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Publication Date

2009

Peer reviewed

Cite as: Desjardins, R. (2009). The rise of education as an economic policy tool: some implications for education policy research. In Desjardins, R., & Rubenson, K. (eds), *Research of vs research for education policy: in an era of transnational education policy-making* (pp. 18-40). Saarbrücken: VDM Verlag.

Chapter 2

The rise of education as an economic policy tool: some implications for education policy research

Richard Desjardins

Introduction

This chapter anchors one of the overarching themes that is developed throughout the book, namely that education policy is increasingly interlinked and subjected to economic policy. Education has been thought to be important for economic policy since the days of Adam Smith but this importance has intensified since the 1950s and especially since the onset of neo-liberalism in the early 1980s. Among other things the influence of the latter has reduced the significance of conventional macro-economic policy tools and other regulatory mechanisms, leaving national governments few alternative options for protecting their citizens against material as well as social and cultural risks. In effect, this has increased the significance of education in many regards, but the importance of a well functioning economy for sustaining overall welfare has ensured that the economic significance of education has dominated. This has had an impact on a wide range of education policy issues, and it has a number of implications for the policy-research relationship in education.

The first part of the paper takes a brief look at the development of the education-economic relationship since the 1950s, as well as the implications this has had for educational reforms and the demand for economically useful information in education policy-making. The second part considers some of the implications that this has for the policy-research relationship in education.

The evolving relationship between education and economics since the 1950s

Historically, educational systems have had important links to both economic and social ends. While some scholars have suggested that the rise of education has gone hand in hand with the rise of the economy ever since the industrial revolution (e.g. Sanderson, 1983; West, 1975), others have emphasised a more nuanced relationship. Green (1990) for example, made a broader link between the development of educational systems and the development of the modern state. From this perspective, public schooling was not just about creating a literate and well trained work force, but also about creating national citizens that would be politically loyal, uphold the status quo, support the state in times of crisis, and help to sustain narratives that were essential for preserving the integrity of the state (Gellner, 1983). This was done primarily by emphasizing moral and social behaviours in

education which were consistent with the aims of the state. Thus education has been used as a tool by the state not only for economic purposes but also for social ones such as to form and reform citizens, and to reproduce social relations. Furthermore, the use of education policy to serve both economic and social ends is deeply entwined. For example, among other mechanisms of state control, education has played a key role in regulating capital-labour relations, and in reproducing social relations between owners of capital and workers. The emphasis on either the economic or social ends of education however, has varied over time and among countries. This is subject to a complex and evolving nexus of social, economic and political forces. The following takes a brief look at the evolving education-economic relationship in the Western world since the 1950s.

The foundations of "economics of education"

The faith in education for economic and social development has been strong since the days of nation building, but the 1950s and 1960s marked a turning point in many ways. First, this was a period for regenerating the economies and societies of the Western world. Second, wealth and standards of living had grown rapidly after the Second World War. Third and perhaps most importantly, there was a growing awareness among the *masses* about the role of education in fostering or hindering social and economic development. These factors among others led to growing appetites among the masses for education and hence there was a surge in the demand for secondary schooling and university education across the Western world. For several reasons, many governments tried to keep up and accommodate this demand, although with reluctance when the full economic implications became apparent. By the late 1950s many governments entertained the idea of expanding education, partly in response to the growing social demand but also because it made sense. The launch of the first orbital satellite (Sputnik 1) by Russia in 1957 established the potentially significant role of education in the development of science and technology, and hence the security, prosperity and development of the nation. This brought education to the forefront of the policy agenda in many Western countries and provided an impetus that coincided well with the growing social demand for education. There was a realisation, however, that few countries could meet the growing demand and thus more would have to be done with existing resources. Furthermore, any public financing of an expansion needed justification. Thus the education-economic policy problem became two-fold.

First, how could the notion of education as a public good (typically viewed as such heretofore) be reconciled with the growing social demand for higher levels of education? What would be the justification for any increased public spending on education? Socially, there was a widely held perception that the pent up demand should be met as part of the wider post-war welfare settlement.

Also, the perceived need to keep up with other nations (for example, in science and technology development) for reasons of national security and prosperity added pressure for an expansion to be viewed as a public good. Therefore the context was ripe for accommodating any economic rationalisations which would help to support the social and political demands. Indeed, by the late 1950s and early 1960s, economists began to strengthen their theories, which ultimately set the basis for further expansion. The empirics strongly pointed in favour of publicly supporting the expansion. On the macro side, Denison's (1962) early studies of US economic growth found that investment in knowledge and labour quality was found to be substantially more important than investment in physical capital. On the micro side, Mincer (1958) among others showed a substantive relationship between schooling and wages, which reinforced the potential significance of the productivity enhancing effect of education. In combination with a number of other key works around the same period (e.g. Schultz, 1961; Becker, 1962), this led to the birth of a new field, namely human capital studies, which has produced thousands and thousands of studies and remains very much within the picture today (e.g. see Psacharopolous, 2006). Thus, with the promotion of new economic growth theories, the 1960s witnessed an explosion in the growth of education, which was largely financed with public funds. The rationale was largely based on the notion that increased education was an investment and that there were economic rewards to be had at the societal level. From this perspective, educational research and policy became deeply entwined around economic issues. In particular, support for increased public spending on education was firmly based on economic justifications. This logic has intensified since then, and has in general set the tone for reforms in education, and the discourse surrounding the purpose and objectives of publicly financed education.

