GRADUATE SCHOOL OF EDUCATION

Transcript: Fernando Reimers, e-Lecture

Fernando Reimers: So in this module, we're going to cover four contents, four topics. The first one is: What is education policy? Then we're going to talk about the logic theory of education policies. Thirdly, we'll talk about the role of transfer of ideas in shaping the logic theory of a policy, and finally, we're going to talk about two tools to guide the process of policy analysis.

As you think about the child shown in the picture, in a country in the developing world, and you see him copying from a textbook, the conditions that made it possible for him to be learning are both individual decisions made by this student and by his parents, but also decisions made by others, including policymakers, government officials, with regards to the availability of schools and how far those schools are from the home of this child, the content of the curriculum, the availability of the instructional resources that are allowing his teachers to teach and this student to learn, the particular characteristics of the teachers that interact with this student, and the duration of the school day. Those government decisions are the result of policymaking.

The key, the central questions of an education policy are questions about who should be educated, for what purpose, in what way, with what methods, at what cost, and who should pay. And all education policy revolves around finding answers to those questions. Now in finding answers to those questions, it is not necessary for every policymaker to reinvent the wheel. There is a method and a discipline that allows us to use the best available knowledge to make the best possible decision given the state of information available with regards to that particular question in a particular country.

What you see here is a way to translate those questions into a diagram representing an education system. And so you see that I'm proposing that an education system has, there are four aspects of that system. The first and most important one is what are the purposes that we're trying to achieve with education. Second one is what is the context in which this education system is situated, because the only way to really think about the quality of relevance of education is with regards to a particular context. Two key components, interrelated components, are the pedagogy that the teachers that connect with those students use, and in pedagogy I'm also embedding curriculum, the content of what is taught and how it is taught. And that pedagogy is influenced by the kinds of teachers that work with those students, by the characteristics that they have, by the level of general knowledge they have when they enter the profession, as well as by the particular preparation they receive to practice this profession. And the last component of the education system is the way in which this system is managed and governed at the school level, the kind of leadership that exists, the way in which school principals relate with other members of the staff, by the technical supervisors that provide support to schools, and by different people in the ministry that provide support to those supervisors. So when we think about shaping education policy, we're thinking about making decisions that are going to shape the integration of these four components of an education system.

When we think about context, we think about these in a series of layered dimensions. We think about an economic context. We think about a cultural context. We think about a political context. We think about a social context. We think about a demographic context, and a

geographical context. So for example, in some parts of the world, there is a bulge of the population of young people between the ages of 15 and 29. The largest group of this age group ever in history in those societies. And it is very important to attend to the kinds of skills in these positions that will allow these young people to make a successful transition to adulthood, to participate in society by having access to jobs and by participating at the community level or in different instances of the society. The failure of providing those young individuals the opportunities to engage in the society can lead to political instability, and to all kinds of consequences that would undermine social development and economic development in those societies. So in that particular setting, I have identified a demographic context. I have identified an economic context implicitly. It is important that there is a good match between the kinds of skills that employers are looking for when they hire graduates of high schools or of colleges. I have also identified a cultural context in that society the transition to adulthood is related to the ability to gain self-sufficiency and independence which associates with gaining a job and so on.

So back to the previous slide when we thought about the core four components of an education system of which one is purpose and the other one is context, what I hope this slide illustrates is that those two need to be interrelated. The purpose of schools need to make sense, need to be relevant, given the particular demands of a context.

So in the rest of this lecture, I'm going to talk essentially about three topics. Why is it that policy decisions matter, have very large consequences? How are those decisions made, which means three things really. Who makes them, how, and with what consequences? And I'm going to talk briefly about a couple of approaches to inform education policy.

In this slide, you see the percentage of the population for different generations going back 250 years in France, who were unable to read. These are the illiteracy rates. And what you see is a declining trend, but the rate at which the trend declines is not a steady rate. You see that there is a point of inflection in that descending slope that begins at the time of the French Revolution and that accelerates at the time when the Ministry of Public Instruction was created. The first office, the first public office to oversee education was established in France in 1802, and the first Ministry of Public Instruction was established in 1828. And you can see by the coincidence of the establishment of those institutions and how the curve of illiteracy decelerates that obviously the creation of public education had a significant impact in increasing the proportion of the population was able to read and write. In fact, most public education systems were created initially to provide basic literacy and basic numeracy to the entire population. So this chart I hope shows that policies and the institution that make them possible matter.

