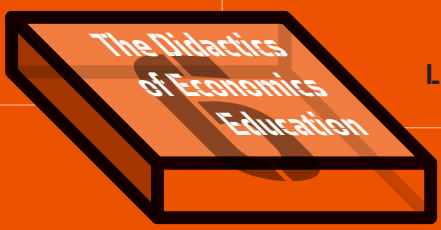
Foundation 6

The Didactics of Economics Education

Improving economics education is not only a matter of changing what is taught, but also how it is taught.

1
Communication and
Collaboration



2
Open and Critical
Discussion

3
Lively and Relevant
Education

Improving economics education is not only a matter of changing what is taught, but also how it is taught. A good course is more than just a good syllabus: it requires effective teaching. Most students will remember a good teacher making a horrible subject interesting or even fun to study, and vice versa.

There are many ways of teaching economics and we do not claim nor believe that there is one single best approach. While different situations and aspects of learning call for different techniques, there are three didactical issues that seem to be of particular relevance throughout economics education.

First, many studies have indicated that economics education could be improved by paying more attention to teaching students to communicate and collaborate. In addition, there have been worrying indications that economics education often fails to facilitate open, critical, but also respectful, discussions. Finally, more diverse and relevant formats of teaching and examining could be used to make economics education more lively and connected to the real world. Towards the end of the chapter, we also suggest useful resources that relate more specifically to varying the ways in which we teach, even if the content often remains the same.

"We make a crucial distinction between formal literacy, where the subject matter is a fixed body of knowledge which participants are encouraged to learn unquestioningly, and substantive literacy, where participants are encouraged to interrogate and critique the subject matter and develop their own independent judgements."

Joe Earle, Cahal Moran & Zach Ward-Perkins (2016, pp. 156-157)

We start this chapter with two non-specialist skills, communication and collaboration, which we believe deserve more attention in the curriculum. We then turn to the culture of our classrooms, arguing for a more open, less hierarchical style of teaching, which stimulates students to start thinking for themselves. Finally, we discuss the need to make the programme content more relevant for the students, and offer a variety of teaching and assessment techniques that help students to better master and retain the material.

1 Communication and Collaboration

Firstly, communication and collaboration skills are a crucial part of becoming an effective economist, as well as growing as a human being. A survey among Dutch professional economists found that being able to make economics simple and understandable is the second most important skill for a professional economist (van Dalen et al., 2015b). Multiple studies among UK employers also found that good communication and working well in teams are both vital skills for economists (O'Doherty et al., 2007; Pomorina, 2012; The Economics Network, 2015; Yurko, 2018).

Noting their importance, research also indicates that there is room for improvement in economics education in these areas. A study among UK employers of economics graduates summarised the need for better communication skills as follows (Yurko, 2018, p. 4):

"Although data analysis and IT abilities fared relatively well in terms of employer satisfaction, employers across all of the aforementioned surveys believed economics

graduates' communication and application skills needed further development. For example, 40% of the employers surveyed in 2012 believed economics graduate appointees had 'not very high' critical self-awareness, followed by inadequate written communication skills and the ability to apply what had been learned in a wider context.

While the prominence of these skills broadly reflects the priority given to generic competencies within the entire graduate employer population, the technical nature of economic analyses requires a particularly demanding set of communication abilities. This is illustrated by employers' focus on the communication of economic concepts and analyses to non-economist audiences, a requirement that emerged regardless of occupational sector, organisational size, or type of graduate job provided by their organisations."

This lack of communication skills can have severe consequences as it can lead to misunderstandings, misinformed decision makers and citizens, and a distrust of economists. A survey among UK citizens found that only 12% felt that *"politicians and the media talk about economics in a way that is accessible and easy to understand"* (Rethinking Economics & Ecnmy, 2018). Furthermore, only 25% of the UK public trusts economists, while 71% trusts scientists.

So what does this mean for the didactics of economics education? On a very basic level it simply means that students should learn how to communicate and collaborate, and practise this wherever possible. On a more detailed level, we suggest the following: written communication, oral communication, and practice.

Written communication

In a survey among employers of economics graduates, several respondents also emphasised the value of learning to communicate economic ideas to different audiences and in various styles of communication (Yurko, 2018). Economists frequently communicate in written form, so it is useful to learn how to write for different audiences. Currently, many programmes spend most attention on writing academic research articles. This is great, but it can also overshadow other forms of written communication that may be even more important for students, as most of them will go on to be professional economists rather than academic economists.

A better balance between various styles of writing might be found by assigning students to write practical reports that are commonly published by and within public and private organisations. Students could also be tasked to write pieces for the general public, like blogs, newspaper articles or columns. The goal here is not so much to learn how to write amazing stories, but rather to communicate to non-economists in a clear and accessible manner.