Second, how could educational resources be managed to meet the objectives of the day? Economists began looking for indices of educational productivity so as to identify what it is that matters for an effective and efficient schooling system, and how resources could be allocated and managed most efficiently. At first, economists compared the outputs of schools, namely the proportion of an age cohort that successfully completed, to see which schools were most efficient. It became apparent however, that this was not adequate because there was no control for quality (Postlethwaite, 1994). This led to a realisation for a need to have comparable measures of achievement, which laid the seeds for the measurement industry in education, including the development of national standards and international comparative measures (see Anderson, 1961). The first IEA (International Association for Evaluation of Educational Achievement) studies that supported this realisation were in the 1960s. A 12-country mathematics study was conducted between 1962 and 1965 (Husén, 1967). This was followed by a six subject study (science, reading

comprehension, literature, English as a foreign language, French as a foreign language, and civic education) in the period between 1967 and 1971. Additionally, international organisations such as the United Nations Educational, Scientific, and Cultural Organisation (UNESCO) and the Organisation for Economic Cooperation and Development (OECD) began to intensify their information gathering activities regarding national systems of education (Postlethwaite, 1994).

Together, the above policy needs which arose out of the education-economic problem strengthened the demand for information regarding resource use in education. This in turn strengthened the relationship between policy and research in the field of education, but the emphasis was on economically useful information. In tune with this, the OECD began to engage in educational research systematically on an international level for policy purposes (see e.g. Papadopolous, 1994). The education policy arena now came under the influence of international organisations as well as national governments, which culminated into growing tensions between the two (see Moutsios; Rinne, this volume, for an extended discussion of this issue). With these developments as a backdrop, we nowadays observe an increasingly dense web of transnational governance in education (Rubenson, 2007), including so-called *policy learning* processes that occur in cross-national contexts (see Cort; Nielsen, this volume, for an extended discussion of this concept).

The shift from Keynesianism to Neo-liberalism

Emerging from the turmoil of the 1970s and building on the foundations of the 1950s and 1960s, the education-economic relationship intensified along with the emergence of neo-liberalism. It is well documented that by the early 1980s there was a dramatic change in the dominant discourse that was driving the politics of the day in the Anglo-Saxon world, namely from a predominantly socially oriented view of the role of the state to an economically oriented one (e.g. Davies and Bansel, 2007; Hursh, 2005; Gewirtz, 2002; Pierson, 1994). The former was encompassed in the notion of the Keynesian welfare state while the latter has come to be associated with the notion of a neo-liberal post-welfare state. This development has been most prominent in Anglo-Saxon states, including the US, the UK, Australia, Canada and New Zealand, but as a source of political influence, neo-liberalism has extended well beyond the reach of these countries.

From the post depression years up to the late 1970s, Keynesianism prevailed to varying degrees in most advanced industrial nations. Up to the late 1960s, it represented a form of governance that managed to serve and protect both capital and social interests reasonably well. Rapid economic growth and the associated accumulation of capital during this period were relatively sheltered from international economic competition, mostly as a result of protectionary measures taken by the state.

Further, by redistributing resources and power, and engaging in large scale social programmes, the state alleviated the social inequality and displacement associated with the rapid accumulation of capital (Levitas, 1998). Against the backdrop of strong state control to protect citizens from social injustices, workers allowed capitalists to control investment and growth, which were ultimately channelled into multinational corporations, in exchange for improving wages (Hursh, 2005). Together, these relations between the state, national citizen-subject and capital-labour underpin what has become known as the Keynesian consensus. By the 1970s, there was considerable pressure on the Keynesian consensus for a number of political, economic and social reasons. Consequently, neo-liberalism became, for many reasons, an attractive form of governmentality.

On the political side, strong state control of capital and the redistribution of resources during Keynesianism was seen by many as a way of correcting for the perceived social injustices of capitalism, but for many others this was also seen as a (potential) threat against freedom (e.g. Friedman, 2002). Strong socially oriented regimes such as those of the Soviet Union and China were portrayed as examples of what can happen when the state is given too much power to govern over its subjects, namely a brutalisation of civil society, individual freedoms and other democratic principles. In particular, strong centralised control over capital interests could be seen as a stepping stone for ideological control over a wider spectrum of human thought and activity. In this context, education might be used as a tool by the state to centrally impose the ideology of those in power and thus directly control the thought patterns of the citizenry as well as their collective memory, and thus their capacity to explore and debate alternative ideas. The notion that the Keynesian welfare state could hinder freedom beyond those of capital interests is debatable, primarily because this issue is subject to a more complex set of conditions and simply the fact that examples of successful market democracies which are strongly socially oriented exist, such as the Nordic countries. Nonetheless this formed an important source of reasoning for the early neo-liberalists, whose ideas were strongly influenced by the powerful neoclassical economic framework which advocated minimal state intervention in both economic and social affairs.

On the economic side, profits began to fall both because of cost pressures from labour but also the fact that these costs could not be passed on to the consumer because of increasing international competition (Bowles and Gintis, 1986). Parenti (1999) reported that profits in the US fell by more than 50% between 1965 and 1974. This led to considerable pressure by economic (capital) interests to deregulate capital flows, and in particular to open up economies which would among other things provide capital interests with access to cheaper labour in global markets. All of this helped to align

interests for supporting a shift, but it was ultimately with the oil shock of 1973, and the ensuing economic problems brought about because of stagflation (many economies experienced high and rising unemployment, coupled with high and rising inflation), that modern liberal economics began to fall out of favour, and the Keynesian consensus was replaced with the neo-liberal doctrine.[1] Classical liberal theorists such as Friedrich von Hayek and Milton Friedman regained dominance; it gave Reagan and Thatcher the opportunity to revitalise the discourses of (neo-) liberal economics, and begin the so-called politics of retrenchment which would scale back the welfare state (Pierson, 1994).

