The Handbook
for Economics Lecturers

Case Studies

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1 Introduction

'Knowledge is the beginning of practice; doing is the completion of knowing. Men of the present, however, make knowledge and action two different things and go not forth to practice, because they hold that one must first have knowledge before one is able to practise. Each one says, 'I proceed to investigate and discuss knowledge; I wait until knowledge is perfect and then go forth to practise it.' Those who to the very end of life fail to practise also fail to understand. This is not a small error, nor one that came in a day. By saying that knowledge and practice are a unit, I am herewith offering a remedy for the disease.'
Wang Yang-ming, Chinese philosopher, 1472–1529

The main aim of economics education is to enable students to 'think like economists'. According to recent research, thinking like an economist includes not only analytical or problem-solving skills but also creative skills, which 'help determine how to frame questions, what tools and principles apply to particular problems, what data and information are pertinent to those problems, and how to understand or explain surprising and unexpected results' (Siegfried *et al*., 1991, p. 199). A large body of evidence (see, for example, Brown *et al*., 1989; Boehrer, 1990) shows that an effective way to accomplish this learning is to provide students with increased opportunities to become more actively engaged in the application of economics. However, much of the teaching in many higher education institutions takes the traditional form of lectures and seminars supplemented by problem sets, written assignments and limited class discussions. As recently pointed out by Becker and Watts (2001), the predominant teaching method in economics departments in the United States is still what they refer to as 'Chalk and Talk'.

As lecturers, we would generally agree that the most vivid and powerful lessons from our own educational experiences are related to projects in which we were actively involved. Concepts, ideas and experiences are harnessed and clarified in our mind more easily and quickly through direct experience than through the reading of books and abstract theories and concepts. This is particularly true in the early development of cognitive skills.

The use of the case method in the teaching of economics has received greater attention in recent years. Velenchik (1995) discusses her experience in using the method to teach international trade policy. She provides an evaluation of the method by comparing the results of students exposed to case discussion with the results of students on the same course but who have instead been taught in more traditional ways. She observed that the students on the case course had a more complete grasp of theory and did better in examination questions requiring analysis of real-world situations using theory. She also observed a dramatic improvement in students' analytical thinking and in their ability to express themselves verbally.

Carlson and Schodt (1995) discuss their experience of using the case method in teaching development economics and international monetary economics. They present a detailed account of students' evaluation of the case method and they are able to show that students are emphatically positive and convinced that the use of cases helped them to learn economics. According to their findings, students feel that the use of cases adds interest to the study of economics and makes their classroom much more real. Carlson (1999) explains how students on his statistics course are presented with a situation that requires statistical and economic analysis to solve a realistic problem. Cases with data for real applications are supplied to students who are then required to prepare a written report to a policy decision-maker. The author's evaluation of the case method shows that the students' involvement in problem solving has greatly improved their learning of statistical methods.

Traditional lectures and seminar are still valuable for transmitting information and knowledge. However, to help our students learn to 'think like economists' we need to consider seriously ways of moving beyond this more traditional mode of instruction. Some of the innovative and more active suggested forms of teaching and learning include the use of classroom games simulations, the introduction of experimental economics, the use of popular and business press, the use of case studies and co-operative learning. In this chapter we will focus on how case studies can be used in economics teaching. The remainder of this introduction explains the basic philosophy of the case method of teaching, its pedagogical value and the different approaches to the use of case studies.

1.1 The case method

The case method was born out of research, teaching and consultancy activities at Harvard Business School. Over the years, case programmes have been established at both Harvard Business School and the Kennedy School of Government. The experience accumulated by tutors and teachers is shared through the publication of short papers that discuss the various pedagogical approaches to case method teaching (see, for example, Boehrer, 1995; Shapiro, 1994). The classical case method has three main components: the *case* itself, the students' *preparation* for the case, and the *discussion* that takes place in the classroom.

Cases are stories about situations in which individuals or groups must make a decision or solve a problem. Cases supply students with information, but not analysis. Although many cases are drawn from real events in which decisions have been made and the outcome is known, most do not describe the decision itself, leaving students with the task of determining what the correct course of action would be. Case method teaching is a form of discussion teaching in which students prepare a case, either individually or in groups, and then seek collectively through in-class discussion to discover a solution to the problem presented by the case.

Unlike problem sets, *cases* do not set the problem out in clear steps; nor do they lead to a single correct answer. Unlike examples used in lectures, textbooks or scholarly articles used for discussions, cases contain facts and description but no analysis. The story in the case can be told in narrative form, with numerical data, charts or graphs, with maps or other illustrations, or with a combination of all these techniques.

Newspapers and magazine articles, insofar as they chronicle events without presenting analysis, can effectively be used as cases. This is true even for articles describing a policy decision or an action that has already been made, as long as they do not provide an analysis of the decision-making process itself. Cases can often be composed of a number of newspaper articles, particularly if they present different points of views about a single issue. For the inexperienced lecturer, approaching case method for the first time, newspaper articles (or newsclips) on a particular case can be effectively used as the first step towards the gradual development of an in-depth and comprehensive account of the case. This 'progressive' approach to the use of case studies will be discussed in more detail later in the chapter.

The success of the case study method is critically dependent upon student *preparation*. Students must come to class well versed in the facts of the case and prepared to provide an analysis of these facts. In the early stages of a module, it is usually helpful to provide students with study questions to guide their preparation, including questions aimed at focusing attention and questions that help them to begin the analytical process. These questions generally ask students to think about the relationships between the facts and events described in the case.

The in-class *discussion*, the core of case method teaching, is flexible enough to accommodate a variety of different strategies for involving students. Role playing, for example, heightens the identification of students with actors in the case. Students may be organised into groups as a means of building consensus or of sharpening conflict. Students might prepare the case within a group or form groups more spontaneously during the course of discussion. Individual or group presentations can be the starting point of the discussion.

1.2 The pedagogy of case studies

The case method is based on a philosophy of professional education which associates knowledge directly with action (Boehrer, 1995). This philosophy rejects the doctrine that students should first learn passively, and then, having learned, should apply knowledge. Instead, the case method is based on the principle that real education consists of the cumulative and unending acquisition, combination and reordering of learning experiences.

There are two fundamental principles underpinning the case method. First, the best-learned lessons are the ones that students teach themselves, through their own struggles. Second, many of the most useful kinds of understanding and judgement cannot be taught but must be learned through practical experience. When instructors assign problems or papers in a course, they are motivated by a similar concern: by working through the problem set on their own or writing the paper, students reach a deeper understanding of the concepts and ideas than they would have if they only read the text or listened passively to lectures. Case method teaching extends this principle to make preparing for class and the class session itself an active learning experience for students. By using complex real-world problems as the focus, it challenges students to learn skills that will be appropriate to deal with the practical problems that they will face as economists, civil servants or private managers.

Teaching through the case method allows educators to address specific pedagogical issues and to develop higher-order skills in students. Velenchik (1995) highlights four pedagogical issues addressed by the case method:

- *Motivation to learn theory*. In general, undergraduate economics courses tend to treat applications as secondary to the exposition of theory. In our teaching we often use examples to illustrate the application of particular theoretical concepts. However, we tend to use the example to reinforce the theory, having taught the theory first, rather than thinking of the theory as a set of tools for answering the question posed by the application. The focus, therefore, is on the theory itself, and the application is often perceived as incidental. When students do not understand the purpose of theory, the process of learning becomes more dry and difficult than it needs to be, and they often fail to grasp the tools they need. In the case method, the problem that the students are challenged to solve takes centre stage. They soon realise that they do not have the tools and they start looking for the tools. They want to learn theory.
- *Application of theory*. The ultimate goal of economics education is to enable students to apply economic reasoning to particular policy issues. The focus is generally as much on the process of policy analysis as on the specific area of policy. One method for illustrating the process is through examples related to lectures. However, this is problematic. The example is often preceded by theory, so that students think of the application as a use of the theory, rather than seeing the theory as a tool for dealing with the issues raised by the application. Examples are commonly selected because they are good illustrations of particular theoretical concepts, but they do little to help students learn which theories are appropriate for which kinds of policy problem. On the other hand, the case method requires the student to identify the theory that best addresses the economic problem under investigation.
- *Use of evidence*. Empirical analysis, guided by theoretical concepts and analytical tools, is central to many economics modules. Students are often required to develop an ability to use quantitative

evidence. This often involves a number of tasks, including determining what types of evidence are relevant measures of particular phenomena, evaluating the credibility of available information, performing calculations to arrive at appropriate and useful measures, and finding the best way to convey this information using tables and graphs. In this respect, although the lecture and example method usually provides students with some exposure to quantitative information, it does not require them to do the work themselves. A prepared classroom example does not provide training in how to select, manipulate and present such evidence; nor does it help students learn to interpret evidence themselves. Case studies include raw data that students have to manipulate, represent and comment on in order to solve the problem.