The next graph is a graph that shows the same trends for the world, and you see that whereas 40 years ago, about 37% of the world population was unable to read and write, by our point in time, it is really about 18% of the world population. So we're all more likely to be able to read because of the efforts that have been sustained over the last 40 years by governments, by international development organizations, by teachers, and by a wide range of stakeholders, who partake on the mission of educating everyone. Where does this idea of educating everyone come from? And how come different countries have signed onto the same idea? They have done that

because ideas travel. Ideas about in this case the purpose of education, remember, I talked about the five core questions, who should be educated.

So this notion that everyone should be educated at a basic level is a notion that is relatively recent in human history. It was first developed by this man, John Comenius. John Comenius was a Moravian minister who experienced 30 years of civil unrest. Very violent civil unrest. It was in part because of that unrest that his wife and his two sons lost their lives in a fire that someone caused in their home. And in thinking about what caused that kind of conflict, that kind of violence, Comenius concluded that it was the lack of ability of people to work out their differences in peaceful ways. And so in this book that you see in front of you, The Didactica Magna, he proposed that if we could educate every person, then we could have peace. Now, when Comenius proposed this idea four centuries ago, it was just an idea. We did not have the means, we did not have the technology to make this idea a reality for every person. In fact, the way in which people used to be educated was either through tutors, highly educated individuals and therefore very, very scarce, who would educate the sons and in some cases the daughters, of affluent families or people with privilege. And in some communities, there were also schools associated often with religious institutions. But we didn't have anything like an infrastructure of public education. It would take another 200 years to develop that infrastructure.

Before I go to that, I want you to pause and think about this political philosopher, Jean-Jacque Rousseau, who proposed a very important idea for education. And it was the idea that the social contract, the basic norms that societies use to govern themselves was very much a construction and it was the only thing that distinguished humans from iguanas. And that in that construction of a social contract, education played a key role. So using today's language, we would say that Rousseau argued that the main purpose of schools, the why we need to educate everybody was so that we could have a social contract that people accepted as legitimate. Many public education systems were created to do exactly that, to provide what we would call today civic competency.

The person that you see in front of you was the beneficiary of one of those tutors. His father was a general in the Prussian army, and this man is Wilhelm von Humboldt. Von Humboldt had a highly trained tutor, the kind of person who in the midst of the French Revolution took Humboldt and his brother to France to see what a country was like in the midst of revolution. And Humboldt played a very important role in the creation of the public education system in Prussia, and as minister of education, he also chartered the University of Berlin, which is the first modern university. Prussia's was really the first system of public instruction, and it served as a model for many other countries who then traveled to Prussia and eventually to Germany, to try to understand how public education could function, and could be established. So you can see how the idea of both educating everybody, the goal of school, and the technology to create an infrastructure that made that possible is an idea that countries borrowed, some countries borrowed from others.

There are two individuals that I want to show you last in this quick overview of the history of public education and the history of the transfer of education ideas, and one of them is Johann Pestalozzi. Johann Pestalozzi was a Swiss who in the 18th century, developed two very important insights for education. The first one was that humans develop in stages. And these

stages of psychological development allowed us to distinguish three distinct moments in the development of a person. One is what he called essentially a pre-rational stage, before the age of 12. One is a semi-rational stage, and then fully human. And Pestalozzi argued an education needs to be tuned to the particular stage of development of the person. So for example, he argued that it was only in the last stage when it made sense to help people develop practical skills, a trade that will allow them to earn a living. But Pestalozzi also argued that it was the role of education to develop a full range of the human personality. So he was someone who was advocating that education should not be narrowly focused, but that it should allow people to develop multiple range of talents and skills. His ideas were informed the creation of a school which he ran, and of a series of schools that were inspired by that thinking. But we did not see, we have not seen the transfer of that view, of that education view on a massive scale.

