE:
STEP SIX: Messing Around
TYPE OF LEARNER: Right Mode Learner
TEACHER ROLE: Coach
METHOD: Facilitation
QUESTION TO BE ASKED BY THIS STUDENT:
How does it work?

DIRECTIONS

Allow students to select an activity from the list below:

* Have students write to a local bank to find out what the effects of inflation are on them.

* Write to a major retailer and ask them what impact inflation has on them.

* Write to anyone, relevant to the issue of inflation, for their response to how inflation would help them or hurt them.

* Use artistic talents in some way to demonstrate inflation and the impact it can have on people.

COMMENT

This step allows for student choice and creativity. It appeals to the RIGHT BRAIN Type Three Learner who uses: illustrated examples - less restraint - spontaneous - prefers artistic function - responds to kinetic stimuli and favors the multi-variable approach.
QUADRANT FOUR: Integrating Application and Experience

STEP SEVEN: Analyzing for Usefulness

TYPE OF LEARNER: Left Mode Learner

TEACHER ROLE: Evaluator/Remediation

METHOD: Self-Discovery

QUESTION TO BE ASKED BY THIS STUDENT:
- What can become of this?
- What can I make of this?

DIRECTIONS

Library Project

Students do research in the library. They are to do the following three steps:

* Find three countries that have a high rate (perhaps "hyper") of inflation.

* Search for cause-effect relationships in the specific countries and then compare and contrast results among the countries themselves.

* What is the major lesson that you learned by looking at inflation in other countries?

COMMENT

Students are able to apply what they learned in previous lessons to new material. LEFT BRAIN Type Four Learner uses: reliance on memory - established information - logical problem solving - and a single approach to solving a problem.
QUADRANT FOUR:

STEP EIGHT: Do it themselves and share their results with others.

TYPE OF LEARNER: Right Mode Learner

TEACHER ROLE: Evaluator/Remediation

METHOD: Self-Discovery

QUESTION TO BE ASKED BY THIS STUDENT:

How can I apply this?

What can it become?

DIRECTIONS

Divide students into 5 groups. Each group will select one of the five methods of solving the inflation problem. You might prefer to divide into 6 groups and allow one group to create a different approach to solving the inflation problem. The five soulutions mentioned in the text are:

* Balancing the Budget
* Tightening Money
* Major Recession
* Voluntary Controls
* Mandatory Controls
* Optional (perhaps Weitzman's philosophy)

Students now must make preparation for a role play situation. Within the role play situation, each group must demonstrate a "plus side" to their respective solution and a "minus side". This role play presentation should be done in front of the whole class.

COMMENT

This ends another circle of exercises. This last step appeals to the RIGHT BRAIN Type Four learner which encourages: intuition - subjective spontaneous - open ended activities. Additionally, body language and response to kinetic stimuli are demonstrated.
LESSON FOUR

GENERAL
To create an awareness and understanding of Big Business and distribution of income.

SPECIFIC

* To have a greater understanding of greed, power, and monopoly as crucial forces in our economic system.

* Look closely and compare capitalism's and socialism's approach to solving our economic problems.

* Make and analyze survey information in regards to a poll/survey.
QUADRANT ONE: Integrating Experience with the Self

STEP ONE: Create an Experience

TYPE OF LEARNER: Right Mode Learner

TEACHER ROLE: Motivator

METHOD: Simulation

QUESTION TO BE ASKED BY THIS STUDENT: Why?

DIRECTIONS

Simulation Game - This game is called STAR POWER and it demonstrates how maldistribution of income occurs and how it effects people.

The only materials you'll need will be poker chips. The simulation game may be obtained at the Drake Memorial Library, SUNY at Brockport.

COMMENT

The objective of this first step is to get the students involved in an activity relevant to the lesson. RIGHT BRAIN Type One Learner use: listening and speaking skills; they interact with others and respond to kinetic stimuli.
**QUADRANT ONE:**

**STEP TWO:** Reflecting on the Experience

**TYPE OF LEARNER:** Left Mode Learner

**TEACHER ROLE:** Witness

**METHOD:** Discussion

**QUESTION TO BE ASKED BY THIS STUDENT:** Why?

**DIRECTIONS**

Debriefing on Star Power simulation game. Example questions:

1) Did you have any idea as to what was going to happen in the game?

2) When did you catch on? How did you know?

3) How did you feel as one of the less fortunate players?

4) How did you feel as one of the more fortunate players?