- *Limitation of theory*. One of the most difficult aspects of applying economic analysis is understanding which parts of a question can be answered by economic analysis, and which are best addressed using other disciplines. In particular, students need to learn the difference between identifying economic consequences of a policy choice and considering these decisions in the broader social and political context in which policy-makers and business leaders find themselves. It is difficult to use a lecture and example to fulfil these goals, since classroom examples are often abstracted from their context. The case method forces students to be confronted with the broader (non-economic) consequences of economic decisions.

The case method can also be used in a very effective way in order to move students gradually up the cognitive skills ladder from the low skills levels of *knowledge*, *comprehension* and *application* to the higher and more desirable skills of *analysis*, *synthesis* and *evaluation*. This educational taxonomy was originally proposed by Bloom (1956) and, even if not uncontested, it provides a transparent and structured approach to the development of students' skills. The following list describes this educational taxonomy and then explains how the case method helps in developing each of the skills.

- *Knowledge*. This refers to the student's ability to *remember* previously learned information. It involves the recall of a wide range of material but all that is required is bringing appropriate information to mind, not necessarily *understanding* its meaning. The case method is probably not the most efficient way to convey knowledge. However, in combination with some lectures, it can be used to broaden knowledge.

- *Comprehension*. This skill is defined as the ability to grasp the meaning of material and it can be demonstrated by translating material from one form to another, by interpreting material and by extrapolating information. By basing knowledge within a real-world context, the case method supports and facilitates the comprehension of basic knowledge.

- *Application*. This is the ability to use learned material in new and concrete situations. It may include the application of rules, methods, concepts, principles, law and theories. Through the analysis of policy decisions or business strategies, students develop an understanding of how theory is applied in real-world contexts.

- *Analysis*. This identifies the ability to break down material into its component parts so that its organisational structure may be understood. The process generally includes identification of the parts, analysis of the relationships among the parts and recognition of the organisational principles involved. As already mentioned, analysis is at the centre of the case method. The case studies require students to break down complex information, establish relationships and identify issues.

- *Synthesis*. This skill refers to the ability to put parts together to form a new whole. The process may involve, for example, the production of a unique communication (presentation) or a plan of operations (research proposal). Case studies foster this skill by requiring students to identify relevant information, summarise fundamental concepts and present a concise summary of main events.

- *Evaluation*. Critical evaluation is concerned with the ability to judge the value of material for a given purpose. After having analysed and synthesised a particular case, students are required to engage in an evaluation of alternative policies or strategies available to policy-makers or business leaders. This can include an evaluation of decisions already taken against possible alternative solutions.

The case method is a rich and powerful approach to the development of cognitive skills in students. It is also a flexible approach, in the sense that lecturers can use it in alternative ways. These are discussed in the next section.

1.3 Adopting the case method

There is no single approach to case teaching. Instead there are several approaches which work for different people in different situations. However, in general, it is possible to distinguish between two main ways of using case studies.

The first way is to use the case study as a support and an illustration in lectures and seminars. For example, in the lecture you might explain how the case illustrates typical dilemmas or issues that policy-makers, public or private managers face and the principles that can be used to help them reach a reasonable decision. In seminars, short cases can be discussed to show the application of theory, stimulate analysis and induce evaluation. This approach to the use of case studies does not necessarily require the development and presentation of long and elaborated case studies. Extracts from newspapers and business journals can be used to great effect in investigating issues and fostering students' analytical skills. The main advantage of this approach is that it requires relatively little preparation and constitutes an easy and gradual introduction to the use of longer and more comprehensive case studies at a later stage.

The second way of using case studies is to challenge the students to grapple with a decision-maker's dilemma, formulate a strategy and come to a class prepared to explain and defend their recommendations. In this approach, which is usually referred to as 'case method teaching', the instructor either does not lecture or conducts a limited number of lectures that are complemented by the analysis of longer and more complex case studies. The role of the lecturer is to moderate a classroom discussion among the students in which the students compare their different approaches. Learning from each other, the students work together to reach a richer understanding. This requires more effort on the part of the lecturer in order to prepare the required case studies and to plan for their use in class discussion.

This chapter outlines each of these two approaches to case studies teaching. If you believe in the pedagogical value of case studies and are new to this teaching method, the gradual progression from the use of newsclips to the use of more comprehensive case studies can represent the best way of introducing this approach into your teaching. Section 2 explains how you can introduce the case method by using short newspaper articles. Section 3 focuses on 'case method teaching', which contemplates the use of longer and more comprehensive case studies. In both sections the overall aim is to show how you can accommodate the case method in your economics modules and, above all, to show how they help achieve the pedagogical goals discussed in subsection 1.2.

2 The case method through the use of newsclips

The use of newspaper articles in economics is relatively well documented (e.g. Becker, 1998). Many instructors like to use newsclips because they portray the complexity of business and political situations and the role of economic theory in unravelling that complexity. Case studies and, by implication, newsclips allow teachers to manipulate data, investigate hypotheses, deal with uncertainty and complexity and, ultimately, come to a decision. Many introductory textbooks complement the more formal exposition of theories and concepts with newsclips that show the applicability of theory to practice. However, less is known and written about the actual use of newspaper articles in the teaching room and its pedagogical value. The work of Becker (1998) is, therefore, something of an exception. He discusses his experience in using newsclips to motivate students' analysis and to help them to learn quantitative skills. The next subsections intend to address these issues, but before this is done we present a short taxonomy of newsclips.

2.1 A taxonomy of newsclips

The term 'newsclip' should be interpreted as news that has a cited source. In particular, we refer to articles published in business newspapers and magazines or in the financial pages of daily newspapers. Bredon (1999) identifies four main ways in which the news is used in teaching economics:

- *Osmotic newsclips*. These are newsclips that have no commentary except possibly for course headings that may help students identify their relevance. They are used in the belief that familiarity will eventually translate into economic literacy.
- *Case study newsclips*. These are published intact and are accompanied by questions and/or analysis. They are usually complex in their coverage.
- *Focused newsclips*. These are short news excerpts used to illustrate a given economic principle or theory.
- *Reworked news*. This is written in the author's own words with specific acknowledgement of the news source.

The use of newspaper articles in your teaching will mainly require the use of *focused* and *case study* newsclips.

2.2 Embedding newsclips into the lecture

In the lecture you should use *focused* newsclips, since the information provided to the students needs to be clear, simple and straight to the point. In many cases, articles contain additional information that is not directly relevant in the context of the topics that the lecture intends to address. This 'noise' in the article can create confusion and take attention away from the relevant issues. Without careful selection the danger is that newsclips simply end up confusing and discouraging students.

Make sure to select newsclips that contain (technical) terminology that is part of the economic theory discussed in the lecture. This will make students aware that the issues discussed in class are not abstract concepts, but are readily applied in the business context.

TOP TIPS

Use **focused** newsclips in the lecture. Clear, simple and short newsclips attract students' attention and help them focus on the topic under investigation.

The lecture could then be structured as follows. At the beginning of the lecture, show the article to the students to introduce the lecture topic and to highlight the main points of discussion. Read the article with the students and emphasise the main issues emerging from the article. In this way you will be able to create the context for the delivery of the lecture. The students' attention is captured, interest is stimulated, issues are raised and general *knowledge* is conveyed. Conclude the reading of the article by posing questions concerning the actions, decisions and strategies of the economic agents portrayed in the article. This helps to focus the issues under investigation and suggests the lines along which the lecture will be articulated.

TOP TIPS

Show the article at the beginning of the lecture and use it to create a context for the analysis of the theory.

Thus, the case study provides a motivation to learn theory because the students begin to understand that unless they have some further knowledge, they will not be able to deal with the issues raised in the newsclip. Learning theory is no longer a dry and passive affair, but an active exercise aimed at solving problems. The ground for the development of the theory is then prepared.

TOP TIPS

The use of two overhead projectors displaying the article and the theoretical concepts simultaneously and side by side would help in cross-referencing theory with practice.

The lecture should then develop along traditional lines where the main theoretical concepts are developed and explained. However, in your explanation you should continuously refer to the article's content and always attempt to place the theory within the context of the article. This helps the students to put theory into context: knowledge is conveyed while comprehension is supported and application is shown. Throughout your explanation, you should gradually answer the questions that were posed at the beginning of the lecture. This allows students to understand how theory can be applied to address a specific issue.

At the end of the lecture, you should summarise the main issues developed in the lecture and you should show the case again to the students. This helps them to fix basic concepts in their mind and, more importantly, students can develop a first understanding of how analysis can be carried out. The delivery of the lecture through the use of the case study generally helps students to develop the 'lower' skill levels of knowledge, comprehension and application. The development of the 'higher'-order skills of analysis, synthesis and evaluation is then carried out through the seminar activities. However, before proceeding with an analysis of seminar activities, an example can help illustrate how the approach is used in the lecture of a second-year economics module.

