

Human Capital or Human Capability:
Basic Education from a Capability Perspective

Yuhan Liu

Pol 423: Poverty Studies Capstone Research

Apr 8th, 2022

Background

Since the initiation of the international development project after World War II, education has always played a crucial part in fostering socioeconomic development in low-income countries. The United Nations system, the World Bank, bilateral donors, and civil society organizations have all made numerous efforts to increase investment in education in the developing world. Today, there are more children in school than ever before. The world's average level of schooling grew from 3.2 years in 1950 to 8 years in 2018 (Psacharopoulos and Patrinos, 2018). The upward trend is persisting, and the average year of schooling is predicted to rise to 10 years by 2050 (ibid). However, there remains an education divide between high-income and low-income countries. In 2018, average years of schooling in high income countries has reached 9.2 years compared to 7 years for middle income countries, and 5 years for low-income countries (ibid).

Despite the remarkable progress over the past 70 years, the global effort of expanding basic education is far from completed. As early as in 2000, the United Nations set achieving universal primary education as one of the Millennium Development Goals, but it was not met by the 2015 deadline. The Sustainable Development Agenda underlines the importance of primary education again in Goal 4, which stipulates that by 2030, the world should ensure inclusive and equitable quality education for all, including a target on universal access to primary education (United Nations). While enrollment in primary education in developing countries has reached 91 percent in 2019, 258 million children and youth, including 57 million children of primary school age, remain out of school (UIS, 2018). The lack of access to basic education, especially at the primary level can often be lost in optimistic aggregate measures of education such as the average years of schooling. In reality, the advances of the past decade have often failed to reach the

poorest children, especially those who live in rural areas or from ethnic minorities. Girls also face an extra set of barriers to education such as the threat of violence and harassment, forced marriage and the pressure of chores at home. In many countries, poor rural girls still spend no more than five years in school and have little chance of advancing to secondary school (Gordon et. al, 2019). The norms and expectations of girls having low education attainment level can advance the notion that education for girls is less important than for boys and further limit educational opportunities for girls.

This paper explores why access to quality basic education should remain an investment priority in the development field by comparing the human capital and human capability approach to education. Based on the analysis, the paper also provides policy recommendation to increase the effectiveness and efficiency of investment in education through program design. The literature review section of the paper provides an overview of the two main theories used to study the effect of education in international development: the human capital approach and human development approach. Then, it reviews existing empirical studies on the “*returns to education*,” presenting the economic argument for investing in education. The methodology section provides the theoretical framework to model the capability-return to education. Then, the analysis section delves into the capability approach to education and discusses the positive effects of education on individuals’ capabilities and the social benefits that extends from them. It makes the argument that societies are duty-bound to enable each child to complete at least a basic education. In the policy recommendations section, the paper explores two policy directions that enhances the effectiveness of investment in basic education. Overall, the paper argues that the returns on investment in basic education include not only monetary benefits but also in terms of multifaceted human capabilities. Thus, universal basic education should remain a policy

priority and education policy should target the promotion of various human capabilities rather than the one-dimensional productivity gain.

Literature Review

There are two broad theories to study the effect of education in fostering socioeconomic development in low-income countries: the human capital approach and the human development approach (Beker, 1964 and Stanton, 2007). The human capital approach popularized in the 1960s emphasized that through education, learning, and skill formation, people can become much more productive, and the increase in productivity contributes significantly to the process of economic growth and improvement in standards of living. The contrasting model of human development emerged in the 1990s. This model draws significantly from the capability approach and emphasizes the intrinsic values of people's well-being. Empirical research focusing on the return to education often follow the human capital approach and quantify the benefit of education in terms of economic outcomes including wages, unemployment rate, and national income.