Oral communication

Besides written communication, oral communication is another very useful skill, also contributing to students' general cooperation skills. Again, there are various styles here: presenting for other economists, but also communicating with non-economists. Besides giving presentations, learning how to productively debate can be very useful. This is not only for those aspiring to go into politics: in virtually every field people discuss with each other what they could best do.

In general, it is important that students learn to communicate with different audiences, such as fellow economists, hands-on policy makers or private sector workers, and the general public. These groups require different styles and forms of communication with different levels of complexity and different foci. Policy makers and private sector workers may be mainly interested in practical applications and implications, while academic economists might be more interested in the analytical arguments and empirical procedures. As such, one has to change what one discusses when addressing an audience. Framing and choice of words are crucial here, as one British consultancy employer explained (Yurko, 2018, p. 8): *"...in particular [we're] looking for the ability to be able to explain economics to people who aren't economists. It's the ability to explain economics concepts without relying on economics jargon, using plain English, and being able to explain the intuition behind economic theory."*

Practise, practise, practise

A final suggestion. We believe that the best way to learn something is by actually doing it. In this case, it means actually communicating with different audiences. Of course, the teacher still plays an important role in this and the first times practicing can be in class with students among each other. But it can be very helpful for students to go out and actually communicate with policy makers, private sector workers, and of course members of the general public.

The latter is probably most easily achieved. An assignment might be to write or present something for some of their friends or family members. This allows the student to practise communicating about economic concepts with non-experts. A way to practise interaction with policy makers and private sector workers might be through exercises on actual cases the professional is currently working on. This way the students can actually help the professional, who in turn can be asked to assess and give feedback to the students, both on the content and way of communicating it. *Building Block 9, Problems & Proposals*, goes into this in more detail.

2 Open and Critical Discussions

Most economics professors are in favour of open and critical discussions. Nonetheless many have argued economics education could be more open and critical by allowing for more reflection and questioning of assumptions and arguments. As a British government employer argued (Yurko, 2018, p. 10): *"...it's that sense of critical thinking which doesn't always come through in economics degrees because, and I know I'm generalising, but there's a lot of assumptions or knowledge that aren't necessarily challenged quite early on in the economics degree. Which, I think, does make a better government economist if you're able to critically think through, for example, whether that neoclassical welfare framework is appropriate or not."*

Whenever an economic theory, model or perspective is being taught, the content should be presented critically. This means that instead of merely listing the assumptions of a theory, they should be discussed and challenged. When might these assumptions hold and when is the theory likely to be useful? This also means discussing the limitations of a model as well as how to solve the algebraic equations within it. How could students combine the outputs of the model with the context of the economy that they are studying?

Is it worth the time invested?

Because time available in class is normally fixed, we appreciate that more time spent being critical means less time available to teach technicalities and let students memorise content. For two main reasons we think the gains of this change are worth the cost. Firstly, learning is a process where knowledge is internalised and not only memorised. Critical thinking is a crucial part of this internalisation, as well as being vital to understand the logical connections between different ideas. This means that even though less time may be spent directly teaching content, students will still understand that content better by the end of the course. Second, critical thinking is necessary for students to actively use their newly acquired knowledge, by applying it to the real world. To make useful recommendations to decision-makers, economists need to be able to choose between competing ways of understanding the world, know how to contextualise the output of their chosen model(s) and understand the limitations of the methods that they have used.

However, there does not need to be a direct trade-off between time spent learning content and learning critical thinking. There are also ways to expand the time available for learning. Students should be encouraged to read material in advance of classes, so that their thinking and learning processes have already started. By the time they reach university, students

should be capable of learning much of the core content of their studies through readings, videos and other media on their own. This means that contact hours with staff such as lectures and tutorials can be reserved for the more complicated content, and for the development of critical thinking.

Another important aspect of being critical is being able to reflect and examine our own ideas and assumptions. A critical mind brings modesty through a better understanding of the limitations of theoretical and methodological tools. Students should be able to challenge and critically reflect on the topics that are being taught; and to think critically about their own understanding and opinions. Critical thinking skills are vital in order to arm students against biases and manipulation. These skills will empower the students to be more independent and creative in their thinking, the rewards of which will be greater success later on in their work life.

Classroom culture: authoritarian or open?