Other events and interests put pressure on the Keynesian consensus during what can be described as the radical 1960s and 1970s. Many subpopulations of Western countries struggled for civil rights and personal liberties, such as women, minorities and the working class. Despite the Keynesian consensus, capital-labour relations became strained because of increasingly visible inequalities associated with post-war economic expansion and its links with access to education. This led to an added emphasis being placed on the social distribution and social implications of education. Further, social liberalism, cultural relativism and progressivism were on the rise. In this context, neo-liberalism could be seen as an effective way to regain social control after the social unrest of the 1960s and 1970s (e.g. student and worker rebellions that culminated in the confrontations of May 1968 in Paris), particularly in light of some of the more progressive positions taken in education and in the media (see Crozier *et al.*, 1975). The early 1970s was an era of serious critical analysis of education and policy, which reflected a rejection of capitalism and an attempt to break with the conservative tradition (Zajda, 2002). By veiling itself as a necessary programme of response to the deep economic crisis of the day, neo-liberalism in effect avoided direct confrontation with the various political, social and cultural discourses that had emerged. Davies and Bansel (2007) suggest that neo-liberalism was in fact a convenient way to accommodate all of those emerging discourses, but at the same time to make them subservient to a dominant discourse of capital in an invisible manner, by what they call the implementation of "piecemeal functionalism".

The influence of the neo-liberal doctrine on some of the world's most powerful economies as well as international institutions coincides with unprecedented liberalisation of not only economic forces but also technological, socio-cultural and political forces. This is encapsulated within the phenomena of globalisation, which by the late 1990s was evident for most observers. Today, most observers agree

[1] This was primarily because the recommended policy response dictated by Keynesian logic was contradictory and impossible, i.e., to apply both anti-recessionary and anti-inflationary policies at the same time.

that the neo-liberal doctrine is the main ideological force which underpins the creation and sustenance of a wide range of structural conditions, including legal and institutionalised frameworks at the international and supranational level (e.g. World Trade Organisation, multinational corporations), which allow for the forces of globalisation to thrive and especially global capitalism. Most nations are affected by the phenomenon of globalisation and the ideology of neo-liberalism. In many countries however, the degree of influence of the latter is debatable, particularly in welfare states that are economically successful such as the Nordic countries. While influenced by the neo-liberal doctrine and experiencing the pressure of intense competition, especially as small open economies in a globalised world, the latter have adapted some of the neo-liberal policy thinking, but to a large degree, they have remained within the framework of the welfare state (Timonen, 2003).

Initially, the main rationale for promoting international liberalisation laid within neoclassical economic trade theory, which suggested that everyone in the world will be better off materially if market activity is left unregulated, not only within borders but also across borders. Politically, this appealed to neo-liberalists because there was a belief that a connection existed between free market activity and wider democratic principles (e.g. Friedman, 2002). Indeed today we can observe an increased flow of goods, services, people, knowledge, ideas, information, and financial capital across borders, and accordingly, an increased number of market democracies and open societies. While globalisation has been facilitated by technological developments, and in particular the impacts these have had on reducing communication costs including the flow of goods, people, and information, it is unlikely that we would see the increased cross border activity that we see today without the emergence of the neo-liberal doctrine.

Not least, neo-liberalism has also had a number of interrelated implications for education. In particular, the above developments set the stage for education to play a greater role in economic policy and conversely, a greater role for economics to play in education.

Shift in responsibility for social inequality

First, neo-liberalism shifted the responsibility for inequality to the individual and refuted the idea that increasing social dependence was the solution. While social inequality was seen as a social injustice in the Keynesian period that should be corrected, neo-liberal thinking has tended to view it as a result of individual inadequacy, and as a source of incentive for being a more productive member of the workforce and successful entrepreneur. In a number of countries, for example Canada, this contributed to a shift in the general tone of educational policy back to a pre-war political liberalism, which was premised on the idea that individual opportunity and equal access to education combined

with social inequality benefits the economy and society (Mitchell, 2003). This is in contrast to the "ethical liberalism" of the 1960s, which was based among others on the ideas of John Dewey, who emphasised the use of education for developing each individual to their fullest potential (see Olssen, 2000).

Thus there is a sharp tension between the neo-liberal view of education and the notion of education as a public good that is embedded in the humanistic tradition. Within this context, a more recent debate is emerging on whether the social policy agenda (including education) of a transnational organisation like the OECD is moving to embrace an "inclusive" form of liberalism (see Mahon and McBride, 2008).

