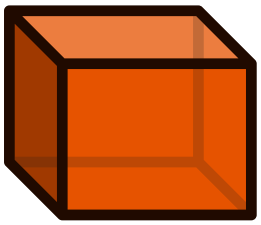
Economy Studies for Environmental Economics

New Ideas & Materials for Educators & Students



Economy Studies

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Rethinking Economics

OUR NEW ECONOMY

Amsterdam University Press

The book Economy Studies

This booklet is part of a series based on Economy Studies, a project for re-envisioning and redesigning economics courses and programs. The project emerged from the worldwide movement to modernise economics education, spurred on by the global financial crisis of 2008, the climate crisis, and the COVID-19 pandemic. It envisions a wide variety of economics graduates and specialists, equipped with a broad toolkit, enabling them to collectively understand and help tackle the issues the world faces today.

This is a practical guide for (re-)designing economics courses and programs. Based on a clear conceptual framework and ten flexible building blocks, this handbook offers refreshing ideas and practical suggestions to stimulate student engagement and critical thinking across a wide range of courses.

Key features

1 Adapting Existing Courses: Plug-and-play suggestions to improve existing economics courses with attention to institutions, history, values and practical skills.

2 Teaching materials: A guide through the rapidly growing range of innovative textbooks and other teaching materials.

3 Example Courses and Curricula: How to design pluralist, real-world economics education within the practical limits of time and resources.

What others say about Economy Studies

"A tremendous resource for both teachers and students of economics."

Prof. **Wendy Carlin** (UCL), director of the CORE Economics Education Project

"Based on a thorough analysis, the authors argue for a radical rethink of how economics is taught. Whether you agree or disagree with some of the specific suggestions, this book is definitely worth reading."

Claudio Borio, Head of Monetary and Economic Department at the BIS.

"This book is a tour de force. The mastery of the subject that the authors and their team display is astonishing. It was a source of inspiration for the development of the new program at the Vrije Universiteit of Amsterdam."

Prof. **Arjo Klamer** (EUR & VU)

Why this booklet

In this booklet, we provide suggestions, content and teaching material for how to modernise and enrich environmental economics courses. In doing so we hope to assist educators in improving and adapting the courses they teach, as well as helping students make suggestions for how this could be done. It is important to note that we pose all these suggestions as potential sources of inspiration, not a checklist of all the things that necessarily should be included. After all, there is a practical limit to what can be taught within a single course.

Other booklets in this series available via www.economystudies.com:

1 Economy Studies for Students
2 Economy Studies for Program Directors and Deans
3 Economy Studies for Secondary Education
4 Economy Studies for Business Schools
5 Economy Studies for Public Administration & Law Programs
6 Economy Studies for Economics 101
7 Economy Studies for Microeconomics
8 Economy Studies for Macroeconomics
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15 Economy Studies for Finance
16 Economy Studies for Monetary Economics
17 Economy Studies for International Economics
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19 Economy Studies for Behavioural Economics

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For ideas and materials on teaching students about normative principles and visions, take a look at the Building Block chapters.

To see what you can do to help modernize economics education at your own university, see the Conclusion.

Summary

"I don't care who writes a nation's laws, if I can write its economics textbooks."

Paul Samuelson

1 Rethinking Economics Education

Humanity is wealthier, more connected and more technologically advanced than ever. Access to healthcare is rapidly expanding and poverty levels keep dropping in most parts of the world. At the same time, societies around the globe are facing a multitude of challenges. To name a few: climate change, biodiversity loss and resource depletion, growing inequalities and power concentrations, economic instability and soaring levels of private and public debt, ageing and migration, social polarisation and rising authoritarian nationalist populism. And, back on the table since 2020: pandemics.

Tackling such challenges requires a deep comprehension of the economy, which the current system of economics education does not sufficiently provide. Economists need a real-world understanding of how various industries work, how they are intertwined with each other, how economic power works, what roles states play and how these are embedded in our society at large. It also requires open minds which can look at issues from a variety of perspectives. A single theoretical framework cannot provide the answers to every question. A range of approaches which prioritise different methodologies, assumptions, units of analysis and outcomes, is necessary for gaining a good understanding of the economy and its issues. Economists need to be able to think critically, select the tools which are most relevant for the context and problem at hand, and understand the limitations and uncertainties of the conclusions that they draw from them. Finally, it requires an awareness and an explicit discussion of the moral dilemmas and normative trade-offs involved in economic decisions. In short, economists have a lot on their plate.

Economists also have a lot of influence, for good and for bad. Firstly, as key policy experts and advisors, economists largely run many of the most powerful public-sector organisations in the world: central banks, ministries of finance, social and economic affairs, the IMF and the World Bank. In the private sector, economists co-direct the behaviour of banks and other large companies. Secondly, the economic ideas that float around most prominently in our society exert an influence far beyond the formal advisory reports of professional economists, guiding decision-making of citizens everywhere. Economic thinking influences even those who do not become economists, as economists have a central role in the public debate and many citizens are taught basic economics in secondary or tertiary education.

The growing societal importance of economists and economic ideas has sparked a lively debate around the content and structure of economics education. A worldwide movement of students and academics calls for more pluralist, real-world focused and socially relevant programmes that would enable economics graduates to better understand and tackle the economic issues that the world faces today. This movement has accelerated over the last decade, spurred on by the global financial crisis of 2008, the climate crisis and the COVID-19 pandemic.

Under names such as Rethinking Economics, Netzwerk für Plurale Ökonomik, Institute for New Economic Thinking (INET), International Student Initiative for Pluralist Economics (ISIPE), International Confederation of Associations for Pluralism in Economics (ICAPE), Diversifying and Decolonising Economics, Economists for Future, Reteaching Economics, and Oikos International, these groups come together for dissent, discussion, self-education, action, campaigning, disseminating ideas and engaging with wider audiences.

Research by these groups indicates that many current programmes are not sufficient to prepare students for their future roles in society. They are often organised around the notion of 'thinking like an economist': training students to think exclusively from the neoclassical perspective and having skills in econometrics, while neglecting other valuable theoretical approaches and research methods. Furthermore, these analytical tools are taught in an overly abstract way and are presented as being value-free.

These groups and others have also produced a growing amount of innovative teaching material, beyond how economics programmes are traditionally structured. From online educational resources such as the open access CORE project and the bottom-up e-learning platform Exploring Economics, to multiple new pluralist and real-world focused textbooks. Many departments have introduced a wealth of new courses, or even started entirely new programmes.

2 This Book: Purpose and Overview

What has been missing so far in this field is an integral approach for constructing economics curricula and courses. This book aims to fill that gap. We bundle the ideas and materials of renewal and reform into a coherent multi-level vision for economics education: its overarching structure, its goals and its principles. We also provide the concrete building blocks for this in terms of academic content, including detailed overviews of teaching materials and practical suggestions. Finally, we translate these to the level of actual programmes and courses, providing a wide range of practical tools for implementation.

This entire book carries a CC-BY Creative Commons licence, which means that any part of the book may be freely copied, redistributed, remixed, transformed or built upon, without restrictions. As such, our proposal for a new integral approach to economics education can also be adopted and used partially, rather than being accepted as a whole. Each idea and suggestion can be judged and incorporated independently. You can totally disagree with principle 1 yet support principle 3. Or you might find little value in building block 5 and yet fall in love with building block 9. That's the idea: it's modular. Thus, the book as a whole can be used as a source of inspiration and overview of options for improving and renewing economics education.

Part I: Foundations

The first part of the book, Foundations, sets out our philosophy and the three guiding principles that should underpin any economist's education. In contrast to the currently common approach of teaching students to 'think like an economist', the Economy Studies approach is this: We envision an education where economics is not centred on a specific method of analysis or thought, but rather centred on a study matter, the economy. Economies can broadly be described as open systems of resource extraction, production, distribution, consumption and waste disposal through which societies provision themselves to sustain life and enhance its quality.

Based on this philosophy, we formulate three principles: Pluralism, Real-World and Values.

First, a discipline centred around a single subject matter requires a plurality of theoretical frameworks: one

single set of basic assumptions is not enough to understand such a multifaceted subject matter. Here it is important that students learn which ideas are compatible with each other and which are in conflict with each other. Some of these theories fall within the current economic mainstream, others exist on its fringes, and yet others are currently at home in other disciplines. It also implies a plurality of research methods, from basic statistics and regression analysis to interviews, network analysis and survey analysis. Such pluralism means that there is no single dominant framework, which might be more difficult for those receiving economic advice, but is ultimately beneficial for the quality of analysis and the resulting decisions.

Second, the notion of a programme centred on the subject matter of the economy implies a continuous and conscious orientation towards the economy as it exists in the real world. Students benefit from studying practical questions and gaining concrete knowledge, not just abstract analytical tools. For instance: How is the German car industry structured? What hurdles does the global energy transition face? What happens at a central bank? The Real-World principle ranges from studies of economic sectors and key institutions in the local or (inter-)national economy, to the histories of economies and case studies of specific economic challenges.

Third, we draw attention to the wide variety of normative principles and visions that can guide economic decisions and action, and which are often subtly embedded in economic theories. There is little sense in trying to 'solve economics problems' without considering what things exactly are worthwhile or problematic, and what values are at stake. Profits, sustainability, power, equal chances, equal outcomes, job creation, labour conditions, ownership, accountability, GDP growth, wellbeing – what should we focus on?

Economics has historically been, and is still, dominated by upper- and middle-class white men based in the Global North. This has consequences for each of the three principles. In terms of Real-World, it is important to pay attention to the lived economic realities of working-class citizens, women, minorities, and those living in the Global South. For Pluralism, we need to incorporate often ignored but valuable ideas and contributions of lower class, female, and non-western scholars. For Values, it is key to realise that people from different backgrounds have different priorities and values, and work to ensure that these are reflected in the questions we focus on and the theories and methods we use. In sum, we need to diversify and decolonise economics education.