Example: using newsclips in the lecture

Business Economics is a second-year module that deals with the economics of business organisation, market structure and strategic behaviour. Students are introduced to an economic analysis of issues such as the horizontal and vertical boundaries of the firm, strategic interaction in oligopolistic markets and competitive advantage. Within the analysis of the vertical boundaries of the firm, one of the topics dealt with in the module is the hold-up problem. Figure 1 presents the article that was used in the lecture.

The article is shown at the beginning of the lecture and the main 'elements' characterising the business transaction are highlighted: bilateral bargaining, contractual negotiation, asset specificity, transaction costs. In essence, these are the core factors comprising up the hold-up problem. After reading the article, the following questions are posed to the students:

> ‘The largest order ever taken to lengthen a luxury liner was revoked yesterday after the Italian owners of the *Costa Classica* pulled out of a deal, leaving 26,000 tonnes of steel (worth £51m) beached on the docks of the Mersey. The Cammel Laird shipyard … was told by Italian cruise operator Costa Crociere that it had postponed delivery of the ship because the work was behind schedule … union leaders and local MPs began a series of crisis meetings late on Thursday to salvage the contract to build and fit a 45-metre extension to the 56,000 tons *Costa Classica*, cutting it in half and inserting the new section in the middle… The Italian shipowner had applied for arbitration to find out whether they could postpone or even terminate the contract, arguing that the work was substantially behind schedule and efforts to resolve the dispute commercially had failed…’ (*Guardian*, 25 November 2000)

Figure 1 Article introducing the case

1. How many parties are involved in this transaction?
2. How can Costa Crociere back off if there is a legally binding contract regulating the business transaction?
3. Can Cammel Laird shipyard sell the ship-extension to somebody else?
4. What do you understand from the phrase ‘efforts to resolve the dispute commercially had failed’?

The lecture then develops around a detailed account of hold-up problem theory by continuously referring to the issues identified at the beginning of the lecture and to the article. At the end of the lecture, the main issues are summarised, the article is shown again and the link between theory and the case is demonstrated.

2.3 Using the newspaper in seminars

Lectures are usually complemented by seminars or tutorials that take place the week after the lecture. This subsection assumes that students are given a set of problems and tasks to prepare beforehand and suggests how seminar activities could be structured.

First, ask the students to solve simple abstract numerical problems whose solution requires the *application* of basic knowledge (i.e. formulae, expressions, etc.) acquired during the lecture and through the reading of the assigned material. It is helpful in this case to design your own problems rather than to use problems taken from textbooks (an example is provided at the end of this subsection). In this way you have better control of the gradual development of cognitive skills in students.

These problems could then be followed by a set of more complex problems in which students have to show an ability to *analyse* a specific economic situation or business decision and to produce a solution. These problems are specifically aimed at developing analytical skills, requiring students to break down information into simple components, establish links and produce a solution. In many cases it is possible to combine application and analysis in one single problem. A very simple example could be a problem that gives information about the fixed and variable costs of production of two alternative technologies and the output the firm expects to produce. The students can then be asked to set up the total and average cost functions. This task would require an ability to apply knowledge. The problem can then continue by asking which technology the firm should employ in production. This task requires students to use the results computed in the earlier parts of the problem to produce a solution by suggesting the most efficient technology.

The seminar could conclude with the investigation of a case study. It is suggested that you use a *case studies* newsclip drawn from leading business newspapers and magazine. The newsclip can be longer than that used in the lecture, even if brief and compact articles should be preferred. Long articles (usually more than 500 words long) can contain too much information that can make the students' analysis difficult and put them off the case. Moreover, time constraints often make it unfeasible to deal with long and complex cases. The investigation of the case study aims to complete the educational taxonomy by inducing students to engage in the synthesis and evaluation of more complex information. Each case study should be accompanied by a set of questions that help students focus their attention on the issues that are relevant to the topic under discussion. It is important to include these questions because, particularly in the early stages of the module, students do not have a clear ability to distinguish important from peripheral information. By attending the lecture and experiencing the approach to case study analysis in the classroom, students should develop some understanding of how to deal with the article. However, in many cases their approach will still be rough and lack the necessary focus.

TOP TIPS

Complement the newspaper article with questions that help students approach the analysis in a structured and coherent manner.

With appropriate guidance and direction, the case study helps students to develop an ability to break down complex information into simple components: analysis is fostered. These simple components can then be linked together and cross-referenced to interpret the actions of economic agents and the strategies of businesses: synthesis is stimulated. This new information is then used critically to evaluate the business strategy against alternative strategies or some set objective: evaluation is triggered.

In the early part of the module, the students will find it difficult to approach case study discussion in a structured and rational way. Your role is to coach the discussion and guide the student through a logical and informative investigation. As students develop a better understanding of how to approach case study analysis, your role in the discussion will reduce and you will be required to intervene much less frequently. In later stages of the module, you can start supplying case studies that are not complemented by any question so that students have to show their analytical skills without the guidance of pre-set boundaries. Indeed, the students' ability to engage in the case analysis without the 'guidelines' provided by the questions will reveal their actual development of higher-order skills.

Students' preparation is important but not necessary. It is important and desirable because it will generate a speedy and livelier discussion of the case. It is not necessary because the length of the case usually allows a quick reading of the article and an almost immediate ability to engage in the discussion. At the end of each seminar, you can distribute additional case studies for students to analyse and provide a short written report. This would allow students to practise and to strengthen their skills. As discussed below, this additional activity could be managed with the help of a Virtual Learning Environment.

Students engage in each element of Bloom's taxonomy through the range of activities in the case study. The development of the lower skills of knowledge, comprehension and application that started with the lecture is then complemented by the seminar activities that are specifically designed to push the students towards the higher skills of analysis, synthesis and application. This structured approach to learning, with the case study method at its centre, can be an effective method for developing higher-order skills in students. An example of case studies in seminar activities is given below. The assessment is the final part of the learning process. The next subsection explains how case studies can be used in various assessment methods to test the students' cognitive skills.

Example: structuring seminar activities

The seminar activities that complement the hold-up lecture, discussed in the previous example, include first a numerical problem aimed at developing comprehension and application and at stimulating analysis. The problem in Figure 2 has been used in the past.

> You are the owner of Engines Ltd, a company that specialises in the production of engines for motorbikes. You are approached by the managers of Aprilia, who are planning to produce a new motorbike that meets new higher government environment standards. They require you to produce a new engine whose emissions must be below the limits imposed by recently introduced anti-pollution legislation. After many discussions and project analysis, you work out that the production of the new engine will require an investment of I = £4 000 000 and that the average variable cost of production will be C = £200. After discussion with the Aprilia managers you agree to supply Q = 50 000 engines at a price of P^*=£400 each. The managers of Engines Ltd know that by signing the contract with Aprilia they commit themselves to the production of a highly specialised product that they will only be able to sell to other motorbike manufacturers at a lower price of P_m = £250. Eventually the contract is signed and the investment is carried out.
>
> 1. What is the rent that Engine Ltd expects to make?
> 2. What is the value of the relationship-specific investment?
> 3. What is the quasi-rent?
> 4. Will Aprilia have incentives to renegotiate the contract once Engines Ltd has carried out the investment? Will the ‘hold-up problem’ emerge? Briefly explain.
> 5. Assuming that the managers of Engines Ltd are rational agents, would they have signed the contract with Aprilia in the first place and would they have carried out the investment? Briefly explain.

Figure 2 Hold-up problem: a numerical example

The exercise is structured in such a way as to require the students to compute, step by step, the values of the main determinants of the hold-up problem. Thus, once questions 1–3 are solved, the student has all the necessary elements to understand whether the hold-up problem will emerge or not. When the problem is organised in this way, the student is helped to approach it in a structured and logic manner. A problem that included only questions 4 and 5 would require the student to do much more background thinking. This can be problematic, particularly in the early stages of the module, if the student has not fully developed an ability to use elementary information to deal with complex issues.

The seminar then continues with the analysis of two related short case study newsclips. The first article (Figure 3) describes a dispute between a British low-cost airline and the owners of the airport from which the airline mainly operates. The article is actually a quotation drawn from the airline’s website (http://www.easyjet.com/en/).

> ‘*Stop Barclays increasing your air fares by £5!* Barclays Bank now controls Luton Airport and wants to increase landing charges to easyJet customers at Luton by 300%, or about £5 per passenger, a significant percentage of easyJet airfares. John Prescott, the Secretary of State for the Environment, Transport and the Regions will decide SHORTLY whether Barclays should be allowed to get away with it. John Prescott has two options – either let Barclays charge whatever it likes, or ask special government appointed experts to decide how much easyJet and other airlines’ customers should pay for using Luton Airport.’