In contrast, the next person, Joseph Lancaster, developed a methodology that allowed to educate large number of children at low cost. And his methodology was called the monitorial system of education. It essentially said the only way we're going to be able to overcome the obvious limitations of the highly expensive tutors that allow us simply to educate a few people would be. If we are very clear about what we are trying to teach children and not overly ambitious and what that is, if we can slice that content into very small units that could be mastered and taught by people with significantly less level of skill and ability than the tutors, and then if we create a group of those monitors, and have them be managed, supervised by one of the tutors. And this system allowed the creation of a series of Lancasterian Societies for the Promotion of Education. There were Lancasterian societies in many different geographies, and in effect those societies inspired the thinking that made it possible for people to imagine a system of public education.

So I hope I have communicated that throughout the history of education, since the very idea that everyone should be educated, there has been an abundance of transfer, of borrowing about who should be educated, and how they should be educated. However, the use of systematic comparisons to inform that transfer is more recent.

It was only about 200 years ago that Marc-Antoine Jullien, a French educator, proposed that we should conduct systematic surveys that documented how different countries were beginning to organize their education systems. And he proposed that those surveys should answer the questions that you see in front of you. What is the number of students in the primary schools in this particular commune or district? What is the proportion relative to the total number of children in that age group? How many of them are grouped under a single director or teacher? At what age do they begin their schooling? Is education integrated for boys and girls? How are those students assessed, and what is the purpose of those examinations? How are students streamed? Is their education from students to students, peer education? How much time is devoted to literacy and math, and at what age do these children leave primary compulsory education? And Jullien thought that it would be very advantageous to policymakers if they could answer the core questions that I began this lecture with, with reference to knowledge about what different countries did, and if we systematically obtained that information. He never actually carried out his surveys, and it's only in much more recent times, in the last 60 years that we have had a number of institutions that have been tasked with a systematic analysis and comparison of education systems around the world.

The first comparisons were undertaken by the International Association for the Evaluation of Educational Achievement. And that association designed surveys that tested the knowledge of students in a range of subjects, from language, mathematics, sciences, civics, and their first studies were conducted in the 1960s. And along with measuring the performance of students, they also interviewed teachers and school principals to get information about their pedagogy about their practices, about the way in which schools were governed. And then they analyzed the relationship between those outcomes, student achievement, and those instructional processes or school processes. The idea was that we could then think of the world as a laboratory of educational practices and that we could learn a tremendous amount from the natural variation that existed in how school systems were organized, and then draw the knowledge that would help policymakers produce the best education system. The IA has continued doing those studies in sciences, in mathematics, in language. Their last, their most recent study is the third study of civic education in which some 60 countries in different continents have participated. I'll be referring to that in a moment.

Other well-known studies of that type were undertaken, have been undertaken by the Organization for Economic Cooperation and Development, based in Paris, and they're known as the PISA studies, the Program for International Student Assessment. And you see in front of you the schedule of those studies. And about 50 different countries, mostly OECD member countries, but also a few countries which are not members of the OECD participate in those assessments of literacy, mathematics and science.

So in front of you, you have one of the tables of the last civic education study undertaken by the IEA. And you can see that those studies are helpful in the first place to describe how is it that different countries in this case do civic education. How do they approach civic education? So what you see is that in only some countries, about half of them in this chart, is civic education a specific subject in the curriculum and it's compulsory. There are no countries where it is a specific subject which is optional. In most countries, third column, you can see that civic education is infused throughout the curriculum, so that the curriculum in these countries think about the language arts curriculum, science curriculum, history curriculum, the social study curriculum as the places in which civic knowledge and skills can be developed. But you can also see that in many of these countries, people think about the culture of a school as a teaching context to develop civic competency. So assemblies and special events are activities that are designed, intentionally designed to promote civic competency. Extracurricular activities. People think about the classroom experience as a very important way to develop competency. So one of the things that any of you interested in developing policies around civic education could do is first of all, examine what is it that different countries are doing, and then hopefully examine and with what results. And what I'm going to argue and what I develop in more detail in one of the readings in which I talk about the transfer, is we shouldn't from these cursory examination of differences simply say well, I like what France is doing with civic education, I'm just going to adopt it, but we should have a series of criteria to help us decide in what way could we intelligently transfer practices from one context to another context. I'll be saying more about that throughout the rest of the lecture.