The Foundations part ends with a chapter on didactics. Improving economics education is not simply a matter of changing what is taught, but also how it is taught. Various surveys among employers of economists show that more attention for communication and collaboration skills is needed. There are also worrying indications that economics classes often fail to facilitate open, critical, but also respectful, discussions. Finally, to make economics education more lively, interesting for students and connected to the real world, a greater variety of teaching and examination methods could be used. On all these fronts we provide practical suggestions.

The second part of the book is devoted to the Building Blocks. Where the Foundations part discusses the purpose and principles of economics education in general, the building blocks are more applied: ten thematic areas of knowledge and skills, which form the meat and bones of the Economy Studies course design method. Each of the ten building blocks covers an area of knowledge and set of skills that we see as essential for the education of future economists.

Part II: Building Blocks

The second part of the book is devoted to the *Building Blocks*. Where the *Foundations* part discusses the purpose and principles of economics education in general, the building blocks are more applied: ten thematic areas of

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We start out with two building blocks that focus on acquiring basic economic knowledge, one conceptual and one focused on the real world. Introducing the Economy is about getting a feeling for economic matters, discussing what the economy is in the first place, why it is relevant, how it is related to other aspects of the social and natural world, and what societal roles economists have. Know Your Own Economy, on the other hand, has a more concrete focus as it is about knowledge of the actual (national and local) economy and its structures, institutions, and sectors.

The third and fourth building blocks deal with history: History of the Economy and History of Economic Thought & Methods. The fifth and sixth building blocks are more conceptually oriented, dealing with how economies can and have been organised, at micro and meso levels – Economic Organisations & Mechanisms – and at the macro level – Political-Economic Systems.

The seventh and eighth building blocks provide a broad and diverse analytic toolkit: Research Methods & Philosophy of Science and Economic Theories. These two, especially the latter, are relatively large. In most programmes, they will require more space than the other building blocks. Finally, building blocks nine and ten deal with practically contributing as an economist: Problems & Proposals is about analysing concrete economic challenges and formulating or evaluating proposed policies and actions, and Economics for a Better World asks how normative principles and visions can guide action to address the major challenges of our times, and helps students to be reflective of their own role as an economist

These building blocks can be used as templates to create stand-alone courses or modules, or they can be combined in courses. They can be re-ordered, combined or integrated in many ways to suit the specific needs of each programme. For instance, Building Block 3: Economic History could be taught as a stand-alone subject, or integrated with the fourth building block into a course History of Economic Thought and Reality, or integrated as a minor component in an existing Labour Economics course. In our ideal world, these building blocks would be combined to form a wide range of economics programmes. Different contexts and challenges require differently trained economists.

Part III: Tools

The third part of the book, titled Tools, provides material that is directly actionable. It starts with Pragmatic Pluralism, a suggested format (including references) for teaching theory in a pluralist manner without drowning students in the enormous diversity of ideas out there. We list thirteen core economic topics and set out for each topic the two main opposing perspectives, a key complementary perspective and additional insights coming from other approaches.

Often there is no space in programmes for completely new courses but there is room for adjustment in some existing courses. In Adapting Existing Courses, we offer ready-to-use sets of suggestions and material to do so, for courses like Micro, Macro, Public Economics and Finance. The Curriculum Review Tool offers a clear starting point for applying our building blocks to an existing programme. This tool helps identify possible blind spots of a programme and suggests ways to strengthen it. The Example Courses that follow illustrate how the building blocks can be used to create completely new courses. The next chapter maps out several complete Example Curricula, demonstrating how the building blocks might be combined to form a complete bachelor or master programme in Economics.

While this book is primarily oriented towards full economics programmes in academic education, in the chapter Courses for Non-Economists we suggest limited packages of core economic ideas that may be useful for business schools, secondary school economics programmes, in an academic minor or for self-study. Finally, Learning Objectives offers tools for designing the learning objectives behind economics courses, starting not from the question 'what does the teacher know best?' but from 'what do the students need to know, to be prepared for their future societal roles?'.

Part IV: Online Materials

Economy Studies is more than a book. On the website, we offer an extended version of the Pragmatic Pluralism chapter, a broader range of Adapting Existing Courses topics, additional Example Courses and Example Curricula. We also provide background material on each of the Economic Approaches described in this book, as well as neighbouring sub-disciplines such as economic sociology and economic geography. In addition, we provide a more complete overview and discussion of research methods, coordination and allocation mechanisms, and the history of economic thought and methods. Finally, we offer much more extensive lists of teaching materials for each of the building blocks.

Online, we also work together with the INET Education Program, at the Institute for New Economic Thinking. This platform will host free educational resources online, accessible to students, teachers and the general public. This includes video lecture series, syllabi, teaching modules, lecture notes, readings, sample quizzes and exams. The platform will also serve as a center to build up an online community of teachers and learners, working together to improve the way economics is taught and learned. Each of the chapters in this book has a discussion page on that platform.

What kind of graduates would a program based on these ideas and materials produce? It is important to acknowledge that they would not have all the skills that current-day graduates have. Less mathematical sophistication, less expertise in econometric analysis, less knowledge of neoclassical theory. In exchange for these losses, students gain: A deeper understanding and more concrete knowledge of the economy in which they live and will work. An awareness and understanding of the various ways in which economic processes can be organised at the micro, meso and macro levels. Practical skills for investigating and tackling questions of economic policy: understanding the context, choosing the right tools, from a variety of theoretical and methodological approaches. And the ability to argue morally as well as analytically, and to clearly distinguish the two.

With this *creative commons* work, we hope to inspire economists and all students of the economy to rethink how we learn economics. The economic challenges we face as societies are enormous, so we desperately need well-prepared economic experts and a citizenry able to participate in economic discussions. Economics education has the vital task of preparing these people as best as possible.

This booklet provides a preview of the *Economy Studies* project. The full book also includes the complete set of building blocks, additional teaching materials, a curriculum review tool, example courses and curricula and suggestions for learning objectives. If you are interested to learn more, visit our website and buy or download the whole book, open access, or contact us.
economy.st

Adapting Environmental Economics Courses

General Approach to Adapting Existing Courses

Change often happens incrementally and slowly. In the economics textbook market, for example, there is an unwritten rule that new textbooks cannot differ more than roughly 15% from the standard textbook in order to be 'acceptable' (Colander, 2003).

While our book clearly breaks this rule and proposes more far-reaching and fundamental changes in most chapters, in this chapter we focus instead on how existing courses could be adjusted incrementally. By doing so, we hope to assist educators in improving and adapting the courses they teach without needing to rip them up and start again, as well as helping students make suggestions for how this could be done.

First, we set out the typical contents of current public economics courses. Second, we provide our suggested additions and changes. It is important to note that we pose all these suggestions as potential sources of inspiration, not a checklist of all the things that necessarily should be included. After all, there is a practical limit to what can be taught within a single course.

Typical contents of current courses

Courses on environmental economics are generally organized around the neoclassical concept of externalities. In particular, they focus on how negative environmental externalities, whether it relates to local air or water pollution, natural resource depletion or climate change, can be internalized in market prices through taxes, tradable permits, and/or government regulation and control. Often the policy tool of cost-benefit analysis is taught as a way of assessing and comparing possible policy interventions. The history and current state of environmental agreements and policy are also frequently discussed, typically from a rational choice perspective.

Frequently used textbooks::

- Environmental Economics Theory and Policy by Alfred Endres
- Environmental Economics by Charles D. Kolstad
- Applying Economics to the Environment by Clifford S. Russell
- Environmental Economics Theory and Applications by Katar Singh and Anil Shishodia
- Natural Resource and Environmental Economics by Roger Perman, Yue Ma, James McGilvray, and Michael Common
- Natural Resource Economics: Conservation and Exploitation by Philip A. Neher

Suggested additions and changes

Practical skills and real-world knowledge

Like in public economics courses, environmental economics courses could benefit from including various policy tools besides cost-benefit analysis, such as risk-opportunity analysis and participatory evaluation. Furthermore, it can be useful to make students familiar with current environmental policies and institutions, as various courses already do. Here, it can also be informative to explore how policies do, or do not, make it

into reality through complex political processes involving politicians, corporate lobbyists, NGOs, activists, scientists, and citizens.

For more detail, see Building Block 2: Know Your Own Economy and Building Block 9: Problems & Proposals.

Teaching Materials

- Environmental Policy: An Introduction by Barry C. Field, from 2007. This accessible book introduces students in a systematic way to the different environmental policy options, domains and actors.
- Environmental Policy by Jane Roberts, most recent edition from 2011. This multidisciplinary introduction explores what causes, or prevents, effective environmental policy at the level of the firm, nation state and international level.
- To introduce the policy tools, reading materials can be of use, but they will probably have the most lasting impact when combined with practical exercises in which students have to apply the tools themselves. For cost-benefit analysis, a useful book is: Cost-Benefit Analysis: Concepts and Practice by Anthony E. Boardman, David H. Greenberg, Aidan R. Vining, David L. Weimer, most recent edition from 2018. For participatory evaluation, the following book can be of help: Participatory Evaluation Up Close: An Integration of Research Based Knowledge by J. Bradley Cousins and Jill A. Chouinard, from 2012. Risk-opportunity analysis is newer and has yet to be explained in a textbook, but an useful working paper explaining the tool and providing examples of applications is: Risk-opportunity analysis for transformative policy design and appraisal by Jean-Francois Mercure, Simon Sharpe, Jorge Vinuales, Matthew Ives, Michael Grubb, Hector Pollitt, Florian Knobloch and Femke Nijsse, from 2020.