5) Elite Group: How willing were you to share your wealth?

6) Poor Group: How much vengeance did you feel? Helplessness? Futility?

7) How did peoples needs affect their actions?

8) Why was the game realistic? Unrealistic?

**COMMENT**

Students are required to reflect upon the simulation game. Debriefing removes student from the role to see why certain things took place. EFT BRAIN Type One Learner analyzes the parts, relies on remembering language and prefers talking.
QUADRANT TWO: Concept Formulation

STEP THREE: Integrating Observations into Concepts

TYPE OF LEARNER: Right Mode Learner

TEACHER ROLE: Teacher

METHOD: Informational - Brainstorming

QUESTION TO BE ASKED BY THIS STUDENT: What?

DIRECTIONS

After listing the three words below on the board, initiate a brainstorming session.

- greed
- power
- monopoly

* Why are people greedy? Good? Bad? How?
* Name someone who is power hungry. Comment.
* Name businesses that hold monopolies.
* Is public school a monopoly? Explain.

COMMENT

Students can be creative within the context of three selected terms. Students can become involved by enhancing the RIGHT BRAIN Type Two learner which stimulates thinking through ideas, reflect abstractly, form concepts and re-examine facts.
QUADRANT TWO:

STEP FOUR: Developing Theories into Concepts

TYPE OF LEARNER: Left Mode Learner

TEACHER ROLE: Teacher

METHOD: Informational

QUESTION TO BE ASKED BY THIS STUDENT: What?

DIRECTIONS

Students are to read in the text, chapters 17 and 18 pp. 179-202. The following vocabulary list should be distributed to the students and they should define these concepts.

- greed
- power
- bigness and the urge for greater bigness
- growth
- maldistribution of income
- monopoly
- oligopoly
- consumer sovereignty
- conglomerate
- merger
- anti-trust

Additionally, students should compare and contrast the financial lives of Jay Gould and Andrew Carnegie. The ECONOMIC TRANSFORMATION OF MERICA by Robert Heilbroner offers an appropriate comparison of these two men. The vocabulary list for this lesson will enhance the discussion of the comparison between Jay Gould and Andrew Carnegie.

COMMENT

This step provides students with factual information and it fulfills the needs of the LEFT BRAIN Type Two Learner who uses a planned and structured activity - established information - and reliance on written/ language stimuli.
QUADRANT THREE: Practice & Personalization

STEP FIVE: Working on Defined Concepts

TYPE OF LEARNER: Left Mode Learner

TEACHER ROLE: Coach

METHOD: Facilitation

QUESTION TO BE ASKED BY THIS STUDENT:
- How does it work?

DIRECTIONS

Students are to break into two groups and each group will construct a society with a different economic philosophy.

Group I will be a purely free market society with no government role in the economy. Hypothetical statistics will be necessary and must be relevant to the particular economic philosophy. They should include:

- names of companies
- what is produced? why?
- does monopoly play a role? how?
- conglomerates?
- projected growth charts or graphs.
- winners/losers in your economy.
- workers? unions?
- salaries?
- employer-employee relations.
- working conditions?
- pollution control?
- education?
- public health?
- distribution of income?

Group II will assume socialism as a philosophy to model their society after. This group is responsible for the same hypothetical questions established for Group I.

Each group submits their respective responses to the hypothetical questions. Reports are typed and a copy of each society's philosophy will be distributed to all the students.

COMMENT

This step allows students to react to concepts. This activity appeals to the LEFT BRAIN Type Three Learner who seeks working on a skill, manipulate materials based upon expert opinion and facts, problem solving by breaking down into parts and finally responding to established information.
QUADRANT THREE:

STEP SIX: Messing Around

TYPE OF LEARNER: Right Mode Learner

TEACHER ROLE: Coach

METHOD: Facilitation

QUESTION TO BE ASKED BY THIS STUDENT:
How does this work?

DIRECTIONS

Additional copies of the two scenarios, prepared in the previous lesson, are made and prepared for a school survey in which student and/or staff will be asked to read both and then choose which one they prefer. The surveyees are to cite three reasons why they made their choice.

NOTE

A survey of parents might prove interesting. Comparing parents and students responses could be useful.

COMMENT

This activity highlights the RIGHT BRAIN Type Three Learners who use experiments with little restraint - like open ended problems - and likes to use analogies where active experimentation can take place.
DIRECTIONS

Students analyze the results of the previous survey. Charted results and conclusions should be posted somewhere in the school. Discuss with students if the exercise was useful and if not why not and if so, how?