Reduced effectiveness of conventional economic policy tools

Second, the influence of neo-liberalism has reduced the effectiveness of conventional economic policy tools and other means which national governments have at their disposal for managing the economy and protecting their citizens. Governments have two main types of macro economic policy tools to maintain or improve standards of living, namely fiscal and monetary policy.[2] They can also use regulations such as restricting trade and capital flows, as well as redistribute resources through taxation and social transfer programmes. In using these tools, governments can play an important role in managing the economy at a macro-economic level. Keynesianism, which represented an interventionist welfare state, advocated the use of these tools to foster and steer the health of the economy. But this was in sharp contradiction to the neo-liberalist doctrine. In its strictest form, the latter is based on the belief that free-market economies are inherently stable in the absence of major government interventions; and, that the liberalisation of markets including the free flow of capital, goods, people, knowledge and ideas holds the promise of economic rewards and overall increases in welfare. This is based on a range of economic theories and empirical studies in the fields of international trade, growth, labour markets and industrial organisation. Thus neo-liberalism has had an impact across a broad range of policy thinking, including: limited government intervention; government budgetary discipline; free trade; competitive exchange rates; privatisation; reduced capital controls on cross-border flow of finance; and deregulation of market activity among others such as union busting (Rodrik, 1996; Cohen and Centeno, 2006). In short, this list is known as the "Washington Consensus" because international organisations located in Washington like the

[2] Fiscal policy refers to government policy that attempts to influence the direction of the economy through changes in government borrowing, spending or taxation. Monetary policy on the other hand attempts to stabilise the economy by controlling interest rates and the supply of money.

International Monetary Fund (IMF) and the World Bank promoted these policies throughout the world especially in the 1980s and early 1990s (also see Moutsios, this volume, for an extended discussion of this issue).

Increased risks because less protection afforded by national governments

By reducing the effectiveness of conventional policy tools, the capacity of national governments to afford protection to their citizens has been substantially reduced in a liberalised context, and therefore, people are faced with increased risks. For example, because of a decoupling of local labour and global capital, combined with an increased level of technological development, people are now more likely to lose their jobs. Under Keynesianism, governments had a range of tools at their disposal for responding to such risks. For example, competitiveness could be maintained through protectionism such as imposing trade tariffs or quotas, providing subsidies, or fixing exchange rates so that local currencies would remain undervalued.

While neo-liberalism, which in general advocates against protectionary measures, has indeed had a powerful influence on the national politics of many nations, governments can and do continue to use fiscal, monetary and other regulatory policy to steer and protect the economy, only now the context is different. Namely, many countries face institutionalised and legal frameworks that are based on principles of international liberalisation, such as the European Union (EU), the European Monetary Union, or the World Trade Organisation (WTO). As intended, the degree to which national governments can use their conventional tools for the purposes of protection and meeting strategic interests is constrained by such frameworks. Although there is continued pressure and there are creative ways which are considered for doing so, it is increasingly difficult for national governments to use these tools for the purposes of protecting local producers or labour from international competition. Accordingly, national governments have fewer options on how to fulfil their mandate of protecting their citizens' standards of living.

The increased risks however, are not only material. In an open global environment, individuals and communities face an increased risk of losing their heritage and their personal, social and cultural values because of an increased flow of ideas as well as a globalised democratic debate over what should and should not be valued, and at what level.

In this context, education is increasingly seen as a crucial tool for mitigating risks associated with globalisation, including the economic, social and cultural risks. In Denmark for example, well over half of the 350 strategic initiatives put forth by the globalisation council are directly linked to

education and training (Danish Government, 2006). The purpose of the council was to investigate the issue of how the country should respond to the challenges of existing in globalised world. Not surprisingly, the importance of a well functioning economy has ensured that mitigating the economic risks associated with globalisation has assumed a dominant position in the discourse surrounding the role of education. Rubenson (this volume) discusses the more holistic view proffered by UNESCO on the role of lifelong learning in securing not only the economic aspects but also personal, social and cultural values. He suggests that this view has been set aside or overtaken by a competing paradigm put forth by the OECD which is based on a more narrow economistic perspective of lifelong learning. A number of observers have expressed concern about the possible negative implications this may have for the role of education in helping to sustain wider democratic principles (e.g. Moutsios, 2008)

Increased competition and the role of education

Although there has been little overall growth in Africa and the Middle East since 1950, trends in world GDP figures indeed suggest that the world is better off today (Shackman, Ya-Lin and Xun, 2005), at least materially, but this has meant an increased level of competition in the world. As advocated by economic theory, competition is important for securing an optimal level of welfare (Gurria, 2008). But it is important to note that neoclassical economic theory which supports liberalisation tends to ignore social, cultural and political factors as well as attitudes, values and beliefs. These however, have been affected by competition too, both in positive ways but also in negative ways depending on the context and whose perspective. Thus there is an increased competition not only for sustaining material standards of living but also for sustaining cultural, social and political values. From this perspective, it is not surprising that the consequences of living in an open globalised world have been reacted to with inward looking and protectionary ideologies based on nationalism and ethnocentrism (e.g. rise in support for far right wing parties in Austria, Belgium, Denmark, France, Netherlands, Norway, Switzerland).

In many countries, globalisation has meant that the philosophy underlying education is rapidly being replaced with a meaner, harder logic of competition on a global scale. A series of reports in the US dating back to the emergence of neo-liberalism exemplify the concern for international competition and the link between education and national economic security as well as prestige. In 1983, Reagan's secretary of education, Terrel Bell, commissioned a report on the importance of educational reform entitled *A Nation at Risk*. The main message of the report was that America had serious problems with the quality and effectiveness of its schools and had to do something about it to

survive as a nation. It reinforced the political sentiment regarding education which was felt when the Soviets launched the Sputnik in 1957:

> "Our nation is at risk. Our once unchallenged pre-eminence in commerce, industry, science, and technological innovation is being overtaken by competitors through the world… We live among determined, well-educated, and strongly motivated competitors. We compete with them for international standing and markets… America's position in the world may once have been reasonably secure with only a few exceptionally well-trained men and women. It is no longer" (NCEE, 1983).