A range of analytical tools and approaches

The concept of externalities is crucial for students to learn, as are the broader insights from neoclassical economics on nature. Environmental economics courses could, however, be enriched by also including different ideas coming from ecological, classical and institutional economics. Ecological economics conceptualizes the economy as being embedded within nature and argues natural capital cannot be replaced by other forms of capital. In this way, it comes to different ideas than neoclassical economics about how the economy should relate to nature and what policies should be pursued. Rent has long been a central concept in economics and it is important that students learn about the different ideas about value creation and extraction that have characterized economic thinking. This can also help them better understand the economics of land and housing of today. Finally, institutional economists, such as Elinor Ostrom, have analysed when and why natural resources are managed successfully as commons. This work gives students more insight in what institutional arrangements are possible and what aspects are most relevant for their success or failure.

For more detail, see Building Block 7: Research Methods & Philosophy of Science, Building Block 8: Economic Theories and the section Nature in the background material Pragmatic Pluralism.

Teaching Materials

- Handbook of pluralist economics education by Jack Reardon, from 2009, chapters 12 and 15. This useful book on how to diversify economics programs, includes two chapters full of ideas and suggestions for courses on sustainability and green economics.
- Economics After The Crisis by Irene van Staveren, from 2015, chapter 13 This well-written textbook sets out the neoclassical, post-Keynesian, social economic and institutional perspectives on nature.
- Introducing a New Economics by Jack Reardon, Maria A. Madi, and Molly S. Cato, from 2017, chapter 3. This ground-breaking textbook introduces the environment, resources and sustainability and weaves together pluralist theory and real-world knowledge.

- The Economy by The CORE Team, from 2017, chapter 20. This successful textbook provides an introduction into economics of the environment.
- Principles of Economics in Context by Jonathan Harris, Julie A. Nelson and Neva Goodwin, most recent edition from 2020, chapters 13, 21, and 33. This useful textbook, which pays particular attention to social and environmental challenges, devotes three chapters to the environment, broader measurement, and sustainability.
- The Handbook of Economic Sociology by Neil J. Smelser and Richard Swedberg, from 2005, chapter 30. This extensive and yet accessible book for non-sociologists, provides an impressive and useful overview of the field of economic sociology, including a chapter on the economy and the environment.
- Polycentric systems for coping with collective action and global environmental change by Elinor Ostrom, from 2010. This article, written from an institutional perspective, argues for tackling climate change on multiple scales and levels, rather than focusing only on global efforts, as this can prevent inaction and allow for more experimentation and learning.
- A review on circular economy: the expected transition to a balanced interplay of environmental and economic systems by Patrizia Ghisellini, Catia Cialani, and S. Ulgiati, from 2016. This article provides an overview of the literature on the circular economy.
- Rethinking the Economics of Land and Housing by Josh Ryan-Collins, Toby Lloyd, and Laurie Macfarlane, from 2017. This accessible book introduces students to classical and modern theories of land and housing, including concepts as economic rent and financialization.
- Environmental and Natural Resource Economics: A Contemporary Approach by Jonathan M Harris & Brian Roach, from 2002. This textbook introduces students to the neoclassical and ecological approaches to nature and environmental issues.
- Ecological Economics: Principles And Applications by Herman E. Daly and Joshua Farley, from 2003. This textbook introduces students to ecological economics and the economics of nature and resources.
- Dimensions of Environmental and Ecological Economics by Nirmal Chandra Sahu and Amita Kumari Choudhury, from 2005. This collection of essays provides an overview of the neoclassical and ecological theories of nature and the economy.
- Routledge Handbook of Ecological Economics: Nature and Society by Clive L. Spash, from 2017. This collection of essays introduces students to variety of theoretical approaches to nature and the economy, from ecological and neoclassical economics, to institutional, feminist, Marxian, post Keynesian and evolutionary economics.

Institutions and different ways of organising the economy

The core question in environmental economics is what economic structures and policies can best tackle environmental problems. As such, it is crucial that students learn about the different possible structures and policies. Here there is also a strong link with theory as each theoretical approach has its own specific focus. Ecological economics stresses the importance of reducing material consumption and direct regulation. Neoclassical economics, instead, favours market-based policies to 'get the price right' in a static framework with a Coasean emission trading scheme or a Pigouvian carbon tax. Complexity economics, in contrast to neoclassical economics, focuses on system dynamics and how targeting tipping points and feedback loops can help solve environmental issues. Evolutionary economists emphasized the importance of innovation and research into clean technologies. Keynesian economists advocate for green industrial policy and government spending to achieve sustainable production processes and consumption. Institutional economists have investigated which institutional structures can prevent tragedies of the commons, thereby providing an alternative to market and state-based solutions to environmental problems. Finally, for more business and individual firm oriented classes, ideas surrounding sustainable and/or circular business models are highly relevant.

For more detail, see Building Block 5: Economic Organizations & Mechanisms and section Nature in the background material Pragmatic Pluralism.

Teaching Materials

- Governing the Commons: The Evolution of Institutions for Collective Action by Elinor Ostrom, most recent edition from 2015. A sharp and rigorous discussion of commons, how they are different from markets and hierarchies, how we should theorize them and real-world examples that help us better understand how they can be successful.
- Environmental and Natural Resource Economics: A Contemporary Approach by Jonathan M Harris and Brian Roach, from 2002. This textbook introduces students to the different institutional and policy options to achieve sustainability, from commons and property rights to environmental accounting and trade agreements.
- Routledge Handbook of Ecological Economics by Clive L. Spash, from 2017. This useful collection of essays explores the different perspectives on tackling environmental issues, various policy challenges and visions for a sustainable economy.
- Economics and Politics of Climate Change by Dieter Helm and Cameron Hepburn, from 2009. This informative collection of essays introduces students to the key international players, low-carbon technologies, and policy instruments.
- Foundations of Sustainable Business: Theory, Function, and Strategy by Nada R. Sanders and John D. Wood, from 2014. This book introduces students to questions related to sustainability and business, management, finance, accounting, and marketing.
- Sustainable Business Models: Principles, Promise, and Practice by Lars Moratis, Frans Melissen, and Samuel O. Idowu, from 2018. This collection of essays explores the different ideas and cases of sustainable business models.
- Business Models for the Circular Economy: Opportunities and Challenges for Policy by OECD, from 2019. This report explores circular business models and their scalability, as well as their environmental impacts and related policy implications.
- Circular Business Models: Developing a Sustainable Future by Mats Larsson, from 2018. A book on how to make businesses and economies circulair, with attention to different aspects, sectors and potential solutions.

Societal relevance and normative aspects

While environmental economics courses should focus on the economics of the environment, it is crucial that students have basic knowledge about environmental issues. Without being familiar with issues, such as resource depletion and biodiversity loss, one could, for example, be unaware of negative side-effects of attempts to tackle climate change by simply replacing all gasoline cars with electric vehicles.

Besides this basic natural scientific knowledge, knowledge about normative perspectives on environmental issues is critical. Here one can teach students both about abstract ethical discussions as well as concrete political struggles related to the environment, preferably connecting the two.

For more detail, see Building Block 1: Introducing the Economy and Building Block 10: Economics for a Better World.

Teaching Materials

- Environmental Politics: A Very Short Introduction by Andrew Dobson, from 2015. This brief and accessible book introduces students to the politics surrounding environmental issues, with attention for key ideas and movements as well as geographical differences and visions for the future.
- Climate Change: A Very Short Introduction by Mark Maslin, most recent edition from 2021. This concise book helps students understand what climate change is, what its causes are, what current state of knowledge and research is, and what potential solutions are.
- The Routledge Handbook of Ethics and Public Policy by Annabelle Lever and Andrei Poama, from 2019, chapters 38-39. This useful collection of essays treats many different aspects of the ethics of public policy, including two chapters on development and climate ethics, and the ethics of waste policy.
- The Oxford Handbook of Ethics and Economics by Mark D. White, from 2019, chapter 25. This extensive collection of essays explores the many moral dimensions of economics, including a chapter on the ethics and economics of ecological justice.
- The Oxford Handbook of Professional Economic Ethics by George F. DeMartino and Deirdre McCloskey, from 2016, chapter 9. This insightful collection of essays explores the different aspects of ethics in economics, with one chapter devoted to the ethics of environmental economics.

History

Many scientists have argued we currently live in the Anthropocene, an geological epoch in which human (economic) behavior is a key force shaping Earth's natural systems. Learning about (economic) environmental history can enable students to put the current situation into historical context and better understand its origins.

For more detail, see Building Block 3: Economic History.

Teaching Materials

- Climate Change in Human History: Prehistory to the Present by Benjamin Lieberman and Elizabeth Gordon, from 2018. This book introduces students to the (recent) history of climate change, with attention to the rise of agriculture, civilizations, the Little Ice Age, industrialization and accelerating climate change.
- Fossil Capital: The Rise of Steam-Power and the Roots of Global Warming by Andreas Malm, from 2016. This well-written book provides a fascinating economic history of energy and how it transformed the world.
- The Economics of Global Climate Change: A Historical Literature Review by Leo Dobes, Frank Jotzo and David I. Stern, from 2014. This review article describes how the economics of climate change has evolved over time.
- Climate Change and the Course of Global History: A Rough Journey by John L. Brooke, from 2014. This impressive book discusses how the earth and humans evolved throughout history, from human emergence and the agricultural revolutions to the industrial revolutions and modern Anthropocene.
- Economic Development and Environmental History in the Anthropocene: Perspectives on Asia and Africa by Gareth Austin, from 2017. This insightful collection of essays introduces students to the historical interaction between the environment and the economy in Sub-Saharan Africa, South Asia, Southeast Asia and East Asia.