Figure 3 Quotation from airline website

'Both easyJet and Ryanair are facing severe cost pressures at their home airports. When easyJet opened services from Luton Airport, it negotiated a five-year deal where the airport earned just £1.60 per passenger plus a 62p handling charge. Luton wants £7.89 per passenger, and two weeks ago reached an interim deal where easyJet will pay a fee believed to be £5 to £6 per passenger.

easyJet insists that this will not lead to higher prices, but it is axing its Luton–Liverpool route, which started at £20 return. "It is just not commercially viable to offer services at that price", says an easyJet spokeswoman. She says expansion plans at Luton are now on hold while it develops alternative hubs at Geneva, Amsterdam and Liverpool.'
(*Guardian*, 17 February 2001)

Figure 4 The evolution of the dispute

The students were given some basic background information on how the airline industry operates and then were asked to identify within this particular case the main determinants of the hold-up problem. This task helps students develop a rational and structured approach to the analysis of information and the synthesis of relevant knowledge. The following are examples of questions asked in the seminar:

1. easyJet is a new airline. Explain the process that led it to choose Luton as its main hub.
2. What types of investment did easyJet carry out at Luton Airport?
3. Why is Luton Airport in a strong negotiating position with easyJet? Given the contractual dispute, why does easyJet not change hub?

Once the students were able to provide an informative and logical analysis of the case study, they were asked to provide an evaluation of the business dispute by suggesting, in particular, the strategies available to the airline. The main aim of this task is to reinforce in the students a clear understanding of the core element of the hold-up problem (i.e. asset specificity) and to evaluate alternative courses of action for a solution of the dispute. The students would first be asked to express their own thoughts and then they would be shown Figure 4, which reports the evolution of the dispute between the two business partners.

The article shows the short- and long-run strategies chosen by the airline. While in the short run it had to give into the airport's requests, the long-run response is diversification and less asset specificity. By the end of the seminar, the students should have developed an ability to investigate similar cases, identify the presence of the hold-up problem and suggest solutions.

2.4 Assessment through the use of the news

Newspaper articles can also be used in assessment. Here we discuss how they can be used in examinations, coursework and presentations. Other assessment strategies can be considered, but we focus on these because of their widespread use.

Examination

If students are assessed by examination, we suggest structuring the paper in four sequential sections aimed at assessing the development of cognitive skills. The higher-order cognitive abilities receive a greater weighting in the mark scheme. The first section should require students to answer short essay-type questions aimed at assessing their level of knowledge and comprehension. The second section should contain some abstract problems whose solution reveals the students' ability to apply theory to practice. Questions aimed at testing the students' ability to analyse alternative policies or strategies within the context of a fictional problem should feature in the third section. The case study should be included in the fourth section and students should be asked to deal with a set of questions aimed at testing their ability to synthesise and evaluate knowledge. A pass mark should be awarded to students who complete satisfactorily at least the first two sections and who, therefore, show at least some basic knowledge and comprehension. A first-class mark is awarded only upon a satisfactory completion of all four sections.

There are many advantages in structuring the exam paper in such a way. It would represent the 'natural conclusion' to a module whose activities are structured around the principles of the gradual development of cognitive skills and the use of case studies. It offers transparency for both students and lecturers, since the ability to deal with the various sections reveals the students' actual level of knowledge. It also clarifies to students the amount of effort required to achieve desired results. Figure 5, from the exam paper for the first-year course Introduction to Macroeconomics, reflects this educational taxonomy.

Section A – Knowledge and Comprehension – Answer the following questions. (30 marks)

1. What is an open market operation? Show, by using graphs, how the central bank can use an open market operation in order to influence economic activity.

2. What are the three types of unemployment? What is the natural rate of unemployment?

3. What is the real exchange rate? If domestic inflation is higher than foreign inflation, but the domestic country has a fixed exchange rate, what happens to net exports in the domestic country over time? Why?

Section B – Application – Solve the following problems. (20 marks)

4. The following table lists a number of components of UK gross national product from both income and expenditure sides of the account for 1995 (figures are in £000s).

Consumer expenditures	367,853	Taxes on expenditures	83,023
Subsidies	5,878	Profits	63,912
Rent	44,092	Capital consumption	63,968
Net property income from abroad	328	Stock changes	–5,303
Government expenditures	121,899	Investment spending	95,442
Exports	135,115	Wages	387,315
Other factor incomes	1,665	Imports	140,415

a) Use the *expenditure approach* to compute the economy's gross domestic product (GDP) and gross national product (GNP) and national income.

b) Use the *income approach* to compute the economy's gross domestic product (GDP), gross national product (GNP) and national income.

5. A typical family living in Sandy Island consumes only apple juice, bananas and cloth. Prices in the *base year* are £4 a litre for apple juice, £3 a kilogram for bananas and £5 a square metre for cloth. The typical family spends £40 on apple juice, £45 on bananas and £25 on cloth. In the *current year*, apple juice costs £3 a litre, bananas cost £4 a kilogram and cloth costs £7 a square metre.

a) Calculate the retail price index on Sandy Island in the current year.

b) Calculate the inflation rate between the base year and the current year.

c) Was your calculation of the price index based on the Laspeyres Index or the Paasche Index? Briefly explain.

d) Are these two indexes a good measure of the price index in the economy? Briefly explain.

6. The following expressions show the relationships between variables in the goods and money markets. Fill in the gaps (dotted lines) in these 'chain relations' and briefly explain their meaning.

a) Central bank buys bonds → Price of bonds (P^b) → M^S → Æ Interest rate (i)

b) i ↓ → Cost of borrowing → I → AD → Y

c) Contractionary open market operation → M^S → i → Cost of borrowing → I → AD → Y …

Figure 5 Embedding the educational taxonomy in the exam paper *(continued overleaf)*

Section C – Application and Analysis – Solve the following problem. (10 marks)

7. In a closed economy autonomous consumption is given by c_0 = 200 and the marginal propensity to consume is c_1 = 0.8. Investment, government spending and taxes are, respectively, I = 300, G = 300, T = 200.

a) Determine the equilibrium level of output Y^e.

b) Draw the goods market graph showing the economy's equilibrium.

c) Compute the government budget balance. Is it in surplus or deficit?

d) Compute the level of consumption and savings in the economy.

e) Show that in equilibrium injections equal withdrawals.

f) Show the relationship between investment and private and public saving.

g) Assume that full employment in the economy is achieved when Y^e = 4,000. How much should the government spend (G) in order to achieve this level of output?

h) Calculate the government spending multiplier.

i) Suppose now that taxes are endogenous and that the tax rate is t = 0.25 so that T = 0.25Y. Compute the equilibrium level of output (assume that government spending is back to G = 300).

j) What is the government spending multiplier in this case? Is it bigger or smaller than that you computed in h) above? Briefly explain.

Section D – Analysis and Synthesis – Solve one of the following problems. (10 marks)

8. Suppose that a closed economy is initially operating at Y_n. Now suppose that the government increases spending in the economy so that G increases.

a) Use the AD/AS graph to illustrate the initial equilibrium, the dynamic adjustment and the medium-run equilibrium.

b) What are the initial effects of the increase in G on the price level P, real money M/P, the interest rate i, investment I and output Y?

c) What happens to the unemployment rate u and output Y relative to their natural levels during: the short run, the dynamic adjustment and the medium run?

d) When output Y is greater than its natural level Y_n, what happens to the AS curve for the next year? Explain.

e) As the AS curve shifts, what happens to the price level P, real money M/P, the interest rate i, investment spending I and output Y?

f) Does output Y return to its natural level Y_n? If so, what does this suggest about the price level P and the expected price P^e in the medium run?

9. Suppose the domestic economy is initially experiencing a trade deficit. Further assume that government officials would like to eliminate the trade deficit. By using the goods market and the net export graphs, answer the following questions.

a) What type of (domestic) policy could be pursued to eliminate the trade deficit? What effect would this policy have on output? Explain.

b) What type of exchange rate policy could be pursued to eliminate the trade deficit? What effect would this policy have on output? Explain.

c) Suppose domestic policy-makers can put pressure on foreign policy-makers to alter their fiscal policy. What type of foreign fiscal policy could be implemented to eliminate the trade deficit? What effect would this policy have on domestic and foreign output? Explain.

10. Suppose that the British government decides to adopt a fixed exchange regime so that the pound to euro exchange rate is fixed at a specific parity.

a) What are the implications of this decision for monetary policy?

b) The British government explains this policy decision as an attempt to control inflation. Comment on this policy decision. Why should a fixed exchange rate regime help in controlling inflation?

c) Suppose that after the introduction of the fixed exchange rate regime the United Kingdom experiences higher inflation than in euroland. What are the economic implications of such an inflation differential?

d) 'By looking at the inflation differential between the UK and euroland, financial speculators can be tempted to trigger a financial crisis.' Explain this statement.

Figure 5 Embedding the educational taxonomy in the exam paper *(continued)*

e) Suppose that shortly after the introduction of the fixed exchange rate regime the UK economy experiences a recession. Shortly after the start of the recession there are calls for the abolition of the fixed exchange rate regime. Experts predict the possibility of a financial crisis. Explain the rationale behind these calls and predictions.