COMMENT

Students are given a chance to analyze information drawing upon a prior understanding of economics. The LEFT BRAIN Type Four Learner utilizes the intellect, written instructions, objective judgments, analytic decision making and reliance on language.
QUADRANT FOUR:

STEP EIGHT: Do it themselves and share what they do with others.

TYPE OF LEARNER: Right Mode Learner

TEACHER ROLE: Evaluator/Remediator

METHOD: Self Discovery

QUESTION TO BE ASKED BY THIS STUDENT:
- How can I apply this?
- What can this become?

DIRECTIONS

Take the survey results and the analysis of the results, and make a projection as to what the trend(s) of the future might be. These projections should be based on survey conclusions but no other restraints or barriers need be applied.

The results of quadrant 3 and 4 would fit nicely into the local paper. The community is always interested in knowing what goes on inside our walls and this activity would give them one example.

CONCLUSION

By looking at survey results, we should have a greater insight into how different economic philosophies answer the same problems. Students, after looking at the major alternatives are better equipped to make decisions by themselves.

COMMENT

This step allows students to have opinions and make them count. This activity fulfills the needs of the RIGHT BRAIN Type Four Learner who uses: open ended questions - experiments with little restraint - spontaneous and problem solving by looking at the whole.
LESSON FIVE
"The Rest of the World"

OBJECTIVES

GENERAL
To gain a greater understanding of the global economy.

SPECIFIC
1) Learn to what degree we are interdependent on other countries for our economic well-being.
2) Learn about specific multi-national corporations.
3) Discuss the subtleties of trade.
4) Letter writing skills will be addressed and related to the topic.
QUADRANT ONE: Integrating Experience with the Self

STEP ONE: Create an Experience

TYPE OF LEARNER: Right Mode Learner

TEACHER ROLE: Motivator

METHOD: Discussion

QUESTION TO BE ASKED BY THIS STUDENT: Why?

DIRECTIONS

Students are to select 25 items that they have at home, e.g., clothes, appliances, furniture. Each item is to be listed and noted where it was made.

The students are then called upon by the teacher to cite a few examples to share with the class.

The teacher asks why so many items are foreign made. Also, why certain types of goods are domestic made while others are imported. Questions should be relevant to the topic.

COMMENT

This step allows students to witness each others findings and become involved. The RIGHT BRAIN Type One Learner expresses these skills: watching - listening - interacting - and speaking.
QUADRANT ONE:

STEP TWO: Reflecting on Experience

TYPE OF LEARNER: Left Mode Learner

TEACHER ROLE: Witness

METHOD: Discussion/Brainstorming

QUESTION TO BE ASKED BY THIS STUDENT: Why?

DIRECTIONS

Start a brainstorming session centered around the following questions:

1) What would it be like if all products sold in the U.S. were made domestically?

2) What would happen to the price of goods if no imports were allowed?

3) Is self-sufficiency a realistic or a sound goal worth pursuing?

4) Are foreign goods of better quality than domestic made goods? How do you know?

Continue this activity until all questions have been addressed.

COMMENT

This step allows students to ponder over what their lists really mean and become more aware of the global network. The LEFT BRAIN Type One Learner uses analysis - reliance on thinking - prefers to talk - and works to break ideas down into parts.
DIRECTIONS

Have students read the three statements below. What conclusions can be drawn from these facts? Some understanding for a global economy should transpire. On a higher level, students might begin to see the effect of these major companies going abroad both in terms of employment and foreign markets.

* Pepsi Cola: produces in more than 500 plants in over 100 countries.

* Ford Motor Company: 1/3 of total assets of $23 billion dollars was invested in 27 foreign countries.

* IBM: in 1971 had subsidiaries in 80 countries.

COMMENT

This step calls for the RIGHT BRAIN Type Two Learner to tap into feelings and reflect upon experience. Subjective judgments and participation by the students meets this step's goal.
QUADRANT TWO:

STEP FOUR: Developing theories and concepts

TYPE OF LEARNER: Left Mode Learner

TEACHER ROLE: Teacher

METHOD: Instructional

QUESTION TO BE ASKED BY THIS STUDENT: What?