What to take out

To create space for the above suggested additions, we advise to focus more on the key ideas and intuitions behind the taught models and devote less teaching time to their technicalities and mathematics. As teaching students to reproduce and work through mathematical models often takes up a large part of the teaching time, this would give the teachers the opportunity to devote more time to practical knowledge, the relevance, institutions, and history. Furthermore, a more even balance between neoclassical economics and other economic approaches could be achieved by decreasing the number of neoclassical ideas and models that are taught.

Pragmatic Pluralism: Overview

Key insights and ideas for thirteen core topics in economics, organised by selecting the most relevant theoretical approaches per topic and contrasting them with each other.

This chapter provides a map through the complex jungle of economic theories. There are many different theoretical approaches, and each aspect of the economy has been analysed by a number of different ones. However, it is neither feasible nor productive for students to engage with every possible angle for every topic. Hence, this chapter, together with *Building Block 8: Economic Theories*, sets out an alternative approach: pragmatic pluralism. That is, make a selection of the most relevant theoretical approaches for the topic that is taught.

The building block chapter sets out the general approach of *pragmatic pluralism* (see economy.st/bb8). This chapter instead focuses on the content, applying the pragmatic pluralism approach to several of the core topics in economics. The full chapter (see economy.st/pragmatic) covers the following thirteen topics:

1 Governments
2 Business Cycles
3 Consumption
4 Economic Development
5 Finance
6 Firms
7 Households
8 Inequality
9 International Trade
10 Labour
11 Markets
12 Money
13 Nature

To reiterate, the core logic of this approach to teaching economic theory is that whilst pluralism is an essential aspect of academia, we also need to be pragmatic to successfully apply it in practice. Rather than pursuing the extreme of either only focusing on one approach, or including every possible strand of thought for every topic, we propose a pragmatic middle ground: teaching a select number of approaches for each topic. In this way, it is possible to introduce students to the variety and diversity of economic thinking, whilst still having enough time and space to properly discuss each of the insights in detail with them.

"Reasonable people may have different theories of the way the economy works – different pictures in their heads of what connects one thing with another in the economic system."

Solow (1983, p. 67)

Theory is the beating heart of all social sciences, including economics. It allows one to understand the components, processes and causal mechanisms characterising various social phenomena in a more structured and systematic manner. However, every topic can be understood from various theoretical perspectives, which can both complement and contradict each other.

Most contemporary economics programmes focus almost exclusively on neoclassical theory. In opposition, some other programs choose to focus entirely on another perspective. We believe, in contrast to both, that there is no single 'correct' or 'best' way to understand the economy as a whole. It is too large and complex to be captured by a single point of view.

Hence, we propose a fundamentally pluralist approach to teaching theory. It is essential to teach students a variety of approaches to give them a rich and broad understanding of the topic, the debate around it and learn to think critically and not to take things as absolute truths. Approaches should be judged on their merits, topic by topic: thinking critically and reflectively to decide which theoretical points of departure help us best to understand this particular corner of the economic system.

Including this pluralist discussion is crucial for the development of students' vital critical thinking skills, through the investigation of links and contradictions between the insights learnt. For a pluralist economics education to be truly valuable, students must graduate not just with strong knowledge of a range of perspectives and methods, but also with a critical understanding of the limitations and blindspots of those tools. Without this, they will struggle to select the most relevant approaches to the task at hand, and to judge how much confidence to have in the conclusions that they reach. Active discussion also has the additional benefit of making sure that students are genuinely understanding the content taught to them, rather than just temporarily memorising it for an exam.

In Practice

So how does this approach work when applied to a topic?

Each topic is subject to debate between alternative views, and to make students familiar with these competing theories, for every topic the two main opposing perspectives are selected. But not all differing ideas and theories are necessarily in conflict with each other. There are also approaches which can supplement one, or both, of the main opposing perspectives, contributing to a richer understanding of the topic. Therefore, each topic also contains one main complementary perspective. On top of these three main theoretical approaches, there are many other useful ideas that students could benefit from by learning about. For this reason, we provide a short summary of other useful insights and ideas that could be included for each topic.

For each topic, we suggest a few particularly useful teaching materials. In the resource chapter *Teaching Materials*, we provide longer lists of suggestions.

The topics presented below could be, and often already are, taught in individual courses. They can also be combined, especially when there is significant overlap such as with Finance and Money for example, although this does of course shorten the teaching time that can be devoted to each topic and its insights. As to determining the relative teaching time to the various perspectives, the following rule of thumb could be useful: the first half of the course is devoted to the two main opposing approaches, the third quarter to the complementary perspective and the last quarter to the other useful insights. As with every rule of thumb, the specific case and context should be taken into account and we advise teachers to determine the relative teaching time devoted to each insight taking the local situation into account.

Cautionary Notes

Before we go into the specific ideas and insights, we want to provide a short recap of the cautionary notes, which are described in full in *Building Block 8: Economic Theories* (see economy.st/bb8).

Firstly, the following overview should be viewed as only one possible example of a pragmatic pluralist approach to teaching economic theory. An overview such as this one should never be set in stone, as the discipline itself is also constantly evolving. While some approaches, such as complexity economics, currently have relatively few insights listed in the overview, this might change over the coming years as more scholars will further develop this approach and apply it to different topics.

Secondly, the overview could easily be expanded to allow for more detail and nuance or a wider range of perspectives or topics. The examples have been written to suit the time constraints of an individual module. The framework could be adapted for a relatively brief programme, such as an economics major in a liberal arts programme, by selecting fewer perspectives for each topic and including fewer topics and possibly combining them into individual modules. Equally, if the available teaching time is greater, for example with a theory-oriented four year undergraduate economics programme, more topics, insights and a greater range of perspectives could be included.

Thirdly, our economics education and own reading has shaped the topics and perspectives that are presented below. This is greatly influenced by living and studying in the Netherlands, and Europe more broadly, and the strong bias in the discipline as a whole towards economic thinking from the Global North. We strongly believe that economics curricula need to be decolonised and with this book we try to contribute to this. To help us do so, we have asked students and professors from all over the world, as well as organizations active on this issue, such as *Diversifying and Decolonising Economics*, for advice. Nevertheless, it is important to say that this is not an area that we personally have particularly strong knowledge in and feel that more could, and should, be done in this regard. We therefore welcome all suggestions on how the content in this chapter, and the rest of the book, could be enriched and improved by including other topics, perspectives and insights.

Finally, this technique of putting approaches as well as topics in separate boxes is only a heuristic for identifying the most important ideas and insights to teach. Many of these approaches and topics are strongly interlinked and can be difficult, or even impossible, to truly separate from each other. As a result, individual thinkers and their ideas can be difficult to put into a single box. For instance, Joseph Schumpeter built on classical, historical, Marxian, Austrian and neoclassical ideas, and is often seen as a key inspiration for evolutionary economics, which is therefore also sometimes called Schumpetarian economics. It is important

that students learn about these links and become familiar with how both the ideas and the topics are connected.

With these cautionary notes in mind, we hope this overview can be of some help in putting the pragmatic pluralist approach in practice and adapting economic theory courses.

Core Theoretical Insights Organised by Topic

Below we have put the thirteen economic topics (along the top) and sixteen theoretical perspectives (down the side) in a table to give an overview of how our pragmatic pluralist approach works.

It would be possible to fill in every box (representing a combination between a topic and an approach) to create what could be described as 'indiscriminate' pluralism. We think that for research purposes, such an approach could be very useful as it could generate new insights by utilising approaches previously not applied to a topic. However, for education we would not advise such an approach, as it would be impossible to teach every possible perspective on a given topic in a meaningful way, given the limited teaching time available. Instead, we advise teachers to focus on the main insights into their chosen topic. In other words, when teaching an economics course, they should focus on the combinations of the topic and perspectives that are most important. For every topic, we have noted to the two main opposing perspectives with ■, the main complementary perspective with □, and the perspectives that can provide smaller but still valuable additional insights with +. In this way, many boxes stay empty. This does not mean that the perspective has nothing to say on the topic, as it often does. But economics education requires us to make choices as to what to teach and what not. In this overview, below we have presented an attempt at making such choices, asking which insights help us understand the world the most. Sometimes there are cases in which perspectives share a certain insight. This is discussed in the explanations of the insights, but for brevity each insight is attributed to a single perspective in the table.

	Governments	Business Cycles	Consumption	Economic Development	Finance	Firms	Households	Inequality	International Trade	Labour	Markets	Money	Nature
Austrian School	+	■						+			+	■	
Behavioural Economics	+			+	+			+			+		
Classical Political Economy	+			■		+					■		□
Complexity Economics	+				□			+					
Cultural Approach					+		□			□	□	□	
Ecological Economics			□	+									■
Evolutionary Economics	□			+		□							
Feminist Economics							■	□		+			
Field Theory						■					+		
Historical School	+			■								+	
Institutional Economics			■	□		■							+
Marxian Political Economy	+	+		+			+	■		■			
Neoclassical Economics	■	□	■	+	■	+	■	■	■	■	■		■
Post-Keynesian Economics	■	■			■			+	■			■	
Social Network Analysis						+				+			
Structuralist Economics				+					□				
Other	+		+			+		+	+				+

■ Main opposing perspective
□ Main complementary perspective
\+ Additional perspective

Pragmatic Pluralism 13: Nature

As human beings we are only one form of life living on this planet. In the early history of humankind this meant that we had to adapt to our environment. Later, we learned how to adjust our environment to serve our needs. This process has gone so far that many scientists have proposed naming the current ecological era "the Anthropocene", implying that human beings are currently the main cause of changes in the Earth's natural systems. But how can we best understand the relationship between humans, their economic activities and the natural world around them? How does nature influence the economy and what role do natural resources and land play in the economy? And currently also very important: how does the economy influence nature?