Section E – Synthesis and Evaluation – Comment on the following article. (30 marks)

'Hopes that the UK manufacturing sector has stabilised received a further boost on Wednesday, with accelerating output and order books pushing a closely-watched survey to its highest level since December 1999.

Meanwhile, a Confederation of British Industry survey suggested the retail sector, which had been burgeoning while manufacturing slumped, appeared to be tempering itself.

The purchasing managers' index (PMI), compiled by the Chartered Institute of Purchasing and Supply (Cips) and Reuters, rose from 50.6 in March to 53.4 last month. This was the third consecutive month that the index stayed above 50, the mark which signals growth.

Manufacturing demand rose at the fastest rate for almost two and a half years as companies reported an increased volume of new business from both domestic and foreign customers, Cips said.

Export orders rose for the second time in the past three months, and at the fastest pace for more than five years. Companies surveyed said business conditions were improving.

Although the survey added to hopes that the manufacturing sector is emerging from the months of recession, it is unlikely to change expectations that the Bank of England's prime interest rate will remain at its 38-year low of 4 per cent until the second half of the year.

Cips said many companies thought a recovery in the US manufacturing sector had helped stimulate growth in much of Europe, with demand from the Middle and Far East, as well as Canada and the US, also up in April.

However, companies doing business with South American countries, particularly Argentina and Brazil, reported slower growth in export orders.

Seventy per cent of companies reported that sales were up in April, while 13 per cent said they were down. The plus 57 per cent balance was a significant improvement on the plus 31 per cent in March and was the highest individual monthly balance since August 1988.

… The three-month moving average, which smooths out month-to-month fluctuations, suggested sales were still slightly below the growth rates of last autumn, the CBI said.

Grocers reported the strongest annual growth since August 2001, while other retailers reported strong growth in sales of clothes, durable household goods, furniture, carpets, hardware, china and DIY products.

Last week, gross domestic product data released by the Office for National Statistics showed the UK economy stagnated for a second successive quarter in January to March, growing just 0.1 per cent in the quarter after zero growth in the quarter of 2001.

The annual rate of growth was down from 1.6 per cent in the fourth quarter of last year to 1 per cent – the lowest for almost 10 years.'
(*Financial Times*, 1 May 2002)

Comment on the above article and use the AD/AS model to explain the economic situation in the United Kingdom. Should the Bank of England intervene in the economy by changing the interest rate? Why? (*Suggestion*: before using the AD/AS model, use the aggregate demand relation to comment on the UK economy.)

Figure 5 Embedding the educational taxonomy in the exam paper *(continued)*

Coursework

Students assessed by coursework should be given a case study newsclip and should be required to provide a detailed account of the events described in the article by resorting to economic theory. The analysis should break up the article into simple components. Relationships between economic agents, actions and outcomes should be established, and an evaluation of the problem should be provided.

It would be helpful to accompany the case study with specific questions that determine the boundaries within which students need to work. The questions should be similar to those used for the discussion of newsclips in seminars. In particular, it is important to set questions aimed at assessing the students' development of cognitive skills. In this respect, a first question could, for example, simply ask the student to describe the economic theory that can help investigate the case study. The answer to this question would simply reflect the student's level of knowledge and comprehension. The student can then be asked to provide an analysis of the article and to show how the theory applies to the specific case. Application and analysis would be tested. Further questions can ask the student to summarise the most important elements of the events described in the article and to provide an evaluation of the economic situation and suggestions for future actions. The students' ability to deal with these questions would reveal their actual level of skill development and would consequently determine the grade they would be rewarded with.

Presentation

Assessing students by presentation is not only an effective way of testing their level of understanding, but also helps them develop other transferable skills such as the ability to communicate to a particular audience, time management and organisational skills. The presentation might require the student to act, for example, as a business news reporter who has to analyse, present and evaluate a piece of economic news for a wider general audience. In this respect, the reports presented by the economics correspondents in programmes such as the BBC's *Newsnight* provide an appropriate model. The student should be asked to provide a summary of the news, identify the main emerging issues and provide a critical evaluation of the implications for various agents in the economy.

2.5 What makes a good newsclip?

There are some basic guidelines that you can follow in the search for the 'ideal' newsclip. The discussion so far has hinted at some of the properties of a good newsclip. The following is a list of attributes that are desirable in the articles you intend to use.

- *Source*. The case study should be drawn from leading business newspapers and magazines or the financial page of good newspapers. This guarantees the quality of the articles and the detailed treatment of the news. Moreover, it is also likely that any development in the case will be followed in future articles. In turn, this helps to accumulate more information that can eventually lead to the creation of an in-depth and more elaborated case study.
- *Freshness*. Fresh news is good news! An event that has recently been reported in the news and that is at the centre of general attention can be helpful in motivating students and in stimulating them to follow day-to-day developments.
- *Pedagogical value*. It is important that the article has enough 'content' to address the pedagogical values that the lecture intends to address.
- *Length*. Articles used in the lecture should not be too long, otherwise students will quickly lose track of the main issue and will lose concentration. The article used in the lecture should not be longer than one overhead transparency, while the suggested maximum length for the article used in the seminar is 500 words. Even if a focused newsclip is used, it is important that the original article is not too long, otherwise it becomes difficult to 'tailor' the article for the classroom analysis. The length of the article is less important for articles used in seminars. However, it is good practice to avoid long articles, particularly in the early stages of the module, since this can frighten students and deter them from engaging in the analysis.

- *Terminology*. It is important that the article contains some of the technical terminology that characterises the theory developed in class. This makes students aware of the fact that the concepts that they are taught are not abstract and that these terms need to become part of their vocabulary if they intend to develop an ability to deal with economic news.
- *Decision making*. A good article should contain an element of decision making, where the economic agents involved in the case have to make or have made a decision that needs to be evaluated and analysed. This helps students to identify themselves with these decision-makers and evaluate in a rational and logic way the best course of action to take.

2.6 Using Virtual Learning Environments

The use of a Virtual Learning Environment can be an effective support of case teaching.

- *Distribution of material*. A dedicated website allows you to post relevant cases for class discussion as soon as they become available.
- *Links*. Links to the websites of business newspapers and magazines allow students to explore news by themselves. You can stimulate such an exploration by asking students to report any new article that they might think related to some of the issues discussed in class.
- *Virtual seminar*s. Students can be given articles to analyse by themselves and they can post their investigation for you to check and mark. In this way the rigid lecture–seminar structure is removed and students can engage with the lecturer in a more flexible way that suits their personal commitments. Similarly, you are free to organise the interaction with students when it is more convenient for you.
- *Bulletin board*. The communication facilities in a Virtual Learning Environment allow a greater interaction among students and facilitate the 'virtual' discussion of cases. You can stimulate the discussion by posting a case and by making some comments on the strategy or policy described in the case. You can then ask the students to discuss the case and your comments. You should follow the development of the discussion and whenever interesting issues are raised you can intervene to steer the discussion towards the analysis of relevant aspects. When you think that the discussion has exhausted the investigation of all possible leads, you should intervene by providing a short structured summary and a closure of the discussion.

2.7 The costs of teaching with newsclips

There are some inevitable costs associated with the use of newsclips:

- *Search time*. You need to dedicate some time to the search and editing of newspaper articles. However, many leading business newspapers and magazines are available on the internet. Their websites have search facilities that allow you to retrieve articles on the basis of keyword searches. This greatly reduces the search time. Bredon (1999) suggests other ways through which the internet can be used to generate newsclips.
- *Teaching time*. The presentation and discussion of newsclips during the lecture is bound to reduce the time available for the analysis of formal theory. Thus, you will have to restructure your lecture and to decide how to accommodate the discussion of theory within the shorter time available.
- *Teamwork*. Teaching with newsclips in a module where you share seminar classes with other tutors requires that your teaching team be fully committed to this teaching method. This implies that they share the same approach, enthusiasm and commitment in the discussion of the allocated cases. You will have to make sure that they will approach the case discussion in similar ways – the supply of guidelines and teaching notes can help the co-ordination activity.

3 Case method teaching

While newsclips can easily be accommodated into the standard lecture–seminar structure, the use of longer and more comprehensive case studies requires some adjustments in the organisation of classroom activities.

3.1 Lectures versus case teaching

Teaching a case is very much an exercise in leadership: engaging student participation in the collective exploration of a problem and the effort to reach a joint resolution. In a traditional lecture, you analyse course material and convey your interpretation of it to the class. In a case discussion, the students analyse the material themselves and your function is to guide and facilitate their work: frame the task, focus the enquiry, stimulate interaction, probe thinking, set direction, register progress and bring closure. The different interaction between the instructor, students and course material in lecture and in case discussion is described by Boehrer (1995), as shown in Figure 6.