I wanted to conclude this historical review referring to a very important set of events that took place about 60 years ago that have really transformed humanity. Until about 60 years ago, the

vast majority of the world population did not have the opportunity to set foot in a school. And that changed, and it changed in part as a result of the crafting of this document, the Universal Declaration of Human Rights, which as you know, was a result of a group of visionary leaders who looking at the devastation caused by World War II, asked themselves, what would it take to create the conditions so that this kind of horror never happens again? And they said what it would take would be to identify what are the basic rights that every person has simply because they're a human being, and to create a global architecture, to create institutional infrastructure that would allow us to advance in the achievement of those rights.

And one of those rights, which is contained in Article 26 of the Declaration, is the right to education. And that invention of course reflects the legacy of Comenius, 400 years earlier. But it is now not just an idea of a philosopher expressed in a book. It is a now a covenant. It is part of a global, a compact to which countries adhere. And in adhering to that compact, they assume the obligation to put in place the programs and the policies to make that goal, that aspiration a reality. So the U.N., the institution that was established to work for the achievement of this right was UNESCO. And UNESCO set out to work with governments around the world in promoting a massive expansion in access to basic education. And at the end of those 60 years, over the last 60 years, the great majority of the world's children now not only have access to school, but many of them complete a course of primary instruction. So we have solved a set of first generation education challenges which of course only makes obvious the next generation's set of challenges which we have to address, which are the challenges of making sure that what the children learn in those schools is relevant and gives them the skills to really gain freedoms in their life in terms of the opportunity to participate economically as well as politically. And for many countries of course the challenges are challenges at higher levels of education, access to high school, and to college. So this is Article 26 of the Declaration.

So as we have seen from this historical overview, policy matters and institution matters. I like to think about a policy as a hypothesis. Behind any policy is a logic theory. If we do A, then B will happen, the hypothesis that connects causes with effects. And a good way to represent those hypotheses is to think about an education system or kind of actions that a policy tries to support and the kind of results that it tries to produce as the connection between a series of inputs, resources, spending per pupil for example, or teachers, that then will enable some processes, a particular curriculum, a particular kind of pedagogy, that will then produce some outputs, some immediate results, the ability for children to learn to read, for example, that will in turn lead to some long-term outcomes, social goals, employment, productivity, political participation, social cohesion, social capital.

So we can schematically represent the logic theory behind any policy as a series of connections between inputs, processes, outputs, and outcomes. Let me give you an example. In a country where a percentage of the population does not know how to read, we might say, what would be necessary to make it possible for those who can't learn how to read, who don't have the opportunity to learn how to read to do so? Or might say, well, the first thing that we need are either schools close to the places where they live, or if they're older, some kind of a center where they can come to. We're going to need some trained teachers who can work with them. We're going to need some specific programs to promote instruction, maybe instructional materials as textbooks or classroom libraries. These are all inputs that we hope would facilitate some processes, the process where a student comes to school for a particular course of time of

instruction, hopefully for six years of primary education, or in the case of an adult, for a threemonth period or a year period. And while they come, they engage in a series of activities with an instructor, with other peers, with those instructional materials that allow them to develop their skills from basically allowing them to learn three things at the same time, one, to be able to decode the written word, two, to do that with comprehension, to understand what they're reading, and three, to do it with love, to really be engaged and be interested in why they're reading. And good literacy instruction is about creating the kinds of processes that allow learners to develop those skills at the same time, concurrently. Hopefully that is going to produce some immediate outputs, some immediate results, the ability of student to read short texts or longer books, their willingness to read voluntarily available materials from a library, and so on. So those are outputs that we can directly attribute to the program that we have put in place as reflected in these processes.

But hopefully these kinds of immediate outputs lead to longer-term outcomes. They enable lifelong learning. They make a person a better farmer because they can read instructions about how to use fertilizers that allow them to be more productive in their farming. They would increase the chances that they get better jobs or are more productive in those jobs. They increase the chances that they can be more engaged citizens because they can read texts that concern public affairs or that represent the different platforms of politicians and think about how those texts relate to their own interests, to the kinds of issues that they care about.