DIRECTIONS

Write the following terms on the board:

* profit
* growth
* markets
* self-interest
* power

* status
* weak dollar
* strong dollar
* trade imbalance
* multi-national corporations

Discuss what role these terms play in looking at the world as a global economy after students have read chapters 19 and 20, pp. 205-09. Students should be not only aware of the meanings of these terms, but how they are interrelated.

COMMENT

This step provides students with established information. It appeals to the LEFT BRAIN Type Two Learner whose needs are:

* intellectual
* remembers names
* responds to verbal explanations
* problem solving by breaking into parts
QUADRANT THREE: Practice & Personalization

STEP FIVE: Working on Defined Concepts

TYPE OF LEARNER: Left Mode Learner

TEACHER ROLE: Coach

METHOD: Facilitation

QUESTION TO BE ASKED BY THIS STUDENT:

How does it work?

DIRECTIONS

Take the 10 concepts from step four, rank them according to which ones you think most important to our country, and then explain why the top three are on top and why the bottom three are on the bottom.

COMMENT

This step allows students to react to given facts and try to expand upon just the definitional nature of the terms. The LEFT BRAIN Type Three learner benefits by working on a skill, manipulating materials of opinion and fact, and problem solving by breaking down the problem into parts.
QUADRANT THREE:

STEP SIX: Messing Around

TYPE OF LEARNER: Right Mode Learner

TEACHER ROLE: Coach

METHOD: Facilitation

QUESTION TO BE ASKED BY THIS STUDENT:

How does this work?

DIRECTIONS

Students forming groups of 2-4. Pass out a map of the world to each student. Students must note two things on the map:

1) 10 countries that the United States have based corporations in (multi-national corporations) and

2) 10 countries that we import goods from. Much of this data can be obtained from step one.

These items should be appropriately marked on the map.

Lastly, students should answer the question:

3) How is it that we depend so much on foreign countries?

OPTIONAL PLAN

1) Students write to one of the top 20 multi-national corporations asking for an explanation as to why that company doesn’t operate exclusively in the United States.

OR (perhaps both)

2) Students write to their Congressperson asking for information on M.N.C. Also included is the students view of the problem with a final request of the Congressperson to respond to the student’s views on the subject of M.N.C.’s.

COMMENTS

A student is allowed his/her personal touch in this situation. RIGHTRAIN Type Three Learners use: intuition - little restraint - personalization and multi-variable methods in doing this task.
QUADRANT FOUR: Integrating Application and Experience

STEP SEVEN: Analyzing for Usefulness or Application

TYPE OF LEARNER: Left Mode Learner

TEACHER ROLE: Evaluator/Remediation

METHOD: Self Discovery

QUESTION TO BE ASKED BY THIS STUDENT:
What can this become?

DIRECTIONS

Students are given several economic problems (hypothetical) of the lay and then are asked to remedy them in a realistic manner. It should be noted that the focus should be on foreign trade in a global economy.

1) You are head of IBM and your workers' strong union is insisting on an unrealistic wage increase (13%) - at least in your eyes. What international adjustment might you make?

ONE POSSIBLE ANSWER: Move operations abroad.

2) As President of Ford Motor Company, you are upset that the U.S. President has allowed duty free Japanese cars to enter the U.S. What international adjustment might you make?

ONE POSSIBLE ANSWER: Move operations abroad.

3) A third world country, ruled by an extreme dictator announces that his rival wants to nationalize all businesses in that country. As a Senator, how would you vote knowing that the U.S. has significant foreign investments in that country?

4) Organization of South American countries (OSAC) decides to kick out all U.S. businesses unless 50% of the profit remains in South American countries. This is a firm position. As U.S. President, what would you do? Who might you expect phone calls from urging you that 100% was the only way?

COMMENT

This step demonstrates whether they can apply previously learned material in a serious way. This taps LEFT BRAIN Type Four Learners who see: problem solving by parts - objective judgment - analytic reading and language and reading reliance.
Directions

Collect news articles that pertain to foreign trade or multi-national corporations. Copy them for all to read. Break into groups (small) and discuss each article as to how it would affect the domestic scene in America.

After ample time, each group will report its findings to the whole class.

Comment

Students take real situations and apply what new information they have gained from the lesson. RIGHT BRAIN Type Four Learner uses: sharing - diversity - synthesizing reading material - and a multi-variable approach to the task.
SUGGESTED TEXT


Sources Refered To

Lodge, John L. (1984), LEARNING STYLES-BRAIN HEMISPHERICITY AND THEIR APPLICATION TO TEACHING UNITS, M.S. Project Paper.