A. The Human Capital Approach: Education as a Driver for Economic Development

The link between education and economic development was instigated by the human capital school originating at the University of Chicago. Schultz (1961) and Becker (1964) laid the foundation for treating human resources explicitly as a form of capital. Schultz (1961) defines human capital as "skill, knowledge, and similar attributes that affect particular human capabilities to do productive work." This association between human capital and production is widely accepted by later economists as the main method to evaluate the effectiveness of investment in human capital. Schultz also acknowledges that there are many aspects to human capital including: health, job training, formal education, study programs for adults, and

migration. Among them, Schultz (1961) called education as “an important key to the riddle of economic growth” and emphasized the positive effect of increased stock of education on earnings and national income. This approach views investments in education much like investments in physical capital by comparing the national resources used to provide education and the increased national output due to productivity gains from education.

The human capital approach is further popularized and reinforced by empirical work some international financial institutions like the World Bank. Some studies of economic growth re-examined the experiences of the Asian tigers (Japan, Taiwan, South Korea, Singapore) and emphasized the role of “human capital” to an even greater extent (World Bank, 1993). Thus, supporters of the human capital approach emphasize the positive relation between investment in education and higher earnings.

There is an undeniable attraction of the human capital model for it provides a straightforward way to measure returns to investment in education using economic indicators (Parkinson and Kester, 2017). However, these economic indicators cannot sufficiently measure every aspect of a good society. The human capital theory presents the investment in education as only a means to an end: the expansion of production and of economic growth. It does not explain why the end goal of development should be increased production.

B. Human Development and the Capability Approach in Relation to Education

The 1990s saw a turn in the focus of development theories. The notion of human development entered the development vocabulary following the work of Amartya Sen, Mahbub ul Haq, and others on human capability.

The first page of the background document of the Jomtien World Conference on Education for All (WCEFA, 1990) states that there is a “growing consensus that human

development must be at the core of any development process.” It also emphasized the importance of education in this process that “the empowerment of individuals through the provision of learning.” This shift in focus from economic indicators to “*human development*” signals a transition from the production-oriented human capital model to a more humanistic view on the objectives of development. The document makes this point explicit by stating that “economic development does not automatically increase the quantity or quality of human development” (ibid).

Recognizing that measures of economic growth such as national income are insufficient to understand development, the United Nations Development Program (UNDP) published the first *Human Development Report (HDR)* in 1990 and introduced the Human Development Index, a composite index of country ranking using country-level data for well-being indicators. These indicators include life expectancy at birth, expected and mean years of schooling, and gross national income per capita. The *HDR* 1990 echoes the WCEFA that “people are the real wealth of a nation,” and it further emphasizes that “The basic objective of development is to create an enabling environment for people to enjoy long, healthy and creative lives.” This the underlying principles of the *HDR* and the *HDI* draws heavily from Amartya Sen’s capability approach to understanding human well-being and development. Moving the discussion away from human capital and towards “*capabilities*” puts people back at center stage of development.

Sen has also offered some criticisms of the human capital approach. He argued that there is too much focus on what a person has as compared to what opportunities they have, and while income may be a starting point to the analysis of poverty, it is not the full picture (Sen, 1994). The human capability approach focuses on the “real and substantive freedoms” in society (Sen, 1999). Instead of what a person has, Sen’s approach focuses on the capability that one can

achieve. Sen (1999 and 1993) defines development as “a process of expanding real freedoms that people enjoy” and human capabilities as “a person’s ability to do valuable acts or reach valuable states of being; [it] represents the alternative combinations of things a person is able to do or be.” That is, by expanding real freedoms, people are empowered with the capabilities to “exercise their reasoned agency” and achieve their potential doing and beings (Sen, 1999).

Despite the importance of the concept of capability in Sen’s works, he never offered a concrete list of capabilities because he sees capabilities as being entirely situated (Parkinson and Kester, 2017). Complementing and building on Sen’s work, Nussbaum outlines ten central capabilities that every human should be entitled to. These ten capabilities include: life; bodily health; bodily integrity; senses, imagination and thought; freedom to feel and express emotion; practical reason; affiliation; other species; play; and control over one’s environment – both political and material (Nussbaum, 2000). While this is not an exhaustive list of the capabilities one need to live a fulfilling life, it operationalized the concept of capability. Thus, the development goal of increasing the real freedoms people enjoy can be divided into guaranteeing these basic capabilities for people of every state. Targeting capabilities is to target the well-being of humans from a holistic perspective instead of the economic side alone.