So it is very important then to think of a policy as a hypothesis that connects different components, and then to be systematic in how we think about these components, to have a model that represents our policy. This slide shows a different kind of model, not in an input/output way. This is a model to represent, to go back to the third study of civic education, to represent, how is it that an education system, that a school might help students develop the kind of knowledge and dispositions that would make them effective democratic citizens, engage democratic citizens? And I have represented in this model essentially six environments which are nested within each other. At the core of those environments, as number six, are frequent and daily opportunities for students to learn at high levels, all subjects, not particularly civic instructions. Very important to be able to learn to read and to understand math and science to be an engaged citizen. Frequent daily opportunities to be able to think on your own, not to be given instructions and directions, but to be given opportunities to exercise your judgment, daily and frequent opportunities to make choices, whether these are choices as to which book you would want to read in half an hour of free reading instruction, choices about the kind of project that you would want to work on in a science class or in a math class, and frequent and daily opportunities to practice tolerance, the acceptance of those who make different choices, who are different than we are, and the skills and the dispositions to see those differences as a source of strength, something that enriches our understandings. So this needs to happen on a frequent basis. It's not that students should be told that these things are important, as they should live them in their daily experiences in the classroom.

Now that context is embedded in a curriculum for democratic citizenship. As we saw in the chart we saw a moment ago from the third civic education study, that curriculum can include a particular course. It can be infused in different courses. It can include things like classroom climate and how the classroom is managed. It can include processes like having a student government where the students have a voice to discuss some matters that have consequence for

them in their school. It can include the kinds of interactions that students have with the community of which the school is a part. It can include the way in which adults relate to students in that school, or the ways in which the adults in the school relate to each other, the teachers relate to each other, and the principals relate to each other. A school can talk all it wants about gender equity and the importance of gender equity. But if the climate of the school is one where girls experience sexual harassment or discrimination, that is going to be a much more powerful moral lesson than anything the teachers may say. Or if the climate of the school is one where the principal harasses female teachers, that is going to send very powerful moral lessons to the students.

So those daily experiences are guided, are normed by a curriculum, which is in turn embedded in teachers who are well prepared, well-educated to themselves, value diversity, to be tolerant, who can model democratic practices, and who are obviously capable to teach the subjects for which they're tasked and accountable and responsible. A teacher who misses class once a week is teaching a very powerful lesson to their students about responsibility, no matter what they say. That in turn is embedded in how schools are governed. And if you remember one of the early charts that I showed in this lecture that represented an education system as the connection between purpose of schools, context, and the relationship between purpose and context, pedagogy and governance, these four, this third dimension, the connection between schools and communities, is a very powerful driver of democratic education.

Those in turn are embedded in whether the school itself has a democratic culture. And lastly, all of that is embedded into policies and a series of cultural norms that expect and that commit to educating all students at high levels. So this is a way to represent an idea. And the idea is that if you want to produce democratic citizens, competent democratic citizens, you have to do, not one or two things; you have to do several things that are interdependent. You have to, in effect, construct a system. Now what is advantage of representing that system either with words, in a narrative, or with a diagram as the slide in front of you does? The advantage is that it can help you discipline your thinking, share it with others, enrich this diagram, develop indicators to monitor how you're doing, and formulate a logic theory for a policy. And out of a clear logic theory, you can then design specific programs where it'll be obvious whether what you need to do is to create a program that would generalize student governments in the school, or create a particular subject of instruction for civic education. And there is not a universal answer to whether you should do one or the other. It depends on the particular context in which you're trying to develop this policy.

The next slide is another model to talk about an education system, in this case, to talk about the relationship between a series of goals and a series of processes to support these goals. And this slide is a development of the Coalition for the Partnership for 21st Century Skills in the United States. This is a public/private partnership that has been working to advance our aspirations about what schools, the kinds of goals that schools should contribute, to the kinds of skills that they should develop. And what you see in the four colors of the rainbow in the background is that the Coalition defines four set of important outcomes. First obviously mastery of core subjects and 21st Century themes, but then associated to them, life and career skills, the ability to manage one's life and career, which include skills to manage one's health, skills to manage one's learning innovation skills, the capacity to learn, to be a lifelong learner, and the capacity to be

creative, to be innovative, to use what we know to solve real problems and to invent solutions to those problems. And lastly, that include information, media, and technology skills, recognizing that the world in which we all live and certainly the world in which the students who are in school today are going to live is a world that is largely shaped by the use of new media. And therefore, this is a language that students have to learn. So those are the core skills. You can see the contrast between that and the set of goals that Joseph Lancaster espoused for schools, where he said, let's teach a few things, essentially reading and mathematics.