In our experience, it is powerful when teaching staff not only allow open discussions, but actively encourage them – allowing students to raise points, including those that run counter to the professor's personal beliefs. A crucial factor in this is awareness of hierarchical relations. The students are subordinate to the teacher and have (almost by definition) less knowledge and experience of the topics. Thus, unsurprisingly, many students are cautious to speak out and share their thoughts. This hesitation can be remedied by treating students with respect, especially when they dare to challenge the teacher's views. A more horizontal teaching dynamic will open up the space for students to be more proactive and critical towards the material they are being taught.

Unfortunately, the fairly harsh and direct debating style that seems to characterise the research side of the discipline can sometimes seep into teaching, resulting in a dismissive and authoritarian classroom style. It is a dangerous situation when a teacher uses the fact that they know best as justification to brush off counter arguments or critiques from their class. While the teacher will almost by definition know more about the topic at hand, this patently fails to create a suitable environment for students to query, interrogate and, by extension, understand what they are being taught. A telling example of this was given by Prof. Stephanie Kelton (2018, min 26-28), recounting an experience from her student days:

> *"When I was at [the University of] Cambridge and I was taking a graduate macro theory course … Willem Buiter is the professor, he is teaching IS-LM theory. So I am sitting there in this big class and there is nothing critical at all being said about this model … So I raised my hand and I posed some questions regarding loanable funds and money. And he [Willem Buiter] turned red in*

the face. That was not welcome and he looked at me and made an example of me in the class. He pointed at me and said: "If you are the type of person who thinks money is important, you are probably the same type of person who would enjoy beating yourself with the rubber hose." It was meant to put me in my place and to tell me there are things one does not talk about."

The point here is not this specific example, but rather how it reflects a broader concern about the classroom, and by extension the discipline; that it is not a space for open, engaged discussion (Fourcade et al., 2015; Wu, 2017). In a welcome development, various associations of economists have recently adopted professional codes of conduct to prevent such behaviour. And we hope this will also help prevent such behaviour in economics education.

It is important that teachers stimulate and facilitate discussions, rather than suppress them. And in such discussions it is key that everyone has a chance to speak up, so that they are not dominated by a handful of loud students. Diversity is often a challenge here: white people and men are often more comfortable being vocal than other groups. Students often feel that the bar for questioning the material being taught in economics is set very high. At many universities, it is extremely rare for economics students to raise their hands in a class, where many go through an entire degree without actively participating.

Teaching techniques that stimulate independent thinking

This is also related to how the subject is taught. Instead of teaching economics as a set of scientific facts, teachers could aim to bring up arguments that can be debated, encouraging students to participate in their own learning. Here it is vital that teachers ask open-ended questions that can open up the space for students to share their analytical reflections. In this way, teachers can work towards creating an open space for active discussion and joint learning.

A final dimension specific to economics is that one's mathematical skills are taken as a proxy for general intelligence. To be sure, mathematics is a very useful skill for economists: crucial in some corners of the profession, a useful adjunct in others. But rather than being treated as one of many kinds of knowledge students have to learn, it is often used as a selection mechanism, painting any student less talented in mathematics as unfit to be an economist and not to be taken as seriously in discussions. This is not right. The ability to think clearly is not by a long stretch the same as the ability to solve a mathematical equation.

3 Lively and Relevant Education

It is very important that economics is taught in a lively way with room for creativity and imagination, and which makes clear why its contents are so relevant. It is important to motivate and stimulate students to become engaged and interested in the topics that are discussed. This is especially important given the life stage people generally are in while studying.

Teaching a difficult audience

Academic students can be a challenging audience. Most students are fairly young when they start studying economics, between the age of 18 and 20. Frequently having moved to a new city, an unfamiliar world, they try to make friends, often already before the first day of the programme through introduction weeks and sometimes even more ritualised initiations. While entering this new environment, they slowly learn to become more independent, frequently living on their own for the first time.

In this stage of life between adolescence and adulthood, many students are strongly distracted by the freedom of student life, partying, drinking, and having fun with friends. For some, this leads to a minimum-effort policy in terms of studying. It can take great effort from academic teaching staff to get these students to study and focus on their programme. Teachers just have to hope that they have given these young people some valuable insights, knowledge and skills that will stay with them for (a bit) longer than until the exam.

Against this background, it helps when the teaching of economics is done in as lively, creative and clearly relevant a manner as possible. Below we give a number of suggestions on how to do so: make it relevant, and use diverse teaching and assessment methods.

Relevance

It is crucial that students understand why the material being taught is worth learning. If this is lost on them, motivation will quickly slip away. Unfortunately, it is no trivial matter to get students to grasp the relevance of every aspect of economics programmes. So how can we ensure that students realise why the material at hand is worth learning?