Main opposing perspectives

- ■ Ecological economics: The economy is embedded in nature
- ■ Neoclassical economics: Natural resources are key inputs for production

Main complementary perspective

- □ Classical political economy: Land and natural resources generate rent

Additional perspectives and insights

- \+ Institutional economics: The tragedy of the commons can be overcome
- \+ Other: Policy ideas to tackle climate change

Main opposing perspectives: Ecological and neoclassical economics

There are roughly speaking two conflicting perspectives on environmental issues, an extractive and an embedded view. The former view, held by neoclassical economics, often called environmental economics, thinks of nature as natural resources which should be extracted to maximise utility. Environmental problems are seen as externalities which should be addressed through efficient government intervention. In this line of thinking, the monetisation and marketisation of nature poses no problem. Instead, it is often thought to be the solution to environmental issues, as monetisation internalises nature into market decision making. Emission trading schemes, for example, give companies the right to buy and sell permits to pollute and damage the earth.

Ecological economics, on the other hand, argues that the environment in which societies and their economies are embedded is central to their functioning. In this view, capturing ever more of nature into economic processes poses a problem, as it will likely destroy the nature on which the economy is dependent. Ecological economists thus argue to consider the limits of the physical world when setting economic goals, such as growth. This leads to what is called strong sustainability, which argues that natural capital cannot be replaced by other forms of capital. In contrast, environmental economists argue for weak sustainability, the idea that growth in human capital can substitute for the shrinkage of natural capital.

Main complementary perspective: Classical political economy

Nature and the land were historically at the core of economic thinking and attention has shifted back in this direction recently, mainly because of the climate emergency. In the 18th century, French Enlightenment thinkers believed that all value originated from nature through agriculture, and their approach was therefore called physiocracy, from the Greek for "government of nature". All other sectors were thought only to be able to reproduce the value put into it. Classical political economists build on these ideas, but argued that manufacturing also creates value. Both physiocrats and classical political economists, however, agreed that the

landowners extracted value from the economy by collecting rent on the land they owned. Collecting rent was seen as value extraction because the landowners, in contrast to the agricultural workers, contributed almost nothing to the production process. Hence, the term to refer to striving for unearned income in general, bears the name rent-seeking. The concept of rent-seeking has also been applied to finance, intellectual property, platforms, contracts, infrastructure and natural resources. The concept of rent in the classical tradition is somewhat distinct from the neoclassical understanding, as the former refers to unearned income coming from the ownership of a scarce asset without engaging in value creation and the latter refers to excess profits above the normal level thanks to preventing market competition. In neoclassical theory and spatial economics, land has been central to location theory which tries to model 'optimal' locations for economic activities.

Based on the classical ideas, Henry George argued that unearned income coming from land ownership should be taxed as its value belongs equally to all members of society, not only its owners. In Rethinking the Economics of Land and Housing, Josh Ryan-Collins, Toby Lloyd, and Laurie Macfarlane analyse how the role of land and housing has changed over time, up to the present day. In doing so, they point to the changing use of land and its financialization as important recent developments. There is considerable debate about how widespread rent-seeking is in today's economies and what the government, and competition authorities in particular, should do about it.

Additional perspectives and insights

Institutional economics: An important topic within ecological and environmental economics is the commons, which are resources and land that are held in common, instead of being owned and controlled by individual private actors or a state. Research on this topic builds on ideas, such as primitive accumulation by Marx and fictitious commodities by Polanyi. A recent important contribution is by Elinor Ostrom, who analysed how and why commons can operate successfully. This is in contrast to the neoclassical idea of the tragedy of the commons, which argues that commons will fail and should be commodified because it is in the self-interest of individuals to deplete shared resources, overcoming the so-called collective action problem. Ostrom shows how communities prevent such resource depletion with the help of informal norms and social practices. Furthermore, she argues that local discussions and meetings can generate more awareness and senses of shared responsibility about ecological issues, triggering more sustainable behavior without market and state action.

Other: Policy ideas to tackle climate change

As the understanding of the urgency of the climate crisis was growing, an increasing number of economic approaches have been developing ideas on how to tackle it. The ecological approach emphasizes the need to reduce material consumption and engage in direct regulation. The neoclassical approach focuses on getting the price right through market-based policies, most importantly with a Pigouvian carbon tax or a Coasean emission trading scheme. Neoclassical economics analyses the two policies in a static framework and concludes that because emission trading schemes allow firms to trade pollution permits, it is more (cost) efficient in achieving the emission reduction. Complexity economics uses a dynamic approach and concludes that while emission trading schemes create balancing feedback loops which after the initial emission reduction fail to incentivize further decarbonisation, carbon taxes trigger self-reinforcing feedback loops which continue to incentivize further decarbonisation, also after initial reductions. Keynesian economists emphasize the need for green industrial policy and government spending, through deployment subsidies and infrastructure investments, to achieve the transition towards a sustainable economy as there is a lack of private demand for environmental-friendly products. Evolutionary economists have focused on the need for innovation in clean technologies and therefore advocate for more government investment in research and innovation.

Teaching Materials

- Chapters & Papers:
  - Economics After The Crisis by Irene van Staveren, from 2015, chapter 13 This well-written textbook sets out the neoclassical, post-Keynesian, social economic and institutional perspectives on nature.
  - Introducing a New Economics by Jack Reardon, Maria A. Madi, and Molly S. Cato, from 2017, chapter 3. This ground-breaking textbook introduces the environment, resources and sustainability and weaves together pluralist theory and real-world knowledge.
  - The Economy by The CORE Team, from 2017, chapter 20. This successful textbook provides an introduction into economics of the environment.
  - Principles of Economics in Context by Jonathan Harris, Julie A. Nelson and Neva Goodwin, most recent edition from 2020, chapters 13, 21, and 33. This useful textbook, which pays particular attention to social and environmental challenges, devotes three chapters to the environment, broader measurement, and sustainability.
  - The Routledge Handbook of Heterodox Economics: Theorizing, Analyzing, and Transforming Capitalism by Tae-Hee Jo, Lynne Chester, and Carlo D'Ippoliti, from 2017, chapters 16, 30 & 31. This broad and diverse book sets out a variety of theories on nature, energy and the environment.
  - The Handbook of Economic Sociology by Neil J. Smelser and Richard Swedberg, from 2005, chapter 30. This extensive and yet accessible book for non-sociologists, provides an impressive and useful overview of the field of economic sociology, including a chapter on the economy and the environment.
  - Polycentric systems for coping with collective action and global environmental change by Elinor Ostrom, from 2010. This article, written from an institutional perspective, argues for tackling climate change on multiple scales and levels, rather than focusing only on global efforts, as this can prevent inaction and allow for more experimentation and learning.
  - A review on circular economy: the expected transition to a balanced interplay of environmental and economic systems by Patrizia Ghisellini, Catia Cialani, and S. Ulgiati, from 2016. This article provides an overview of the literature on the circular economy.
- Books:
  - Rethinking the Economics of Land and Housing by Josh Ryan-Collins, Toby Lloyd, and Laurie Macfarlane, from 2017. This accessible book introduces students to classical and modern theories of land and housing, including concepts as economic rent and financialization.
  - Environmental and Natural Resource Economics: A Contemporary Approach by Jonathan M Harris & Brian Roach, from 2002. This textbook introduces students to the neoclassical and ecological approaches to nature and environmental issues.
  - Ecological Economics: Principles And Applications by Herman E. Daly and Joshua Farley, from 2003. This textbook introduces students to ecological economics and the economics of nature and resources.
  - Dimensions of Environmental and Ecological Economics by Nirmal Chandra Sahu and Amita Kumari Choudhury, from 2005. This collection of essays provides an overview of the neoclassical and ecological theories of nature and the economy.
  - Routledge Handbook of Ecological Economics: Nature and Society by Clive L. Spash, from 2017. This collection of essays introduces students to variety of theoretical approaches to nature and the economy, from ecological and neoclassical economics, to institutional, feminist, Marxian, post Keynesian and evolutionary economics.

Building Blocks: Overview

The meat and bones of the Economy Studies course design method are the ten building blocks. Each of these building blocks covers an area of knowledge or a skill that we see as essential for the education of future economists. They can be used as templates to create courses, of generally six to ten weeks each. One can also pick and choose elements of the different building blocks to combine them into a broader course, or split up a building block into several courses.