Now the processes to support that are four processes, learning environments that are rich and of high quality, professional development for teachers so they can construct those environments, a curriculum, a high quality curriculum and instructional materials, and standards and assessment. And there has to be alignment. These different processes need to be supporting each other. It is not of much help to have a curriculum that tries to teach 21st Century skills if the teachers aren't prepared to teach to that curriculum, or if the teachers are prepared, but the examinations that determine whether students proceed to the next grade or to the next level of education really measure low order cognitive skills. Because examinations, in the end, what gets measured in many places is what gets taught. So there needs to be alignment and coherence between the different processes that support what an education system is doing. And that's why I argued earlier in the talk that clarity about the purpose of a policy and the mechanisms to create a shared consensus on what those purposes are is essential. It is essential at the school level. It is essential at the system level, because it is that clarity and that shared sense of purpose that allows alignment of different processes, and that allows every one of the stakeholders that makes an education system function really to be pulling in the same direction.

So this is another slide illustrating a logic theory of an education policy. And we've already talked about that. You can look at the slide all you want. I won't talk about it more. I'm going to suggest that in thinking about educational opportunity, it is also helpful to develop a clear theory of action about what educational opportunity is. There is a conception that many people who are non-specialists in education share, unfortunately, which is a conception that equates educational opportunity to access to education. I call this the elevator theory of educational opportunity. It basically assumes if you provide every child the opportunity to have a, to access a school that is close to the place where they live, the job is done, as if we had just opened a faucet or flicked a switch, and all kinds of good and wonderful things are going to happen. An alternative to that theory says, well, that is, of course, very important, but it's just the beginning. Opening the door of the school to a child and allowing the child to come to the school only begins a process that needs to continue with access to high quality curriculum, with access to high quality teachers, with access to an environment that is welcome and that causes the child to want to come back to the school. And unfortunately, there are too many places around the world where the children experience in school mistreatment. They are beaten up. They are harassed by peers, by teachers. Who would want to come back to a school like that? With access to a curriculum that the parents perceive as relevant as teaching their children something of value.

So this stage theory of educational opportunity says, there are really different levels of educational opportunity. And different education systems and different populations within systems find themselves in need of access to different levels in that ladder. So one of them is obviously equality of access. The next layer is equality of the inputs that I have suggested are the core. The basic resources, per pupil spending in an education system where there are vast

differences in the amount of resources per student in urban areas and rural areas, it's going to be difficult to have equality because money buys the resources that are essential to teach well. Equality of processes, making sure that in addition to the resources, the adults that manage those resources, the teachers have comfortable levels of competency in different environments, equality of learning outputs, and lastly, equality of outcomes. So you can see, I have taken the input, process, output, and outcome model, which I suggest that is helpful to inform a logic theory of a policy, and used that to translate the concept of equality of opportunity, and to suggest that for any of you interested in Comenius's aspiration or in achieving the right to education for all children, we really have to keep an eye on equality at each of these levels, and not just in inputs or in access to school.

So what we think about when we think about input? Well, we think about money. We think about the kinds of teachers that students have. We think about the kinds of resources they have access to. We think about the condition of the physical facilities of a classroom of a school. We think about what the students learn from previous levels. Even in the very first grade of school, what the teacher has to work with is what the previous level, preschool or homes, have already produced. And there are vast differences, for example, in the number of words that first grade children know when they, on the first day when they come to school. And those differences are something that the teacher is going to have to work to equalize, to work with the kids who know less words, because they're a very important predictor of how well they're going to be able to read and how competent as a reader they're going to be at the age of fifteen.

And of course another very important input is the diversity that exists in the class. In many education systems around the world, schools segregate children by socioeconomic origin, by race, by culture, by religious background, by gender. And segregated schools preclude children from the opportunity to learn, to work with others who are different. So one of the very important resources of school is the student is working. It is perhaps the second most important resource in a school, other than the quality of the teacher. When we think about processes, what are we thinking about? Well certainly the instructional practices, the pedagogies the teachers use, how responsive teachers are to the students, how much time students spend on task. It's one of the most important determinants of learning outcomes, how much time you are at it. The fit between the curriculum and the background of the student or the context where they work, the language of instruction, whether it is a language that the student speaks as a mother tongue or whether it is a third language. So let's now shift, talk a little bit about the making of education policy, and to talk about some tools that can help us bring some discipline to the formulation of those logic theories that undergird any educational policy.