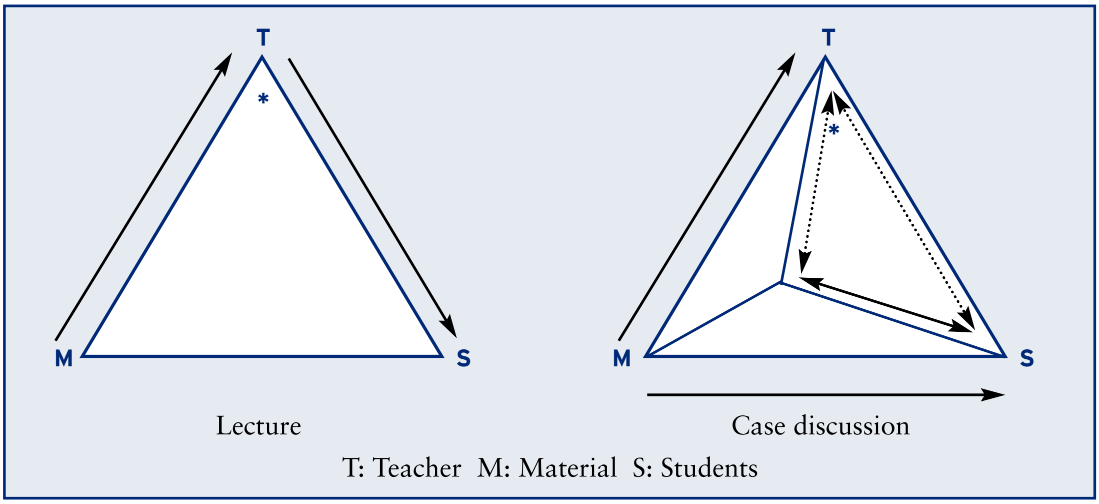

Figure 6 Interaction in lectures and case teaching

The teacher stands between the material and the students in lecture. In case discussion, the students meet the material more directly, and they interact with each other as well. Your role in teaching a case is to manage those encounters towards purposeful ends and, as the dotted lines suggest, to learn from them as well, about the students and the case. While intellectual and procedural authority (*) belongs to the teacher in lecture, teacher and students share it in case discussion. Both determine what is learned, and students, as well as teachers, can raise questions. With case discussion the exercise is more challenging and interesting. However, the success of the discussion is critically dependent upon a number of factors that need to be carefully considered when planning the introduction of the case method. The remainder of this section discusses these factors.

3.2 Placement

The first task in teaching a case is to place it purposefully within the framework of a module. It is also important to keep in mind that one case will often fit into several modules. Having assigned the case to a module segment, you need to determine where it fits into the sequence of related classes and materials, particularly those that concern theory. The most obvious sequence is to present the theory first, then ask your students to apply it to the case, but cases can contribute to the learning of theory in alternative ways. Pedagogical issues can guide the decision concerning the placement of the case studies.. In this respect, you can consider two approaches that are not necessarily exclusive.

Motivating students to learn theory

In the first approach, the case is used to motivate students to learn theory. This can be an extremely successful technique, but it requires careful attention to the timing, selection and teaching of the cases. This application of the case method tends to be more difficult than the use of cases as applications. However, it is especially rewarding, particularly since it increases student engagement in the lectures on theory that follow.

TOP TIPS

To motivate students to learn theory, discuss a case before the lectures take place.

To be used as motivating devices, cases should be introduced *before* the students have heard lectures on the relevant aspect of theory. At first, the students will find this approach more difficult, even if engaging. Thus, it is important to reassure them that you are aware that they do not have the theoretical tools necessary to complete the analysis of the case. Take special care to allow them to explore all possible analytical methods without imposing a particular structure. The goal is to allow them to come to the conclusion that they need some analytical tools, and this will happen only if they are given the opportunity to think the problem through on their own.

Make sure that the case you select raises interesting and relevant questions, without undue complexity. Some quantitative data should be included, but you should be careful to avoid overwhelming students with too much information. Select decision-forcing cases where the outcome of the case is not indicated and challenge students to determine what the best course of action would be. This type of case works much better than those with a described outcome.

You should steer the class discussion towards the generation of a list of questions that need to be answered before the problem posed in the case can be solved. This is a better approach than to present the students with a menu of possible solution choices. In this way you stimulate the development of analytical skills in students: break up the problem into simple elements, synthesise them to create a new entity and evaluate possible courses of action. The questions raised in the discussion should be of a type that can be answered by the application of economic theory. Students will tend to pose these questions in terms that are specific to the case. You should gently intervene and guide them to rephrase them in more general terms.

You should end the case discussion with a set of questions that need answers. They will be provided progressively in the lectures that follow the case discussion. In the subsequent lectures, you should restate the questions at the beginning of each lecture to remind students of what they are trying to understand and continue to make the connection between the case and the theory. This use of the case method motivates students to learn theory, primarily because they wish to understand the case and evaluate the arguments presented in it.

The case as an application of theory

The second approach to placement is to use the case as an application of theory, providing students with an opportunity to 'do' economics and to apply acquired knowledge in real-world contexts. This approach to case study teaching fulfils other pedagogical goals by inducing students to apply theory, use evidence and recognise the legitimate range of application of economic analysis. In the cognitive skills ladder, the approach helps to develop the higher-order skills of analysis, synthesis and evaluation.

> **TOP TIPS**
>
> Discuss cases after the lectures in order to show the application of theory.

You can structure the learning activities by choosing between two alternative approaches. One option is to introduce a case after each lecture. One or more seminars after the lecture are then dedicated to the analysis of the chosen case. A second option is to teach a series of cases after the completion of a series lectures on a theme. In this instance, the traditional weekly lecture–seminar structure is replaced by a series of lectures followed by a set of case discussions.

This second method is more demanding for students, since it forces them to do more work in figuring out which theory to apply in which case. In this respect it helps to address the pedagogical goal of identifying the relevant theories to apply in economic analysis. The major drawback of such an approach is that it produces a long series of lecture classes uninterrupted by the change of pace provided by cases. This dilemma can be dealt with by teaching some short cases during the part of the class period throughout the lecture sequence. The short cases can be used to reinforce specific theoretical concepts. At the same time, students' interest is kept alive since application of abstract knowledge to real cases is shown.

> **TOP TIPS**
>
> Use brief newsclips to intermit the sequence of theory lectures and show the applicability of theory in short cases.

You could then teach two or three broad and more complex cases after all the lectures on the subject have been completed. The choice of how many cases to explore is yours and you should base it on factors such as students' interest, the availability of cases and the time required to present theory.

3.3 Structuring the case discussion

Case discussions depend upon the active and effective participation of students. Students must get involved and take the prime responsibility for their learning. In this respect there are various issues that students and lecturers need to consider in order to make a success of the case study approach. This section discusses five issues that are pivotal to this success: the relationship between the student and the lecturer; the leading questions that will direct the case study; preparation for the case study by teacher and students; the procedure for the case study; and closure.

The relationship between the student and the lecturer

> **TOP TIPS**
>
> At the beginning of the module, establish an explicit contract with the students by showing your expectations of their performance and yours.

The relationship between the student and the lecturer is vital to the operation of the case class. Both parties play an important role in making the case method successful, and both the students and the lecturer have duties and responsibilities. To show your commitment to students and to induce students to participate actively in the exercise, you can make an explicit contract with the students at the beginning of the module (see Shapiro, 1984).

The contract will describe how the teacher and students will be expected to behave with dedication, responsibilities, integrity and a commitment to excellence. Students should commit themselves to the '4 Ps' of the student involvement in case discussion:

- *Preparation*. If the student does not read and analyse the case, and then formulate an action plan, the case discussion will mean little.
- *Presence*. If the student is not present, she or he cannot learn and, more important, cannot add her or his unique thoughts and insight to the group discussion.
- *Promptness*. Students who enter the classroom late disrupt the discussion.
- *Participation*. Each student's learning is best facilitated by regular participation.

The students will, over time, grow to understand the importance of these four elements, but it is important that they are stressed early in the module. Your contractual responsibilities might typically include:

- careful and complete preparation for the classroom experience;
- concern and devotion to the students in all dealings;
- striving to make the course a satisfying development experience.

In general, the more you do, the more the students will do. By showing your commitment to the students, by being well prepared and by showing concern for the students, you will be able to extract a similar level of commitment on the part of the students. Nothing creates student commitment to preparation as much as having the instructor quote case facts, such as numbers, from memory in the first class. Students will generally prepare up to, but not beyond, the standards of preparation shown by the instructor.

Leading questions that will direct the case study

The central task in teaching a case is asking questions, to guide students' preparation, to guide discussion and to facilitate students' participation. They are your fundamental means of mediating your students' encounter with the case and managing their interaction. In planning case teaching, it is important to identify central aspects of the case and to formulate key questions that will direct students' investigation.

A case discussion requires just a few major discussion questions. Class sessions seldom afford time for more than three to five. Typically, they encompass defining the problem, selecting among action alternatives and reflecting more broadly on the situation. A typical sequence of questions would invite observation, analysis, prescription and then evaluation. Questions such as 'what stands out?', 'how does it fit together?', 'what should be done?' and 'what does it all mean?' help students to focus on their main objective and set the boundaries within which the discussion should be conducted.