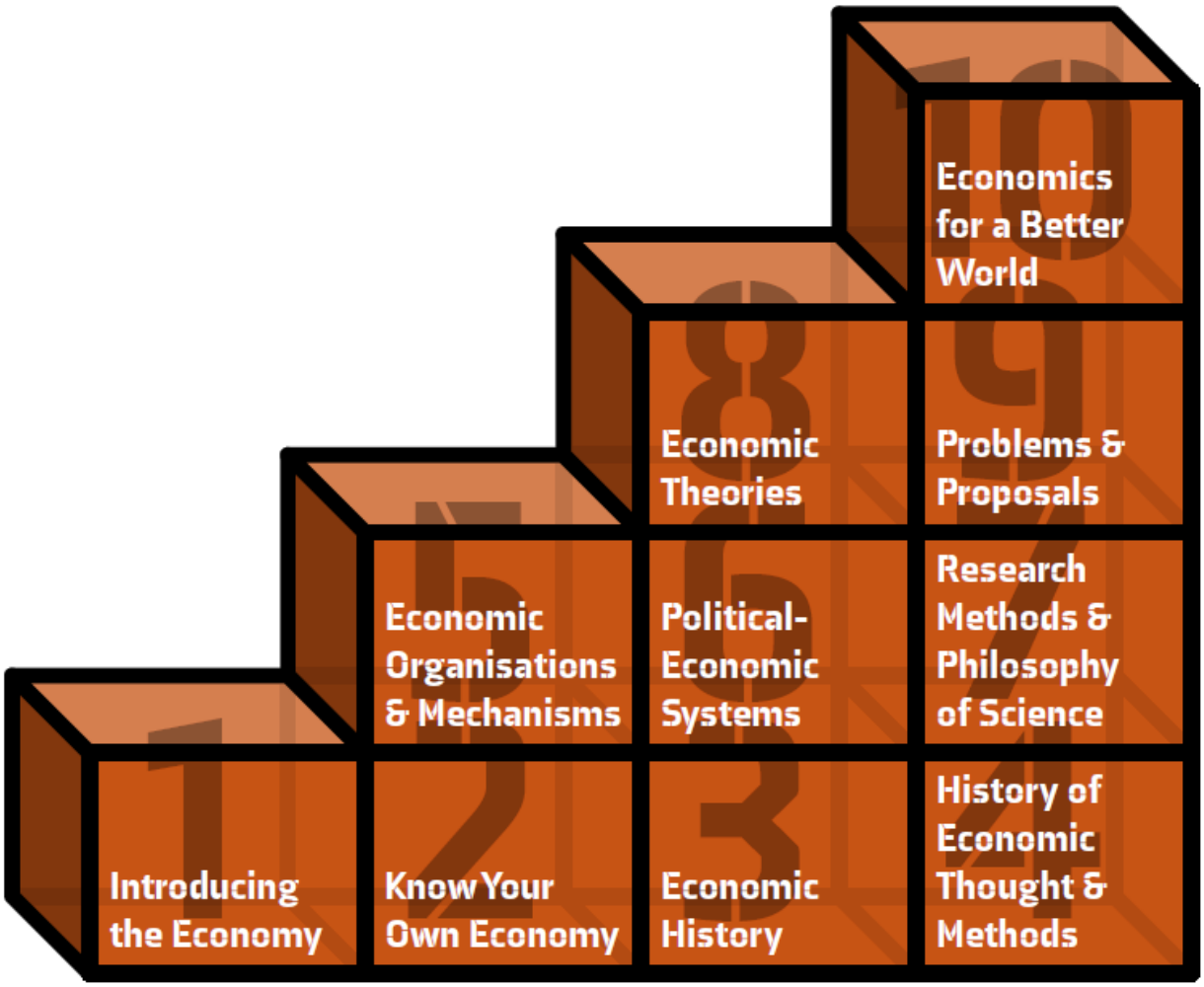


Figure 1: The ten building blocks that form the core of this book. The order of the numbers is not necessarily the order in which they should be taught. Their relative size varies, with building blocks 7 and 8 generally taking up much more space than the others.

The first two building blocks focus on helping students to develop a feeling for economic matters and teaching them basic conceptual and real-world economic knowledge. *Building Block 1: Introducing the Economy* discusses the definition and relevance of 'the economy' and how it is related to other aspects of the social and physical world. *Building Block 2: Know Your Own Economy*, explores actual national and local economies and their structures, institutions and sectors.

With this basic knowledge in hand, we explore the history of economic thought and of the real-world economy. *Building Block 3: Economic History* explores the fascinating and diverse history of economic events

and developments. *Building Block 4: History of Economic Thought & Methods*, in contrast, is about the remarkable and complex history of ideas about the economy. Together, these chapters provide a crucial foundation for students' further education.

Besides knowing basic economic concepts, facts and history, it is key that economics students learn how economies can and have been organised, at micro-, meso- and macro-levels. *Building Block 5: Economic Organisations & Mechanisms* investigates the different forms of economic interaction and organisation that operate at each level and together make up an economy. *Building Block 6: Political-Economic Systems* reviews the complex structures, institutions and power relations that form the overarching structure of an economy.

Another core element of a good economics education is a broad and diverse analytic toolkit, filled with relevant methods and theories. *Building Block 7: Research Methods & Philosophy of Science* is about both quantitative and qualitative data collection and analysis methods. In *Building Block 8: Economic Theories* we propose a 'pragmatic pluralist' approach to teaching theories by focusing on only the most important insights for every topic. These two building blocks will likely take more space in most programmes than the others, as the centre of gravity of an academic education lies in methods and theories.

The last two building blocks are largely concerned with the productive application of economic ideas in the real world. Economics education should be preparing the economic experts of tomorrow for their future roles in society. *Building Block 9: Problems & Proposals* deals with the practical skills necessary for the work of almost all economists: analysing real-world problems and working on proposals to address them, whether in a company, government agency, think tank or academic department. *Building Block 10: Economics for a Better World* deals with the values involved in decision making, asking what normative principles and visions can guide actions to address the major challenges of our times.

Building Block 10: Economics for a Better World

What normative principles and visions can guide action to make the world a better place and address the major challenges of our times?

What: This building block is about normative ideas in economics. That is, the underlying ideals guiding economic thinking and decisions, such as equity, efficiency, liberty and solidarity. It also includes visions for how the economy could and should look, ranging from concrete policy proposals to visions of differently organised economic systems.

Why: It is crucial that students are taught about the normative aspects of economic thinking. It helps them deal with normative issues in a more conscious and sophisticated way. This is especially important because it prepares them for their later work in which they will have to inform non-economists on the normative dilemmas of economic decisions. If they are never taught to think about and explain these issues, it is very likely that as graduates they will be blind to them. Or that if they do address them, they will likely do so in an inconsistent and haphazard manner. Students thus have to gain experience with normativity during their education.

Contrast with current programmes: Current programmes generally have two approaches to normativity. Some try to ignore it, along the lines of: 'There is normative economics, and there is positive economics; here we only deal with positive science'. We think this is an unrealistic and damaging approach, as it in no way prepares students for their future roles in advising others to make decisions. The other frequently found approach is to tuck away all normative aspects in a separate course on ethics. Though more helpful, this is not enough. Besides learning general ethical philosophy, students need to understand its role in economic questions. We suggest teaching normative aspects in a more integrated and applied way, making students aware of normative aspects of theories when they learn them and teaching them to spot the more normative elements of policy advice.

Sections:

"The choice between different social arrangements for the solution of economic problems should be carried out in broader terms than this [comparisons of market values] and that the total effect of these arrangements in all spheres of life should be taken into account. As Frank H. Knight has so often emphasized, problems of welfare economics must ultimately dissolve into a study of morals."

Ronald Coase (1960, p. 43)

The ultimate goal of economics, apart from sheer fascination, is to contribute to a better world. How such a better world looks however, is hotly debated. In fact, normative discussions about economic questions are often at the centre of political debates. Economic questions are thus not simply a matter of intellectual curiosity or academic interest, they are key societal issues. Economists have the vital role of supporting society in making decisions and taking actions concerning these economic questions.

As explained in Foundation 4: Values, it is not the job of the economists to make these decisions, but it is our job to inform and support others in making economic decisions, shedding light on their normative and analytical aspects, as well as their implications in the real world. This requires that economics students learn about the normative aspects of economic questions, the focus of this building block.

In other words, in contrast to many of the other building blocks which focus mainly on descriptive or analytical ideas and knowledge, this building block focuses on normative ideas. It is about teaching students to identify the underlying values and moral dilemmas involved in economic issues and to explain these clearly to non-economists. These skills enable economists to minimise their own normative biases in their work and identify weak points in normative arguments and reasoning.

This chapter starts with a section on teaching students to spot and critically assess the normative elements embedded in analytical tools, such as models and measurements. The next two sections are more applied and focus on ideas that can guide action. The second section has a more short-term focus and looks at normative principles on which decisions can be based. The third section has a more long-term perspective focusing on visions of how the economy should look.

1 Normative Principles for Decisions

To be able to make a decision, one has to apply normative principles, be it consciously or not. Since the ultimate goal of economics is to help the world make better economic decisions, it is important that students become familiar with the normative aspects of decisions. By being able to uncover relevant normative principles and clearly articulate how
they relate to the issue at hand, economists can inform others to better understand the decisions they have to make.

These normative principles are often called 'welfare criteria' in economics. It is, however, important to note that maximising the welfare or utility of individuals is only one such normative principle. The different economic approaches described in the online resource Economic Approaches (economy.st/approaches) provides an overview of the assumptions underlying different economic theories. Other principles than welfare include fairness, legitimacy, security, stability, and reciprocity. These principles differ in their translatability into mathematical form and their applicability in practice.

Of particular importance is how normative principles deal with the pros and cons of decisions. Within welfare economics, the principles of Pareto efficiency, 'do no harm', and Kaldor-Hicks efficiency, 'hypothetical compensation', are well known. These are only two among many principles on which normative assessments can be based. Solely within the utilitarian tradition already, there are, for example, also those who argue the average or minimum utility should be maximised.

Besides utilitarian principles there are also other ideas about how to deal with moral dilemmas, such as the precautionary principle and inalienable rights and liberties. Students need to become familiar with these different ways of approaching normative trade-offs, as they are relevant for many real-world problems.

The goal here is not to teach students how they should independently make value judgments, but to learn how to identify underlying normative assumptions and trade-offs and clearly communicate them to non-economists. Or in Huei-chun Su's words (2012, pp. 378-379): "Normative economics in this sense is primarily concerned with exploring the way of making an evaluation, but it does not have to commit to endorsing the evaluation. In this way, normative economics only relates to value judgements but does not make value judgements." It is not about teaching students 'what is right', it is about teaching them how to clearly see where and how value judgments are being made throughout the analysis.