The report had a profound impact on education in the US, but also had ramifications at the international level. The US pulled out of UNESCO in 1983, and instead increased pressure on the OECD to produce internationally comparable education statistics and evaluate the condition of education in the industrialised world. Interestingly, this was one way for the US federal government to secure a role for itself in its own national debate, since education policy was predominantly the responsibility of individual states and the newly created federal ministry of education in the late 1970s had in fact little control over education. This exemplified the growing complexity of the relationships between national governments and international bodies.

Furthermore, the 1980s marked a period when a number of countries, began to set educational standards in certain subject areas (e.g. NRC, 1986). Success in science and mathematics education was prioritised because these were seen as crucial subject areas where good performance is necessary for being ready to compete in a global economy. In particular, a link was made between science and future workforce requirements:

> "Science understanding and ability also will enhance the capability of all students to hold meaningful and productive jobs in the future. The business community needs entry-level workers with the ability to learn, reason, think creatively, make decisions and solve problems" (NRC, 1986, p. 12).

More recently, picking up where *A Nation at Risk* left off, the John Glenn commission in the US produced a report entitled *Rising above the Gathering Storm* (CPGE, 2007). Its main message reinforced the threat of globalisation to individual nations, and the key role that education had to play in this:

> Having reviewed trends in the United States and abroad, the committee is deeply concerned that the scientific and technological building blocks critical to our economic leadership are eroding at a time when many other nations are gathering strength (*ibid*, p. 4).

Science and mathematics were again placed at the centre:

> The U.S. system of public education must lay the foundation for developing a workforce that is literate in mathematics and science, among other subjects. It is the creative intellectual energy of our workforce that will drive successful innovation and create jobs for all citizens (*ibid*, p. 112).

These developments have fed into the development of the measurement industry in education. In particular, by tapping into the concern of governments and the wider public about what it is that students have actually learned as a result of all this investment in schooling, the OECD Programme for International Student Assessment (PISA) has achieved a spectacular profile at the international level. PISA directly measures what 15-year-old students have learnt in some 60 countries (OECD, 2004), but it only deals with one age band, and it narrowly focuses on a small set of competencies such as science and mathematics literacy, not on what happens as a consequence of developing those competencies. Much criticism has been levelled toward PISA for reaching such a high profile in terms of its impact while being so narrow in its coverage and depth. Some critics claim that PISA test items are biased in favour of Anglo-Saxon cultures and that these types of tests are like "hidden curricula", aimed at persuading entire nations to adopt more competitive attitudes (see Hopmann, Brinek, Retzl, 2007).

Meanwhile, economists have continued to produce a series of theoretical and empirical contributions in the areas of international trade, growth theory, labour market and industrial organisation, many of which point to the importance of human capital for economic competition, as well as increased rewards to welfare for continuing to liberalise, including the free flow of people, knowledge and ideas. Most notably, contributions to endogenous growth theory in the late 1980s revealed that the unique properties of knowledge implied that there were increasing returns to investments in human capital, as opposed to the previously held view that economies could only grow with decreasing returns to investment in physical capital (Lucas, 1988; Romer, 1990). On the heels of this, the discourse of knowledge-based economies emerged in the early 1990s and in effect subsumed the discourses of risk, competition and the consequent need to continually invest in learning throughout the lifespan so as to keep up (what Rubenson, this volume, refers to as the OECD and the second generation of lifelong learning). Most OECD countries are now in agreement regarding the pillars of a successful knowledge-based economy in a globalised world, namely knowledge, innovation, entrepreneurship and technology. It is easy to see that education has a critical role to play in nurturing each of these pillars. Therefore, it is no wonder that there are commonly held perceptions that education is faced with priority claims to serve economic ends. Even if only with a narrow view, economic research which is both theoretically and empirically well founded, has systematically implicated education in economic prosperity.

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The increased role of economics in education policy

The preceding discussion focused on the rise of education as a macro economic policy tool whereas the following takes a closer look at some of the implications this has had for the increased role of economic principles in the internal functioning of educational systems. In a number of ways, the above mentioned conditions marked a period when economic principles would intensify their influence on education policy-making. Building on the economics of education foundations formed in the 1950 and 1960s, the key issues in countries who had by the early 1980s adopted neo-liberalism were: How much public financing? How should public resources be managed most efficiently? And how should the educational system be managed so as to achieve the new priorities that education should achieve in an open and competitive world? This was on the one hand a period of consolidation that faced renewed pressure to restrain public spending on education, but on the other hand it was also a period invigorated by a mandate to reform education so that it would respond to the new realities of an increasingly competitive world. The initial impact of the shift to neo-liberalism on education policy in the US for example, was to go back to the basics and rationalise education policies.

Firstly, calls for budgetary discipline put pressure on claims to the public good function of education. In particular, returns to education estimates as measured by economists indicated that private vs public returns to education were comparatively high, especially for higher education (e.g. Psacharopolous, 1973; 1981; 1985). From an economic perspective, this meant that individuals should also help to cover the costs, otherwise a smaller, more fortunate sub population would benefit at the expense of the wider public. Even so, the faith in education as a positive force in wider society remained strong and, accordingly, so has public support for education, especially for primary and secondary schooling. Furthermore, more recent estimates which take account of a broader range of benefits such as improved health and reduced crime, suggest that the public returns to education are just as high as the private returns, if not higher (e.g. McMahon, 1999).