Preparation for the case study by teacher and students

The foundation of good case discussion is preparation – the students' as well as your own (Hitchner, 1977; Zimmerman, 1985; Gomez-Ibañez, 1986; Lundberg, 1993). The contract that you agree with the students at the beginning of the module should emphasise the importance of discussion learning and clarify your view of the connection between their participation and their learning. You can use three common tactics for stimulating students' preparation:

- *Study question*. You can assign study questions to guide students' reading of the case with the aim of a) getting them to organise the information in the case for themselves, b) focusing on key discussion issues and c) beginning the analysis of those issues.
- *Encourage conversation*. You can encourage preliminary conversation of the case among students by organising study groups of five or six students or simply suggesting that students meet informally to talk about the case before class. Group work increases the incentives for

students to prepare individually and enables them to pool information and try out ideas. It also helps to build confidence for participating in class discussion.

- *Written assignment*. You can also ask the students to prepare a brief written assignment. The thinking required by a written piece of work usually results in a deeper discussion. You could, for example, ask the students to provide some tentative conclusions, as in a one-page memo from a policy adviser or a short economic report. You can then decide to collect this written assignment and make it part of the overall assessment, or simply use it as a means of giving feedback to the students. Writing encourages thinking and reflection.

TOP TIPS

You can use the communication facilities in a Virtual Learning Environment to stimulate discussion among students.

As part of your preparation for the case discussion you should consider the following:

- *Structured questions*. You could formulate questions to foster discussion and guide the students towards a full exploration of the case. You also need to master the information in the case.
- *Anticipate students' reactions*. List key facts and issues, outline the situation, summarise different actors' perspectives and consider alternative analyses of the problem as you prepare to react effectively to what your students say.
- *Organise the discussion*. Plan how you will display the students' analysis on the white boards and arrange the room, if you can, to enable them to see and talk directly to each other. Think in advance whether you want to stage any role-play during the discussion. Plan how you might open the discussion, which students you might ask particular questions and what transition you can make from one question to the next.

Example: teaching trade policy with the case method

This example is drawn from an article by Velenchik (1995) and shows how the case method is used at the beginning of a trade policy course. The course starts with a case discussion of a several-page transcript of the congressional testimony of the president of the National Association of Manufacturers of Scissors and Shears with regard to a proposed reduction in tariffs pursuant to the Trade Expansion Act of 1962. He argues that the tariff must be maintained, and his testimony in support of this belief includes both quantitative and qualitative data, as well as several attempts at analysis of the situation in the industry, not all of which are correct. He makes statements about the competition from German and Japanese industries, the employment consequences of tariff removal, and the importance of scissors and shears to the domestic economy. The case provides students with the opportunity both to evaluate the veracity of the testimony and to consider how they would go about deciding whether to maintain the tariff.

The students were given the case before the class discussion and they were encouraged to prepare some written analysis of it. These reports were not marked but students could receive informal feedback from the lecturer on request.

In the course of the analysis, students discover that their decision depends on the answers to some specific questions requiring knowledge and tools they do not yet possess. By the end of the class, students have produced a list of questions that usually include the following:

- What determines a country's trade pattern?
- Is free trade good?
- Who gains and who loses from trade?

- How do tariffs affect these gains and losses?
- What are the efficiency and equity trade-offs in making trade policy?

However, students do not usually generate these questions in this form. The class usually begins with a question like 'Why is the US scissors industry less and less able to compete with Japan and Germany?' and from there, with some gentle prodding on the lecturer's part, develop the more general form in the first question above. The case motivates students to learn theory, primarily because they wish to understand the case and evaluate the arguments presented in it. After the case, the lecturer gives a series of lectures on the basics of trade theory and the theory of commercial policy, making frequent references to the case and to the questions the students raised.

Procedure for the case study

The process of case discussion needs to be carefully structured and managed (Shapiro, 1984; Boehrer, 1995).

You need to provide the discussion with context and direction, draw your students into the case situation, keep their comments focused on the current question, help them develop their ideas, encourage their efforts and challenge their thinking, pull the strands of conversation together, and bring the whole exercise to some sort of conclusion.
Boehrer, 1995, p. 6

In managing the discussion process, you should consider the following issues:

- *Introduction*. It is a good idea to start framing the discussion with a few remarks that tie the case into the module and set an overall direction.
- *Role-play*. At the beginning of the session you can ask students to put themselves in the position of one or more of the economic agents involved in the case. Much of the power of the case to engage student thinking and generate learning through discussions lies in its being a real story that comes to life when students inhabit or take ownership of the situation and face the problem as if it were their own. You can decide to assign students to specific roles before class, but it can also help if you make them act spontaneously.
- *Generate participation*. Once the first question has been posed, it is your task to generate participation. You can use various techniques to stimulate discussion. You can invite a couple of students to open the discussion and give them time to think while you make your opening remarks. When they have commented, you can open the conversation to the rest of the class. Well-prepared students will volunteer while others will need to be called upon. Try not to surprise the students: make advanced eye contact; call them by name and ask a question that they can decline. You should spread participation around the room and be selective.
- *Active listening*. Your role as a listener in the discussion is a critical element in establishing the students' ownership of the discussion. You should limit your own comments during the discussion and you should be sure to listen hard and carefully to each comment. Your listening should be *active* insofar as it encourages elaboration, confirms your understanding and asks for evidence or illustration from the case. It is often necessary to act as interpreter to make what one student says clear or accessible to the rest of the class. You may also have to ask for the relevance of a comment, or remind the group what the current question is, in order to keep focus. You may want to probe a student's reasoning or assumptions, or challenge the thinking you hear. In order to encourage students to participate and to voice their ideas, you need to make sure that their interventions are respected and protected. Protection does not mean that standards are low and any idea is accepted and embraced. It does mean that such a comment is not ridiculed but is subject to positive, critical review, preferably by other students' comments.

- Use of the white board. You should record your students' contribution on the board. This will help them to track the discussion and help you to reflect their thinking. The board can also be helpful in occasionally summarising and assessing the students' progression. Use the board to list and prioritise topics and to compare and contrast contributions. The board might also be used for flow diagrams and tables that list advantages and disadvantages or arguments for and against a proposal. It is important for you to remember that the board provides students with important feedback by setting each contribution in context and by providing a critical review of the significance of comments.
- *Keep to the teaching plan*. Keeping your teaching plan in mind will alert you to openings to subsidiary issues and the next major question. By planning your questions in advance, you make a smooth transition between issues more likely. When an opening emerges from the discussion, you should decide how to proceed. If the previous issue has been well explored, you can briefly summarise it and continue the discussion of the new opening. Taking an opening when it comes helps to keep the discussion moving. On the other hand, if the previous issue has not been fully explored, you can acknowledge the opening and reserve it as the next step in the discussion after the conclusion of the present issue. When a spontaneous issue emerges, you can consider adjusting your teaching plan if you regard it as an important development in the discussion. Often some of the best discussions take their directions from student questions.

TOP TIPS

Use the board to clarify conflicts and issues. Do not use the board as a passive recording device.

Closure

It is important that at the end of the discussion you provide a structured closure. To be satisfying, the exercise requires some sense of completion, even if time runs short. One class seldom exhausts the possibilities of a good case. However, irrespective of the state of the discussion, you should reserve some minutes to end it.

The notes on the board can represent a starting point for your summary. You must be careful not to invalidate your students' work by presenting a solution to the case. Though good cases concern problems that have no single correct answer, some students feel 'lost' if they do not get a clear-cut answer to a problem. It is your task to make them understand that the most important aspect of the whole exercise is their ability to provide a structured approach to the problem. Whether the analysis leads them to one solution or another simply helps them understand how many real-world outcomes are determined by circumstances and other external factors.

A good summary of the discussion should also involve the students. If the discussion itself has generated new questions, it will be worthwhile to formulate them as an invitation to continued exploration. They may help you tie the case into upcoming classes. In general, however you end the class, a good sign of a successful case discussion is if your students keep talking about the case after its end.

3.4 What makes a good case?

Once you have decided to adopt the case method in your teaching, you need to find the cases to use in your classes. You have two options. You can use 'ready-made' cases supplied in textbooks or by academic institutions. Harvard Business School Publishing and the Case Program at the Kennedy School of Government are the natural places to look at for such cases. Suggested sources of available case studies are indicated in section 4.