Since it is not economists themselves who should make normative decisions, students should learn how the general population sees certain central normative trade-offs. This can be done by looking at interviews and surveys of citizens, or letting students conduct new ones. Of course, it is not a matter of learning survey data by heart, nor should students internalise majority opinions on a certain issue as 'the right view'. Rather, learning the habit of looking at the normative choices of people can help students to realise the range of value-judgements that may exist beyond the 'common sense' they personally are used to or automatically adopting the values or interests of their employers – looking outside their own values bubble, as it were.

How can this be done? A course on labour economics, for example, generally covers the topic of unemployment and frequently also discusses the related policy options. When discussing these different social policies, one could explicitly identify the normative questions involved in the different aspects of those policies. Kuhn et al. (2020) and Nicoli et al.
(2020), two papers related to one research project, identified the following six questions as main normative issues concerning EU social policy:

1. How generous should the unemployment benefit levels be?
2. Should there be training and education opportunities for unemployed citizens?
3. How much between-country redistribution should there be?
4. How much tax are you willing to pay and should there be progressive, proportional or regressive taxation?
5. Should it be centrally administered by the EU or decentrally by national governments?
6. How much job search effort do unemployed citizens need to do to be able to get benefits?

Surprisingly they found that the majority of the EU population is in favour of such an EU unemployment scheme. But citizens' support depends heavily on the choices made concerning the normative issues mentioned above. Most EU citizens prefer decentralised implementation, more generous programmes, requiring education and training opportunities as well as job search effort conditions, and low as well as progressive taxation. The point here is not that these are the 'right' moral positions, but rather that these are simply the normative choices most EU citizens would make. By looking at the results of such surveys students become aware of the normative choices citizens prefer and develop a feeling for what is generally considered important.

2 Visions for the Economy

Next to the normative elements embedded in analytical tools and normative principles for decisions, normative visions and ideas on economies are relevant for economics education. Such economic visions are often at the core of political ideologies and the directions in which societies develop. These visions can range from short-term concrete policy proposals to idealistic visions of utopian economic systems. These ideas about how to structure and organise an economy are thus crucial for any economist to be familiar with. Again, this should not be aimed at turning economics students into believers of those visions. Instead, the goal should be to make students knowledgeable about the wide variety of visions, so they can develop a good understanding of them and are able to inform non-economists about them.

The central challenges of an age generally define its normative discussions. The main societal challenges of our time seem to be climate change, pandemics, rising levels of public and private debt, cultural clashes between nationalism and cosmopolitanism, growing inequality and a concentration of economic power. It is key to teach students something about the range of economic visions on these topics.

Taking climate change as an example, it would be useful to expose students to debates between the ideas of green growth, degrowth as well as growth agnosticism. Green growth is based on a future vision in which ecological sustainability is accompanied with a further rise in GDP, often linked to a strong belief in technological progress (Allan & Meckling, 2021; Meckling & Allan, 2020; OECD, 2021). Opposing this idea, the degrowth perspective envisions a sustainable future in which GDP has declined, because they argue it will not be possible to fully decouple GDP growth from resource use and carbon emissions (Haberl et al., 2020; Hickel, 2020; Hickel & Kallis, 2020). Then there are those who want to shift the focus of the debate because they argue GDP is not a particularly relevant topic or economic goal. Instead, they argue that human wellbeing should be the goal of economic activity, making them focus on the relationship of sustainability with wellbeing, rather than with GDP (Van den Bergh, 2011; Van den Bergh & Kallis, 2012). As such, they are growth agnostic, being indifferent to GDP's development and focusing instead on human wellbeing.

These economic visions are likely to shape the coming future as they are already influencing political movements and policy decisions. Students need to learn at least their outlines. Besides having strong links to societal challenges, these economic visions are also deeply connected to economic organisations and mechanisms (Building Block 5) and political-economic systems (Building Block 6). Therefore, it is important that students become familiar with the various moral views on ways of organising economies. Given that most economies are currently mainly organised along capitalist lines, it is perhaps no surprise that normative discussions about capitalism are particularly relevant. However, in a master's programme specialising in labour economics for example, it would be particularly important to expose students to the different normative visions on how labour should be organised and rewarded.

In sum, students should learn about the different visions that exist about how the economy could or should look. In addition, it seems particularly promising to connect these discussions about normative ideas to societal challenges as well as ways of organising economies.

3 Practical Suggestions

Firstly, meaningful normative discussions require shared reference points: a solid grounding in analytical and real-world knowledge. For instance, when discussing the different visions on the future concerning climate change, it pays to first discuss with students what climate change is and how it has evolved so far.

- What are the main causes of climate change?
- How far are we from reaching the various planetary boundaries (and by how much have we already exceeded some of them)?
- How much of our natural resources have already been depleted and how much is left?
- What are the future scenarios climate scientists think are likely?
- Which sectors and countries have been mainly responsible for the emissions?
- What is the state of the different sources of energy?
- etc.

Without such knowledge, students would not learn how to form informed, rather than purely ideology-driven, opinions.

Secondly, we think this building block provides the perfect opportunity to let students practise their communication skills, both in written and spoken form. The most direct method would be to ask students to write essays and debate about the normative positions they believe in. Additionally, it can be very useful to make students defend normative positions that are not their own. This forces them to consider the strengths of positions that they personally disagree with, and the weaknesses of the position they hold themselves. It is a particularly relevant skill for their careers, as being able to understand others' normative ideas is often a lot more important than convincing others of yours.

Another way to do this could be to give students the assignment to prepare a written argumentation on a normative question and hand this in. Based on their answers, every student is linked to another student who views the issue from a different perspective and arrives at another conclusion. Thereafter, every couple gets a limited timeslot, for example one hour, to explain to each other their argumentation and reasoning. Directly after this, students have to write down the argumentation of the other as best as they can, thereby testing how well they understand their opponents' reasoning. Finally, the teacher compares the original assignments with the written recounts, assessing how many of the key arguments match. Each couple receives one grade so that both their explaining and listening skills are rewarded and teamwork between (intellectual) opponents is stimulated.

Some interesting questions to discuss could be the following:

- Is material consumption the goal of the economy?
- What level of inequality is justifiable if it contributes to economic growth?
- Is alienation a justifiable side effect if the work creates economic growth?
- Do owners or shareholders have the sole moral right to make decisions in firms or should other stakeholders, such as workers and consumers, have a say on decisions as well?
- What should be commodified, and what do we find too sacred or too dangerous to trade or manage commercially? Consider for example, organs, humans, human time, education, housing, citizenship,

mind-altering substances, weapons, land, medicine, ideas, techniques, prisons, the right to pollute, or political office.
- Should trade in these items be forbidden, regulated through limiting rules or market mechanisms, or left free? Sandel's What Money Can Buy provides great material for such discussions.

Furthermore, taking controversial positions should not be punished, but nor should students be pushed to choose an ideology to believe in. It should be perfectly fine if students take nuanced and complex positions that are not easily put in ideological boxes. So when giving such randomly assigned normative positions, we think it is important to not only assign ideologically stereotypical positions.

Finally, and connected to the point above, it can help to link such exercises to real historical or recent cases to ground them in reality and link them to specific contexts. This is also what they will be doing in their careers, so it only makes sense to give them experience in doing so.

Teaching Materials

- The Oxford Handbook of Ethics and Economics by Mark D. White, from This extensive collection of essays explores the many moral dimensions of economics, from different ethical theories and the ethics in schools of thought, to the ethics of money, labour markets, risk, law, civil rights and ecological sustainability.
- Economic Analysis, Moral Philosophy, and Public Policy by Daniel Hausman, Michael McPherson, and Debra Satz, most recent edition from 2016. A great introduction into normative economics, covering its many areas and topics from welfare economics and utility theory to liberty, equality and justice.
- A Guide to Ethics and Public Policy: Finding Our Way by D. Don Welch, from 2014. A brief but insightful book providing a broad framework for evaluating policy proposals and outcomes, organised around five moral principles: benefit, effectiveness, fairness, fidelity, and legitimacy.
- The Oxford Handbook of Professional Economic Ethics by George F. DeMartino and Deirdre McCloskey, from 2016. This insightful collection of essays explores the different aspects of ethics in economics, with special attention to ethical issues related to economic theory, research and policy advice.
- Political Ideologies: An Introduction by Andrew Heywood, most recent edition from 2021. A useful and accessible introduction into a wide variety of political ideologies, from liberalism, socialism, and conservatism to feminism, nationalism, and green ideology, that shape much of our normative thinking on the economy.
- Moral Views on Market Society by Marion Fourcade and Kieran Healy, from 2007. An insightful overview paper on the key different normative perspectives on capitalism, enabling readers to better understand and place ideas and arguments prevalent in many debates about the economy.
- Is Capitalism Obsolete? A Journey Through Alternative Economic Systems by Giacomo Corneo, from 2017. A systematic and sharp overview of different (mainly socialist) economic systems that helps students think analytically about their allocation and coordination mechanisms and informs them about the possible ways of organising economies and the arguments for and against the various options.
- What Money Can't Buy: The Moral Limits of Markets by Michael J. Sandel, most recent edition from 2012. A highly influential and well-written book reflecting on the moral place of markets in society and asking the key question whether everything should be up for sale. The Institute for New Economic Thinking has also launched a video series on the book and topic: https://www.ineteconomics.org/perspectives/videos/what-money-cant-buy
- Thrive: Fundamentals for a New Economy by Kees Klomp & Shinta Oosterwaal, from 2021. This collection of essays introduces students to various visions for how the economy could be run, from regenerative, wellbeing and common good economics, to doughnut, buddhist and degrowth economics.