A first step is simply explaining: why are you teaching something? The first lecture of a course is a good time to do so: set out the various reasons why the contents of the course are relevant for the students to learn. Second, make frequent links to the real world. In *Foundation 3: Real-World* we suggest ways to do this, including the use of newspapers, blogs, guest lectures, visits to economic organisations, policy reports, and case studies.

Third, it helps when students develop a better understanding of how their professional future might look, and how this material would be useful then. This can be done by facilitating career orientation and personal self-reflection. Another way to help in this regard is making them more familiar with the roles economists play in society, through guest lectures, visits, and perhaps even more effective internships. Such an internship could be very big, being full time for half a year. But it could also be quite brief and small, for example being only one day a week lasting for a couple of months. These smaller internships are probably more suitable for earlier on in economics programmes, while the more extensive ones fit better at the end.

Diverse teaching and assessment methods

Besides helping students understand the relevance of what they are learning, it can help to experiment with different teaching and assessment methods, creatively using a broad range of different and active learning strategies and tools.

Research shows that active learning strategies, such as cooperative learning exercises, classroom experiments, and case studies, result in better learning outcomes, higher test scores and longer retention, especially when there is repetition in the content (Hoyt & McGoldrick, 2012, p. 331). So far, however, economics remains taught mainly through traditional lectures in which students are largely passive (Watts & Schaur, 2011).

As for different active learning strategies, well established approaches one might make use of are differentiated learning, vicarious or observational learning, problem-based learning, and blended learning. Each having different ideas about how differentiated or universal the teaching material should be, how active or passive students should be in class, how to use digital or physical experiences, and whether to focus on individual or group exercises. Differentiated learning, as the term suggests, believes in differentiation, meaning that students in the same class get different assignments, explanations and/or materials based on their personal interests, preferred learning styles, abilities and levels. Vicarious and observational learning focus on learning from the experiences of others and observing their behaviour, and can be done through guest lectures, field trips and exercises, and internships. Problem-based learning is about working through the processes of solving open-ended problems in small groups. Blended learning is about effectively combining online and in-person classroom education, enabling teachers to benefit from both their strengths. And there are many other useful approaches that teachers could benefit from, some of which are also covered in the resources described below.

It is also an option to involve students, particularly in more advanced courses, in the selection of the material. One could, for example, ask the students to select one piece, chapter or paper, on the economy, or specific topic at hand, that they find good or insightful and let them write and present a short introduction into the text for the rest of the class (Dow, 2009). Besides letting students participate in selecting teaching material, one can also ask them to come up with real-world examples that can help illustrate theoretical concepts. One could do this in class but also as an assignment, grading students based on how unique, well-chosen and explained the example is. And this brings us to the next point: assessment methods.

For assessment there are also many methods. A useful distinction is between formative and summative assessment, the former focusing on monitoring students' progress and the latter focusing on evaluating students' knowledge or skills. Examples of formative assessment methods are: rubrics, (active) participation in class, handing in weekly notes on readings, peer- and self-assessment. And summative assessment is often done with the help of written and oral exams, projects, and presentations.

It is important that assessment methods complement the students' learning process and their understanding of the economy. Examination methods where students are encouraged to cram are more likely to result in students forgetting the material they have been taught. Examples of this are time-constrained exams and non-open ended questions, frequently used in the UK (Earle et al., 2016). Assessment design should be made in such a way that fosters cognition and critical thinking, enabling students to apply their newly acquired knowledge in the real world. Moreover, this will contribute to rewarding the students that have spent time reflecting on the subject and demonstrates a better understanding of the material. We should see assessments as an integral part of the learning process, not only as a means in itself. They are a chance for students to spend time to think independently about what they have been taught.

Once you start redesigning the educational process, a wide field of unexpected possibilities opens up. Three interesting examples are service learning programmes, the Cusanus Hochschule and the Schumacher College. Service learning, as described in *Putting the invisible hand to work* by McGoldrick and Ziegert, is about using service activities in local communities to help students better understand the economy and develop their skills at applying this knowledge. An added benefit of this approach is that not only the students learn from their service activities, the local communities can also be strengthened by it and it makes economics more accessible and connected to citizens. Cusanus is a young and independent

academic institution in a small German town where most students live on campus only part-time, to attend the intensive block seminars which form the heart of its program. In these week-long sessions, topics are treated in context, including extensive exchanges between teachers and students and active group work. Schumacher students live on the (UK) campus full time, working together in other ways besides studying, such as growing 50% of their own food. Both of these institutions have economic questions at the core of their programmes, but actively interweave these with a broader set of social and ecological questions.

Resources

In this chapter, we hope to have flagged some important issues, but we fully recognize that more is needed to improve the didactics of economics education. Fortunately, there are many good resources that can help with this. Here we provide a short overview of useful books, journals, and online resources and communities.