Alternatively, you can decide to create your own case studies. As mentioned above, you can use a gradual approach and take newspaper articles as your starting point. Contacts with members of the business community, consultancies and research work in external agencies can constitute other sources of inspiration. Robyn (1986) discusses the core elements of a good case, and some guidelines to take into consideration when developing a case are summarised below:

- *Pedagogical utility*. The most important question you should ask yourself is: what teaching function will the case serve? What pedagogic issues will the case raise? Are those issues that cannot be raised equally well or better by an existing case? The rule of thumb for judging the pedagogical value of a potential case is: 'Every case needs a theory'. The corollary to this rule is that cases should not be thought of in isolation but rather as part of a module or course sequence.
- *Conflict provoking*. Controversy is the essence of a good case discussion: it engages the students; it forces them to analyse and defend their position; and it demonstrates to them that, while there are generally no right answers, there are certain questions that it is essential to ask. Most cases are fundamentally about something controversial: a policy over which people disagree; a managerial decision that involves difficult trade-offs; an ethically questionable business decision. In preparing your case, you can ask yourself the following question: 'Is this an issue about which reasonable people could disagree?'
- *Decision forcing*. Generally a case works better if it leaves decisions unresolved. That is, it is helpful if the case presents a choice or decision that confronts a manager or analyst without revealing what the protagonist did and the consequences of that action. A case that forces students to make a decision will prove more effective at getting them to take the first-person perspective rather than looking on from the outside.
- *Generality*. A measure of a good case is its generalisation to some larger class of economic or analytical problems. Usually, if a case is interesting because it is unique, it is probably not a very useful case pedagogically.
- *Brevity*. Cases that are too long and that contain too many facts tend to keep the discussion grounded in particulars. Thus, brevity is generally desirable.
- *Quantitative information*. The cases should contain quantitative information presented in a variety of forms, including tables, charts and graphs. Ideally, some of this information would be irrelevant, some would need additional manipulation in order to be useful and all would require significant interpretation beyond that provided in the text of the case.
- *Institutional and historical knowledge*. While the analysis of the case should require students to use theory learned outside the context of the case, it is important to select cases that do not require students to posses a large stock of institutional or historical knowledge. Usually, students have different backgrounds and cases that require previous knowledge tend to disadvantage students whose backgrounds are less comprehensive. However, if you decide to use such a case, make sure that you provide students with an accompanying handout, including definitions or some historical information if the case is incomplete.

3.5 Assessment within the case method approach

The case method does not provide any prescription about the strategy to use in assessment. For example, Carlson and Schodt (1995) report assessing their students through exam (70 per cent) and homework and case discussion (30 per cent). However, alternative strategies are feasible. In general, the issues raised in subsection 2.4 hold within the case method approach. However, given the particular importance of participation and class discussion for the case method, you should consider making class attendance compulsory and awarding grades for the level of class discussion.

You might also consider group work as a viable and effective way of developing both subject-specific and transferable skills. For example, groups of students could be given separate cases to investigate. Their findings could be summarised in a written report and presented to other students, who will have an opportunity to test their colleagues. This strategy will help students to develop an ability to work with others and to present in public, and it also encourages greater discussion among students.

3.6 The costs of adopting the case method

The pedagogical value of the case method has been discussed throughout the chapter. However, you must be prepared to face the following costs if you intend to introduce the case method in your teaching.

- *Class control*. The use of the case discussion means that you trade off considerable control over the class outcome for a dynamic, student-centred exercise. This can be problematic. By allowing students to express their ideas, the case method gives some students the impression that all ideas are equally good. It is up to you to guide the class through the process of distinguishing between good and bad ideas. Similarly, students do not always take away from the discussion the ideas one hopes. Even if this problem is common to other teaching methods, it is particularly evident in case analysis. However, a good closure at the end of the case discussion can help reduce or eliminate such a problem.
- *Preparation costs*. Preparing and conducting a case discussion tends to demand more energy and time than lecturing. It is still relatively difficult to find good cases in economics and instructors find they must spend time working them up themselves.
- *Students' preparation*. Students must prepare much more than they typically do for seminars and they must also take the risk of expressing their ideas in public and being willing for these ideas to be subject to critical review.
- *Breadth of curriculum*. Teaching cases takes time and it can lead to the elimination of some material from the curriculum that would have otherwise been presented. However, the experience from lecturers who have adopted the case method shows that while students tend to have a less thorough and detailed knowledge of models, they have a good understanding of the fundamental insights and basic mechanics of some central ideas in economic theory and are able to apply them to the analysis of policy. What they learn is not what we cover.
- *Colleagues' involvement*. The use of the case method in big modules where the teaching is shared among more than one lecturer requires that all those involved in the teaching share the same passion and belief in the method. Sometimes it can be difficult to find such co-operation. In this respect, it can be helpful to prepare relatively detailed teaching notes that simplify the work required by colleagues and promote consistency in the teaching approach.

4 Where next?

4.1 Suggested reading

The following are good sources of case studies in economics:

Gomez-Ibañez, J.A. and Kalt, J. P. (1990) *Cases in Microeconomics*, Prentice Hall, Englewood Cliffs, NJ.

Rukstad, M. G. (1992) *Macroeconomic Decision Making in the World Economy: Text and Cases*, 3rd edn, Harcourt Brace Jovanovich, Fort Worth, TX.

Yarbrough, B. and Yarbrough, R. (1991) *The World Economy: Trade and Finance*, Dryden Press, Hinsdale, IL.

Research and development of case studies is carried out by various associations, among which is the North American Case Research Association. Journals such as the *Case Research Journal*, the *Asian Case Research Journal*, the *Journal of Economic Education* and the *Journal of Education for Business* regularly publish articles on the case method.

4.2 Websites

The Harvard Business School Publishing, the Kennedy School of Government, the Darden Business School at Virginia University and the Richard Ivey School of Business websites contain extremely helpful material and information about the case method. You can access samples of their case studies by following the instructions on their websites:

Harvard Business School Publishing:
http://harvardbusinessonline.hbsp.harvard.edu/b01/en/cases/cases_home.jhtml

Kennedy School of Government Case Programme: http://www.ksgcase.harvard.edu

Darden Business School Case Programme: http://www.darden.virginia.edu/

Richard Ivey School of Business: http://www.ivey.uwo.ca/IveyPublishing/

The North American Case Research Association is dedicated to the development of case studies and the diffusion of the case method. It provides a gateway to other case resources and it can be found at: http://nacra.net.

The Economics LTSN website contains links to Web-based resources on the case method and it can be accessed at: http://www.economics.ltsn.ac.uk/teaching/casestudy.htm.

References

Becker, W. (1998) 'Engaging students in quantitative analysis with short case examples from the academic and popular press', *American Economic Review*, Papers and Proceedings, vol. 88, pp. 480–6.

Becker, W. and Watts, M. (2001) 'Teaching methods in US undergraduate economics courses', *Journal of Economic Education*, vol. 32, pp. 269–80.

Bloom, B. S. (Ed). (1956). Taxonomy of Educational Objectives Handbook 1: Cognitive Domain. New York: Longman, Green and Co.

Boehrer, J. (1990) 'Spectators and gladiators: reconnecting students with the problem', *Teaching Excellence*, vol. 2, no. 7, pp. 1–2.

Boehrer, J. (1995) 'How to teach a case', *Kennedy School of Government Case Programme*, case no. C18-95-1285.0.*

Bredon, G. (1999) 'Net news – old wine in a new bottle?', *Journal of Economic Education*, vol. 30, pp. 28–32.

Brown, J., Collins, A. and Duguid, P. (1989) 'Situated cognition and the culture of learning', *Educational Researcher*, vol. 181, pp. 34–42.

Carlson, J. (1999) 'A case method for teaching statistics', *Journal of Economic Education*, vol. 30, pp. 52–8.

Carlson, J. and Schodt, D. (1995) 'Beyond the lecture: case teaching and the learning of economic theory', *Journal of Economic Education*, vol. 26, pp. 17–28.

Gomez-Ibañez, J. (1986) 'Learning by the case method', *Kennedy School of Government Case Programme*, case no. N15-86-1136.0.*

Hitchner, S. B. (1977) 'Preparation of teaching notes', *Kennedy School of Government Case Programme*, case no. N14-77-189.0.*

Lundberg, C. C. (1993) 'A framework for student case preparation', *Case Research Journal*, vol. 13 (summer), pp. 132–44.

Robyn, D. (1986) 'What makes a good case?', *Kennedy School of Government Case Programme*, case no. N15-86-673.0.*

Shapiro, B. P. (1984) 'Hints for case teaching', *Harvard Business Schoo*l, 9-585-012.

Siegfried, J. J., Bartlett, R., Hansen, W. L., Kelley, A. C., McCloskey, D. N., Tietenberg, T. H. (1991) 'The status and prospects of the economics major', *Journal of Economic Education*, vol. 22, pp. 195–224.

Velenchik, A. D. (1995) 'The case method as a strategy for teaching policy analysis to undergraduates', *Journal of Economic Education*, vol. 26, pp. 29–38.

Zimmerman, P. B. (1985) 'Case development and teaching: communicating the results', *Kennedy School of Government Case Programme*, case no. N15-85-653.*

* available from Kennedy School of Government Case Programme:
http://www.ksgcase.harvard.edu.
available from Harvard Business School Publishing:
http://harvardbusinessonline.hbsp.harvard.edu/b01/en/cases/cases_home.jhtml.