Secondly, the adaptation of market-oriented principles, which was part of a wider movement to modernise the public sector (i.e. New Public Management), deeply influenced structural reforms in education. The aim of New Public Management was to increase the effectiveness and efficiency of public services while maintaining recognition for the special characteristics of public goods. This involved increased pressures for privatisation and marketisation in education (see Wells and Holme, 2005), including an increased focus on learning outcomes and fostering a better alignment among incentives, responsibilities and rewards.

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Thirdly, the perceived impact of education on competitiveness and other economic outcomes took on a more prominent role in setting the direction of educational systems. In particular, it influenced the debate on what it is that educational systems are supposed to achieve, and more precisely which learning outcomes (for example, science and math literacy). Accordingly, the policy focus during this time was on reforms to centralise control. Frustrated by constrained resources and pressure to reform so that education would respond to the looming threats and consequences of the expansion of global capitalism, policy-makers acted to centralise decision making control on key aspects regarding who should influence the agenda for setting educational priorities, as well as on regulating the framework conditions for resource management (see Bascia *et al.*, 2005). A tension grew between bottom-up approaches to policy-making, which made headway in the 1960s, and top-down approaches. In the US, there was a struggle between the federal and local officials and business leaders became involved (see Bascia *et al.*, 2005). Greater control over education policy would also facilitate a reshaping of the mechanisms needed for ensuring that education was being as effective as it could be, and that objectives were being met in the most efficient way.

With this as a background, the introduction of accountability, standards and measurement in education were seen as solutions for balancing the need for a more decentralised market-oriented approach, while at the same time allowing for greater centralised control over quality and cost efficiency. Rinne (this volume) refers to this as a distinction between procedures that are strategically centralised, but operationally decentralised. Accountability and standards based mechanisms allow for greater transparency but also for greater centralised control in defining the anchors (i.e. the outcomes) from which to manage the educational system, while at the same time helping to foster and align incentives to fulfil those objectives, including the use of sanctions for not meeting standards. In effect, accountability and standards marked the emergence of the measurement industry in education (see Wells and Holme, 2005; Roeber, 1999), including not least standardised measures of achievement (e.g. US National Assessment Education Programme). By extension, these mechanisms would help to generate better data for the purposes of management, but the focus was on the measurement of learning outcomes. This was attractive for many because it would force actors to define better the objectives of education and it would provide tools for assessing whether those objectives were being adequately met. The problem however, with focusing on learning outcomes is whether existing measures do justice to the actual objectives. Accountability that is driven by measurement carries the risk that educational systems are guided by what can be measured rather than by the actual objectives. For example, teaching to the test is a real concern; so is an over-emphasis on certain outcomes that favour science and technological development outcomes vs wider outcomes

that relate to human development, sociability and civicness. Still, measures that are unduly narrow can help us to make headway but only as long as the limitations are widely acknowledged and taken into account.

To sum up the first part of this chapter, it can be said that the intensification of economic foundations in education in the 1950s and 1960s, the increased influence of the liberalisation movement since the early 1980s, the shift to knowledge economies in the 1990s, and the globalisation that ensued, have all contributed to the heightened significance of education for economic policy. Industrial countries are undergoing a period of fundamental economic transformation in which knowledge and information are being promoted as the foundations for competitiveness, economic growth and improved standards of living for all. At the same time, the international and supranational institutionalised frameworks that were borne out of the influence of the neo-liberal doctrine have come together to reduce the effectiveness of conventional economic policy tools as well as other means which governments have used to protect their citizens. These latter tools were once effective in responding to risks against national standards of living such as threats to local competitiveness but are now less effective in a more liberalised environment. As a consequence, educational policy has become entwined with the economic viability of nations, and has thus become increasingly interlinked with and subjected to economic ends. Reviewing national and supranational policy documents reveals the increasing importance attributed to the role of lifelong learning in promoting the well-being of nations and individuals. Policy-makers all around OECD countries seem to agree with Tony Blair that, "education is the best economic policy we have" (Martin, 2003, p. 567). This reflects the sentiment that education is now fundamental for nations to maintain competitiveness and standards of living, and that governments have few alternatives but to rely on education policy. Lastly, this heightened significance of education for economic policy has gone hand in hand with a greater role for economic principles to play in education policy. The next section discusses some of the implications these developments may have on the broader role of research in education policy-making.

Some implications for the role of research in education policy-making

Although subject to intense debate, policy intervention in education relates more generally to at least three major considerations. First, interventions can be justified on the grounds of making the most effective and efficient use of available resources. This is subject to the debate of how best to reach an optimal amount of investment in learning, and hence to reach an appropriate balance of costs and benefits, as well as how educational systems should be set up and managed so that they may achieve

what they are suppose to in the best possible way. Second, interventions can be justified on the grounds of alleviating inequalities of opportunity as well as inequalities in social and economic conditions among groups in society. This is subject to the debate of how best to distribute learning opportunities, and hence their associated outcomes according to our concern for human welfare and goals such as the attainment of equity and social cohesion. The former consideration is primarily for the concern of economic conditions, while the latter is for the wider concern of human and social conditions. But the two are linked in important ways and research has the task of revealing how, to what extent, and what this means for the likely implications of how the policy process plays out. For example, there is some evidence which suggests that unequal chances to participate in education and under-investment in education are strongly linked (Desjardins, Rubenson, Milana, 2006). Third, because education features public good characteristics, public policy has a critical role to play in defining educational objectives. This has both economic and social dimensions, since, as it was discussed earlier, education has important links to both economic and social ends. In recent years however, it could be said that an added emphasis has been placed on serving economic ends, perhaps at the expense of not only the social objectives but also the personal and cultural objectives of education. In short, key educational considerations are not only about how much education and for whom, but also about what the objectives of education are and who defines them.