Books

- *International Handbook on Teaching and Learning Economics* by Gail M. Hoyt and KimMarie McGoldrick, from 2012. A rich and useful collection of essays both on the content and didactics of economics education with chapters on case use, context-rich problems, cooperative learning exercises, improving classroom discussion, classroom experiments, interactive lecture demonstrations, just-in-time teaching, Socratic teaching, feminist pedagogy, economic blogs, integrating media and response systems, distance education, and using literature, novels, and poetry.
- *Teaching Economics: More Alternatives to Chalk and Talk* by William E. Becker, Michael Watts, and Suzanne R. Becker, from 2006. Another useful collection of essays focusing on moving away from traditional lecture and textbook based teaching with chapters on classroom experiments, cooperative learning, case studies, active learning techniques in large lecture classes, using digital technologies, team term papers and presentations, and, in our opinion very important and inspiring, having fun in the classroom.
- *Teaching Economics: Perspectives on Innovative Economics Education*, by Joshua Hall and Kerianne Lawson, from 2019. This more recent book on how economics can be taught is filled with concrete examples and exercises, explores new opportunities like using video games, music and medical experiences when teaching economics.
- *Putting the invisible hand to work: Concepts and models for service learning in economics*, by KimMarie McGoldrick and Andrea L. Ziegert, from 2002. This collection of essays introduces the reader to what service learning

is, explains why it can be useful, provides guidelines and resources, and gives examples of applications with chapters on land economics, forensic economics, access to health care, non-profit organisations, volunteer work, and a statistics course.

Journals

Besides these books, there are also useful academic journals containing a broad literature on the different ways of teaching economics. A useful literature review to start with could be 'Research on teaching economics to undergraduates' by Allgood, Walstad and Siegfried, from 2015.

Examples of journals on economics education are:

- The *Journal of Economic Education (JEE)* was founded in 1969 and is to this day an important journal for research on how economics is, and should be, taught.
- The *International Review of Economics Education (IREE)* was launched in 2003 by the Economics Network of the UK's Higher Education Academy and has since 2013 been published by Elsevier.
- The *Australasian Journal of Economics Education (AJEE)*, founded in 2004, has ten objectives, including improving the pedagogy of economics, the relation between teaching and research, and paying more attention to interdisciplinary issues, history, economic philosophy and implicit assumptions.
- The *International Journal of Pluralism and Economics Education (IJPEE)* was launched just after the start of the global financial crisis in 2009 to bring together a diverse community of scholars to investigate and share knowledge about how economics could be taught in a pluralist way.
- The *Journal of Economics Teaching (JET)* was founded in 2015 and focuses on innovating economics pedagogy and sharing insights to economics teachers at all educational levels.
- *Perspectives on Economic Education Research (PEER)* was launched in 2005 and has a strong tradition of research on active learning activities, such as experiments and case studies.
- The *Journal of Economics and Economic Education Research (JEEER)* was founded in 2000 and covers a broad range of issues, from micro- and macroeconomics to normative, environmental and financial economics.
- *Citizenship, Social and Economics Education (CSEE)* started in 1996 and has a broad focus on the role of social and economics education in society.
- The *Journal for Economics Educators (JEE)* was founded in the 1990s and is published online by the Tennessee Economics Association.
- The *Computers in Higher Education Economics Review (CHEER)* existed from 1987 to 2011, when it was incorporated into the IREE.

Online resources and communities

It can also be helpful to learn directly from other teachers and share experiences and insights with each other. Many countries have multiple didactical organisations as well as associations for economics teachers, especially on high school level.

- The American Economic Association, for example, provides an useful overview of teaching resources, ideas for classroom experiences and giving examples to illustrate concepts: https://www.aeaweb.org/resources/teachers
- Another useful source might be the UK-based Economics Network, which offers an enormous amount of sessions, advice and materials, such as the Handbook for Economics Lecturers: https://www.economicsnetwork.ac.uk/
- The Institute for New Economic Thinking offers a platform for exchange of academic teaching materials, discussion and peer-to-peer exchange at https://ineted.org
- Exploring Economics is an open access, e-learning platform on pluralist economics. Here you can discover and study a variety of economic theories, methods and topics. https://www.exploring-economics.org
- Economics Education offers a range of materials and links on the movement to make economics education more diverse and socially relevant: https://www.economicseducation.org
- Finally, using games and experiments to teach students about microeconomics, industrial organisation, game theory, behavioural economics and coordination and allocation mechanisms has become increasingly popular. A useful and interesting tool for learning more about this is Economics Games: https://economics-games.com/