So a policy is basically an explicit or an implicit decision which sets out directives, either to guide future decisions, to initiate some action, which may involve committing resources, or to guide the implementation of previous decisions. Right? So we can think of it as a decision, a decision formulated typically by governments and government representatives.

It is helpful to think about the process of policymaking, again, not as a discrete step, as a flicking a light switch, but as a process that proceeds in stages. And so there is a process of formulating a policy, deciding what is it that we're trying to accomplish, what resources do we need, what kind of process are going to help us accomplish that? That is followed by an assessment of alternatives, because for any possible outcome, there are different roads that can lead to the same outcome. And those alternatives need to be assessed in terms of what is known about how

effective they're likely to be, about their costs, about their political feasibility, about to what extent they're a good match to the institutional capacity of the education system. There are some wonderful ideas that are over the head of the kinds of people who have to implement them. And therefore, they're bad ideas for that particular system, unless we build in the systems to build that capacity.

So second step in that process is an assessment of alternatives. Third step is the actual making of the decision. Fourth step is implementing that decision. Next step is to evaluate what happened with implementation. And that evaluation can take place in two moments. It can take place throughout the process of implementation. We call that formative evaluation, evaluation that has the purpose of providing feedback to those that are responsible for the management of process, and it can also be summative evaluation, evaluation after the project has been completed, after the policy cycle has been completed. And that evaluation can generate the kind of knowledge that informs a new policy cycle.

So if we think about policy that way, every policymaker is building on the outcomes of what their predecessors did. And it's very helpful to think of policy really as learning of an education system over time. The one thing that policies should achieve in addition to the results which they set out to achieve, is knowledge about how to design better policies in the future. And of course research on evaluation are processes that can help us gain the information that can answer what works and what doesn't work.

In this slide, you have another representation of the policy cycle that basically distinguishes the formulation, evaluation, adoption, or making the decision, implementation, assessment of impact, adjustment of the policy, and the new policy cycle. And that talks about how this happens at three levels that are related. At one level is the conceptual level, the kinds of documents and plans, the words that get written to communicate these ideas. Next level is an analytic level, research level. And lastly, it's an execution level. It's where things happen when people actually get together and make programs take place.

The book by Eugene Bardach, which is one of your readings, describes in great detail a particular path to inform the process of policymaker, which Bardach calls the eightfold path of effective problem solving, of policy analysis. And the path basically says, it is first of all very important to define what is the problem that you're trying to solve? What is the problem space? And to do that in a way that doesn't embed the solution in the definition, but that defines a problem in as broad a way as possible. Second it's important to look at some evidence. One of the ways to discipline the thinking is not to produce policies that are just the result of the imagination of policymakers or their own personal experience, but that actually take the time to look at, when do we know about this problem? What do we know about the causes of this problem? Why is it that children in this particular rural area are not learning to read? Why is it that they're dropping out of school?

In assembling that evidence, it's also helpful to look at other policies that have achieved the kinds of results that we intend to achieve, either in this setting or in other settings. Then as a result of that examination, which is described in my paper on transfer, it's important to construct, what are the alternatives to achieve these results? What are two or three different things that could be done? What are two or three different logic theories to achieve the results that we seek to achieve?

Then after we have laid out those alternatives, it's important to explicitly formulate, what are the criteria that we're going to use to select an alternative? And those criteria, as I have mentioned, could be effectiveness, what are the results that we expect the policy to achieve, cost, feasibility of implementation. In some cases, it may be political acceptability of the decision. And so once a team involving policymaking can agree on, what are the criteria and how they're going to be ranked, because there may be tradeoffs among different options in terms of how well each of them meets all these criteria. Then it's possible to project the outcomes. What would happen in terms of these criteria if we chose Option A or B or C? And then discuss the tradeoffs, make the decision, and tell the story. Very important piece of policymaking is communication, is building a narrative that can convey to all the stakeholders that are going to have to be involved in the implementation of the policy what the policy is trying to accomplish, what is the theory of action, and what are the kinds of components of this policy input, processes output side we're going to have to keep an eye on to make sure that implementation is a faithful representation of intentions of the policy?