The political process is thus crucial for the setting of educational objectives, as well as the mechanisms for helping to ensure those objectives are met. How does this play out? And how does research relate to this process? One major issue is whether the setting of objectives is based on an appropriate balance of knowledge regarding how best to reach a broad range of personal, cultural, social and economic needs. While the setting of objectives is largely a political issue, the research community has an important role to play (see Walker, this volume, for an extended discussion of this issue), especially as policy becomes increasingly subject to scientifically oriented debate. For example, critical research is a necessary task to help keep governments to account in democratic societies (e.g. see Lauder, Brown, and Halsey, 2004), but not least, research also has a role to play in developing a better understanding, including an evidence base, of the impact of education not only on economy but also on wider society. It also needs to assert a greater role in informing the political debate on educational objectives and the likely implications in a manner that is practical, forward looking and solution based. To make progress on this however, the policy and research community need to deal with the tension between research *for* policy and *of* policy. In short, the aim of striking an adequate balance, and by implication the struggle of social policy in education, depends very much on the formation of an adequate and well balanced evidence base; good communication among

researchers, policy-makers and practitioners; as well as a greater coherence among these communities with respect to the role of different types of research. The following elaborates on each of these points.

Need to understand better the impact of education not only on economy but also on wider society

It is widely recognised that the total benefits of education to society exceed the sum of what individuals earn as a result of their educational attainment. Besides providing the knowledge and skills necessary for economic participation, the schooling system is the primary agent of socialisation in modern societies. But while human capital theory links education to economic outcomes and offers a robust framework for scientific investigation and policy research, there is no comparable theory linking education to wider social outcomes. Thus we need to improve our models for understanding better these relationships; for gathering and synthesizing what we know and what we want to know; and for drawing out their implications for policy and further research (Behrman and Stacey, 1997; McMahon, 1999; Schuller *et al.*, 2004).

One of the key purposes of education is to facilitate the processes involved in developing and maintaining capabilities so as to generate well-being, ranging from the economic to the social, cultural and personal aspects. But to what extent are various dimensions of well-being actually stated and recognised objectives of educational systems? And are they anchored on a well balanced notion of what constitutes economic, social and personal well-being? What is the balance among various objectives and what should the priorities be? Are efforts to guide and manage educational systems, including the design and implementation of policy, and the training of administrators and teachers coherently geared toward such objectives? Are educational systems adequately evaluated and held accountable vis-à-vis such objectives? Are the resources organised and used in a way that fulfils what society intends educational systems to achieve? Do the educational systems provide the right forms and types of learning opportunities? Are the learning opportunities offered at the right time and distributed over the lifespan in the best possible way? These are all important questions for policy and research to address but unfortunately they are not straightforward.

To research the full range of effects of education on the economy and society is difficult. Many of the links between education and well-being are complex and often not well supported by a rigorous knowledge base, nor well understood. Certain outcomes such as the wage and GDP growth effects of education are an exception. Presumably, the importance of a well-functioning economy has ensured that these have received due attention, but the fact that these effects are more amenable to being quantified and generalised has surely been a deciding factor. Consequently a decent evidence base has been built up for these economically oriented outcomes, but there are many other outcomes that

are arguably equally important. Much research in recent years has investigated other educational outcomes but the results are less known (see Vila 2005, for a recent review of this work), precisely because the relationships involved are more complex. The latter implies two serious shortcomings to this area of research. Firstly, the relevant variables are difficult to assess using precise quantitative measures, and secondly, complexity combined with poor data make it more difficult to verify any causality that can be generalised. This has meant that research on the wider benefits of education is not as usable for policy-makers as more straight forward results which can be quantified and generalised.

But as educational systems and their significance continue to grow, so does the importance of grasping the full range of impacts that education has on economy and society. This includes a better understanding of the public good function of education. We know that the effects of education are far reaching and extend well beyond the economic sphere, but how and to what extent are important theoretical and empirical questions for educational research? Although the plausible links between education and well-being abound, we in fact have little empirical knowledge, which is robust, on the nature and range of such effects, nor on the conditions needed to secure positive effects. Further, there is plenty of evidence to suggest that some of these potential effects are not necessarily positive. Indeed, the wider context of values and norms, especially with regard to morality, compassion, tolerance and inclusion are key aspects to take into account. We also know very little about the impact of different curricula on wider society, or likewise of different pedagogical methods, and ways of organizing and running schools.

These difficulties point to the importance of mixed method and comparative research in education. Beyond a further build up of theory which can guide the collection of better data and the development of measures, we need improved analyses and empirical testing using mixed methods. More emphasis should be placed on complementing statistical analyses with qualitative evidence (see Johnson and Onwuegbuzie, 2004; Cook and Gorard, 2007). Likewise, comparative data and research can be powerful for several reasons. First, assessing cross-country differences, and relating these to economic, social, policy and other contextual conditions, permits policy-makers to assess the comparative strengths and weaknesses in the country's past, current and prospective efforts. Second, because cross-country variation in policies and institutional settings is greater than intra-country variation, a comparative information base can in principle provide more policy-relevant data and analysis than a compilation of national studies that are not comparable. Together, these methods are necessary to build up a well-balanced evidence base that can inform the debate. But this requires

recognition of the full cycle of complementary phases and activities which underlie the research process. Moreover, it requires recognition of the empirical limitations of the various methods used in educational research, especially those that seek to produce generalisable results as to the likely effects of specific policies and practices. This would help to address the above limitations and thus allow for a more precise understanding of how education leads to well-being. In turn, this may allow for drawing up more meaningful implications for both policy and practice in relation to curricula and pedagogy at different ages and stages.