Conclusion

In this concluding chapter, we briefly review what this book has offered and then look ahead, offering practical suggestions and ideas for economics teachers and professors, programme directors and students.

1 A New Vision for Economics Education

Our rapidly changing world is faced with many economic challenges, such as increasing debt levels, staggering inequalities and serious forms of ecological breakdown. These challenges are complex and cross multiple dimensions of our social and natural systems. To face these troubles, therefore, it is not nearly enough for economists to hold knowledge in formal, theoretical abstractions. Whilst these may be sophisticated, they only reflect a fraction of what is actually going on in the real world. We need broadly-trained economists with an understanding of the real-world economy. We need economists who know for example how the main industries work, who can grasp the interfaces between state and corporate systems and who see how economies are embedded in the society and ecology at large.

This requires open minds which can look at issues from a variety of perspectives. Given the multifaceted nature of economic systems, no single theoretical framework or methodology can answer all questions, or capture all of its dimensions and mechanisms. Instead, economists need the ability to think critically and evaluate the appropriateness of a range of fundamentally different approaches. In doing so, they also need to be able to clearly distinguish and explicitly discuss the moral dilemmas and normative trade-offs involved in economic decisions.

This book sets out a concrete path towards building such a pluralist and real-world based economics curriculum. While we envision a large diversity of possible economics programs, we suggest that all programs would be improved by following these three organising principles: a pluralist toolkit of theories and methods, sufficient real-world economic knowledge and practical skills, and active training in the consideration of moral and social questions. To flesh out these principles, we propose ten concrete Building Blocks: practical material for the creation of courses. These Building Blocks include introductory material, history of economic thought and reality, forms of economic organisation, research methods, theoretical approaches, normative ideas, practical skills and knowledge of the real economy.

What kind of graduates would a program based on these ideas and materials produce? It is important to acknowledge that they would not have all the skills that current-day graduates have. They would have less mathematical sophistication, less expertise in econometric analysis, and less knowledge of neoclassical theory. In exchange for this, students would gain a deeper understanding and more concrete knowledge of the economy they will live and work in. This includes:

- An understanding of the linkages between the economy, the environment and society.
- The ability to analyse different types of economic topics and problems, by using a variety of theoretical and methodological approaches.
- An integral understanding of how various smaller mechanisms make up larger economic systems.

- Practical skills for investigating and resolving questions of economic policy: both understanding the context and choosing the right tool.
- The ability to argue morally as well as analytically, and to clearly distinguish the two.

In short, such programmes would produce academically-trained professional economists: broad thinkers and practical scholars, rather than students who are trained to write academic research papers.

2 Change Is Necessary and Possible

It will not be easy to build such programmes. We fully realise that these changes cannot be introduced overnight. Surprisingly rare is the academic economist who can teach even a basic introductory course on their national economic sectors and institutions. The structure of the discipline - highly internationalised, methods-centred and organised around a single pyramid structure of journals - does not facilitate the creation of such knowledge. The same applies to pluralism in economic theory: the decades-long marginalization of valuable schools of thought has left us with a dearth of suitably trained academics.

In addition, academic programmes tend to have a strong path-dependency. Most are only updated infrequently and changed piecemeal. Long-running courses have to be adjusted, the order of courses stacking on top of each other has to be reconsidered, new courses have to be developed and new expertise has to come into the economics departments. In many countries, national or international frameworks regulate academic programme content. In short, this is a long road, but one that we believe is both necessary and possible.

The changes we propose are necessary. The devastating impact of our economy on the life-sustaining ecological systems of this planet is increasingly visible, making the realistic study of that economy all the more urgent. The unprecedented centrality of the economy in our society and the big role of economic ideas in political decision-making make it all the more vital for economists to be firmly rooted in the real world, to have a pluralist perspective and to be trained in distinguishing the moral tangles inherent to economic questions. We need to prepare a new generation of economists, and we should start this work now.

And the changes we propose are possible. Indeed, they are happening, thanks to the energy of a growing worldwide network of students and academics. More and more pluralist and real-world textbooks, course formats, readers, best practices and other materials are becoming available (see the online *Teaching Materials* resource chapter for many examples). Increasingly, faculties are teaching economics primarily as a subject-based pluralist discipline, rather than a method-centred monist approach. Economic faculties are hiring academics from other theoretical schools and other disciplines, thus reversing the narrowing of the past decades and enriching both students and colleagues with fresh insights. Various universities are starting to experiment with teaching-based career tracks, enabling staff to focus on developing better teaching materials rather than spending every free minute on trying to get published in mainstream academic journals. Pluralist programs are springing up inside and outside of traditional economics departments, throughout the academic world. Perhaps most importantly, more and more faculties are opening up to the idea of widening their student's view beyond the traditional theories and methods.

3 Calls to Action

But while there are hopeful signs of change, this is only the start. We need more students, teachers, programme directors and deans to make a difference and help ensure that the economists of the future are prepared for their roles in society. So what can each of us do to bring economics education to a higher plane?

Students, be critical of what you are learning. Do not just ask: *"Is this part of the exam?"*. Instead, ask: *"Does this reflect the real world?"*, *"In what other way could one also look at this issue?"*, and *"What are the moral dilemmas surrounding this case?"*. Look up the course you are following in chapter *Tool 2: Adapting Existing Courses* and discuss the suggested additions and changes with your teacher. Design your own ideal course with the tool of chapter *Tool 4: Example Courses* and campaign to make your dream into a reality. Talk to your lecturers and find out who is interested in your ideas. Build public support by publishing an open letter or petition that advocates for the creation of this new course.

Get in contact with the programme committee and apply the *Tool 3: Curriculum Review* to your programme to see what could be improved. Build, or join, a local team of critical students. Organise a reading group or an event. If you want, you can get affiliated with the international Rethinking Economics network and benefit from the experience, contacts and resources of a large worldwide network of student groups. Doing it together will not only help you last longer and achieve more impact, it will also be more fun.

Teachers, think about what you are preparing your students for. Less than 3% of them will become academic economists, the rest will work inside government agencies, policy institutes and think-tanks, (central) banks and other financial corporations, private sector and not-for-profit companies, NGOs and campaign groups, and journalistic entities. As such, they will work on tackling practical and real-world problems, rather than publishing academic articles. So, confront your students with the messy and complex real world, let them practice tackling actual cases, start lectures with today's newspaper, ask guest speakers from the relevant field, and let students go out of the classroom and see it with their own eyes.

Stimulate open discussions and active participation from students, bring in literature from other disciplines, actively expose the weaknesses of the theories you are teaching. Make normative assumptions explicit and let students struggle with the resulting moral dilemmas. Make sure that you are not just pushing through a textbook; be proud of your role as a teacher and *use* it. Make use of the suggestions provided throughout this book, and in particular in *Tool 2: Adapting Existing Courses*. Kick-start discussions, play devil's advocate. Trigger students to start thinking, critically and independently.

Most academics reach many more people through their teaching than through their academic papers. Yet today, teaching is underappreciated and under-rewarded. Often, the time allocated for teaching is not nearly enough. Please speak out about this. Challenge that status quo, with the students as your allies.

Deans and programme directors, support and facilitate good teaching. Make sure that your faculty have enough resources and time available for teaching. Enable them to constantly improve their teaching and update the taught material. Give students a voice and role in designing and adapting the courses. And ask yourself: how is our program built? Was it created through a departmental power struggle about which professors' specialisation is more important and deserves most space in the programme? Or is it carefully designed based on a clear idea of the societal roles students are being prepared for?

Do not be afraid to deviate from the standard programme at other universities. Variety in programs makes economics education stronger, not weaker. Take a look at the chapter *Tool 5: Example Curricula* and draw

inspiration from other innovative programmes. And try your hand at the Curriculum Review Tool, to see where in your programme there might be gaps in terms of relevant knowledge or skills. You could also ask teachers or students to run this analysis, and set up a series of meetings to discuss the outcomes. Or you could ask members of the international Rethinking Economics movement to organise a workshop or conference to further explore how the programme could be improved. Attention and open discussion about how to better economics education can only be positive, contributing to better prepared future economists.

Governments, create the right conditions for good economics education. Look at how resources for teaching and research are distributed. Does this encourage relevant, open-minded and interdisciplinary research and teaching, or does it encourage scoring on the intellectual square millimetre through a competitive 'publish or perish' system? Are universities stimulated to offer their faculty career options focused on education and reward good teaching? Governments could also follow the French example (2014) and initiate an independent and in-depth investigation of the state of the economics education in the country.

Climate change, inequality, economic instability, ageing, power concentration, pandemics, biodiversity loss, social polarisation, resource depletion, migration, poverty; these are core challenges for the world of today and tomorrow. Economists have a central role in society and need to tackle these challenges head-on. Reforming and modernising economics education is therefore of great importance not only to the students and teachers directly involved in it, but also to society as a whole. Let's build better courses and programmes, together.

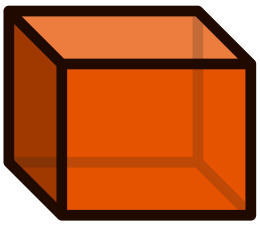
Ready to get started?

This book is free and open access. We hope it serves you. Here are three things you can do to help this movement for renewing economics education:

1. Send this or another booklet to three colleagues/students: economy.st/short

2. Contact us to organize a workshop at your faculty: economy.st/workshops

3. Subscribe to the newsletter: economy.st/news



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