One of the tools that can help in the process of formulating these alternatives is the logical framework approach. And one of the readings that is assigned for this week describes in great detail how to do a logical framework. But at its core, the logical framework is basically a four by four matrix, a four by four grid that identifies, on one side, you'll see the resonance to the input process, output outcome model in a moment, that defines, what are the goals, outcomes, what are the objectives? What are the outputs that reflect those objectives? What are the activities, the processes? And what are the inputs that are necessary to achieve those? And then on the columns, you have, for each one of them, a narrative summary describing what those would be, what those elements would be, a series of indicators that allows to measure how we're doing with regards to committing resources, implementing activities, achieving outputs or long-term outcomes, a mechanism to monitor an evaluation. Where are we going to gain this information? And lastly, and very important, what are the critical assumptions and links between the different components of the logical framework matrix?

So what you see, this matrix is a series of if/then connections. If we can meet certain inputs then certain activities will be possible. If we implement those activities, then we'll achieve certain results, certain outputs. If we achieve those outputs, this is going to help us achieve some objectives. And if we achieve those objectives, that is going to contribute to certain goals. But mediating each of these connections, if/then, cause and effect, are a series of assumptions. For example, we might say that one of the ways to improve the capacity of teachers to promote literacy is to provide them with professional development. But that assumes that teachers would come to the professional development. It assumes that maybe they will do some of the readings. It assumes that maybe they will engage with the training, very important assumption. Sometimes being transparent about those assumptions allows us to put in place mechanisms so that we don't just hope for the best with regards to them, but so that we take control over the likelihood that those assumptions will take place. So for example, if making sure that people show up to training is a critical assumption, we need to figure out, what are the reasons why they might not show up? The reasons might be because there is a cost, transportation. Then providing a subsidy for that cost might increase the chances that they do. Another reason might be because what's going to happen to the students that they teach if they take off for training? So making arrangements for a substitute teacher to take over would make it more likely that they would come, etc.

So the logical framework is also a project design methodology that can guide a particular process, to map a range of stakeholders that are concerned with the policy to involve their wisdom, to extract their knowledge and use it in shaping the logic theory of a policy. So the main steps in this process are basically analyzing, who should be concerned with this issue? Who are the stakeholder groups, and which are the institutions that are concerned with this process, analyzing the problem, determining the objectives, assessing alternatives, planning the implementation of those activities, and finally formalizing a logical framework.

So you can see, I hope, the correspondence between the eightfold path of effective problem solving and this particular tool, which is one component of the eightfold path. This was a methodology developed some 40 years ago, 50 years ago really. It has been adopted widely by governments and development institutions. And I think that many of you probably have already seen it. And if you don't, I think it'll be time well spent to do the reading and to use it in one of the assignments that you will do in this class.

Lastly, I wanted to talk about the importance of transferring ideas. I have made the case, I hope, that in order to develop the logic theory of a policy, it is important to have a discipline that comes from looking at the facts. But looking at a fact is expensive. To conduct research is expensive. And it is not practical for every decision that education policymakers are responsible for to conduct empirical research in that particular context. That's why we borrow ideas. But we shouldn't borrow willingly. We should stop and think, for every policy, say we're trying to create a new civic education program, not just to look at which country has the highest results in civic education and what do they do, but to understand, in what context are they doing it? What kind of teachers do they have? What is the support for the process of education in that place? How is that similar from our context? How are our priorities different? How can we transfer this idea in a way that makes the necessary adaptations so that we make the idea as responsive as possible to the context that we're trying to address?

So basically, we need to have contextualized transfer, intelligent transfer. Intelligent transfer is really a process of reinvention. It is reinvention informed by, what, by the practices that have proven successful in other country, context. But it is not the automatic borrowing of those ideas from one place to the next.

To conclude, in this lecture, I have talked about why education policy matters and why it has great consequences for the opportunities that people around the world have to develop their potential, their human potential. I have argued that every policy reflects a logic theory. And a logic theory often involves the transfer of ideas. Because it is just practical to learn from the experience of other countries, of other education systems. I have argued that in formulating a policy and in designing a logic theory, it is important to follow a systematic process of analysis. The eightfold path is a method to conduct such policy analysis. And the logical framework approach is a particular tool to formulate a logical theory. And I have lastly argued how to contextualize the transfer of ideas from one setting to the next. Thank you very much.