Need to inform better the political debate on educational objectives

A growing consensus is forming that the links between personal, social and economic well-being and education need to be understood better and communicated to policy-makers and the wider public (OECD, 2001; 2007). Policy concerns such as mental and physical health, active citizenship and social cohesion have assumed greater prominence on the political agenda. But this interest precedes theoretical development and a good information base to make sound policy decisions. Thus there is a need to inform better the political debate regarding educational objectives, their likely impact, and how best to attain them.

This is no easy task, however. For example, research *of* policy has shown that the policy-research relationship is not linear, and policies are not always implemented as intended because among other reasons there can be tension, miscommunication, or disagreement among actors within the system, as well as a lack of competencies in implementing reforms. More generally, the issue of what educational systems are supposed to achieve constitutes a *complex* and *ill-defined* problem.[3] The objectives of education are not always known or clear. Firstly, setting the objectives of education is a political issue. Thus it may be difficult to reach consensus on well defined objectives or it may be disadvantageous to do so. Secondly, the knowledge base on what educational systems *can* and *do* achieve is very poor. It is common sense that education has an influence on individuals and society but how and to what extent is still very much a matter of substantial debate. Unfortunately, due to the inherent complexity, the debate is not as well informed as it could otherwise be hoped.

Even when stated and elaborated, objectives remain elusive and problematic. For example, the objectives of education are often reduced to proximate outcomes such as the attainment of certain skills, because by assumption (and sometimes theory) these are commonly believed to lead in turn to well-being. To date, most of the evidence base regarding the links between education and well-being

[3] See Simon (1973) for a discussion of complex and ill-defined problems.

rests on assumptions about the significance of proximate outcomes such as math or science literacy. Rarely, however, is the knowledge base adequate to favour emphasis on certain proximate outcomes over others. Still, this approach offers the opportunity for parsimony, measurability, and hence provides clear and manageable anchors which help to guide and keep educational systems accountable. Thus ways of extending and deepening this approach are part of the solution, although it should be acknowledged that this sort of information will always remain imperfect and must be complemented with other methods of assessment.

Dealing with the tension between policy research <u>for</u> policy and <u>of</u> policy

Today, the evidence base regarding the effects of reforms and whether the effects are intended or unintended is relatively poor, although there are important studies in this area (e.g. see Nichols, Berliner, and Charles, 2007). Still, it could be said that there is a demand for research and usable knowledge in education policy-making which is not being met as well as it could be. For example, many observers have called for a reinforcement of so-called evidenced based policy-making and for improved links between research and education policy-making (see Burns and Schuller, this volume, for an extended discussion of this issue). But it is important to note that there exist deep tensions and gaps between the policy-making and educational research community which must be recognised (Scott, 1999; Ginsburg and Gorostiaga, 2001; also see Levin; Rasmussen, this volume, for an extended discussion of this issue). Even among the research community, it is important to make careful distinctions between different types of policy research, not least among others, between research *for* policy and research *of* policy. For example, there is a large community of academics who tend to focus on the latter and thus overwhelmingly produce critical policy research rather than research *for* policy. The former type of research tends to be ad-hoc, backward looking, and critical, whereas the latter tends to be forward looking, concerned with solutions to practical problems. Both are necessary but the distinction is a source of tension. For example, many academics in the human and social sciences take serious offence to the idea of doing research *for* policy and see this as an assault by technocrats against the purity of science. Conversely, many policy-makers complain about the irrelevance of much academic research.

It is important to note that in having a tendency to favour a problem solving approach to research rather than a critical approach (see introduction), the economic sciences when compared to the broader social sciences are one area of research that have helped to fulfil the increasing demand for usable knowledge in education policy-making. It is easy to see that this carries the risk of education

policy remaining biased in favour of meeting economic ends. Thus a more coherent and balanced approach to this problem may be needed.

Summing up

This chapter has discussed briefly the evolving nexus of political, social and economic forces since the 1950s and in particular how this has led to a heightened significance of education for economic policy in recent decades, especially with the onset of neo-liberalism in the early 1980s. It was also suggested that this has gone hand-in-hand with economic principles playing a greater role in education policy. One of the reasons for this has been the increase in the demand for usable knowledge in education policy-making, which the economic sciences have helped to fulfil. Accordingly, education policy-making has been deeply influenced by and entwined with economic principles. In taking a leading role of doing research *for* policy, the economics discipline has supplied theoretically and empirically well-founded research (although not always necessarily welcome by all actors), which responds to an increased demand by policy as well as practitioner communities for assistance in guiding and managing educational systems, as well as in predicting the likely consequences of alternative choices. This has implications for the role of research in education policy-making. Namely, if social scientists which are relevant to educational research, limit their role to only holding governments to account for past choices, then there is a risk that in an evidence based policy-making environment, educational policy will continue to be dominated by economic policy needs. Thus there is a need for a more coherent strategy in educational research regarding the balance between research *of* policy and *for* policy.

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