In the Human development Index, key capabilities are instrumentalized by the inclusion of proxies for three important ends of development: access to health, education, and goods (Stanton, 2007). The role of education in the capability approach is multiple and complex, and this paper will further discuss the value of education and its relationship with specific capabilities. Being educated has been described by Sen (1992) as a basic capability centrally important to foster the functionings (being and doings) that are crucial to well-being. Education is referred to as foundational to other capabilities (Unterhalter, 2002). From this perspective,

investment in education has an important role in increasing human well-being by removing unfreedoms and fostering capabilities.

C. Empirical Studies on the Returns to Education

Following the production-driven human capital approach, most literature focus on education as a driver for economic development and studies the returns to education in monetary terms. The returns to education include both private and social returns. The private rate of return to schooling equals the individual's lifetime earnings to the net present value of the individual's private cost of education (Psacharopoulos and Patrinos, 2018).). The social rate of return includes the full resource cost of the investment in education such as the cost of building schools and teachers' salary. The social benefits should include not only the increase in productivity due to education but also other non-monetary benefits such as the lives saved because of improved sanitation conditions and other positive externalities related to education. However, these social benefits to education are difficult to calculate, so the social benefit of education is often underestimated (ibid). It is also worth noting that there are two main methods of calculating returns to education: the full-discounting method and the Mincerian earnings function (Ibid). Psacharopoulos and Patrinos (2018) makes the distinction that the Mincerian method gives private returns, whereas the full-discounting method can give private and social returns. Thus, the results obtained using these two methods are not directly comparable because they differ in scale (ibid).

Based on a database of 1,120 estimates in 139 countries, Psacharopoulos and Patrinos (2018) reviews the trends and patterns of the private and social returns to investment in education since the 1950s. This study is one of the most cited reports on returns to education in recent years. It shows that over the decades, the private average global rate of return to one extra

year of schooling has been stable at about 9 percent a year. Social returns to schooling remain high, above 10 percent at the secondary and higher education levels, and this is likely an underestimation due to the unaccounted positive externalities.

The study notes that while private returns to primary education are still high, with near universal primary education in most regions, it is becoming difficult to estimate returns to primary schooling using recent surveys and the full discounting method. Using the full-discounting method, primary education continues to exhibit the highest social profitability in all world regions. The survey also found that women continue to experience higher average rates of return to schooling by about two percent, and the gap has increased since the 2004 update (1%).

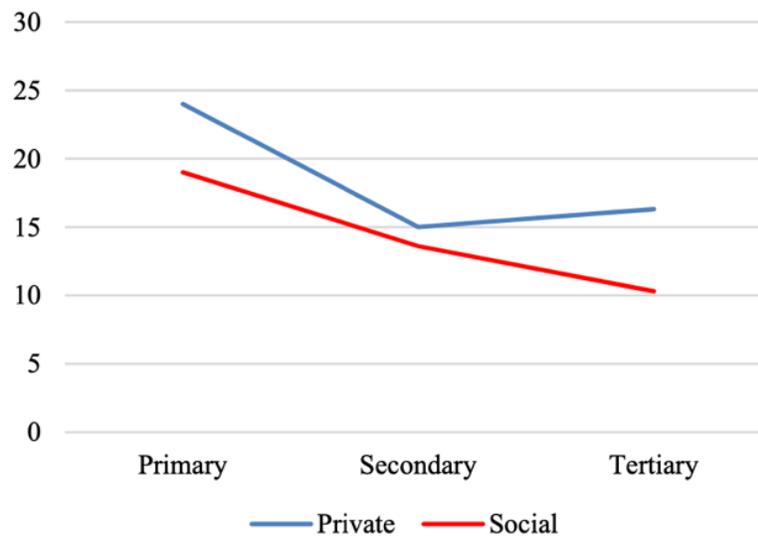


Figure 1: The Pattern of Private and Social Returns by Education Level using Full Discounting Method: Psacharopoulos and Patrinos (2018)

However, despite the high social return to primary education, the rapid technological advancement and the increasing return on tertiary education is making investment in technology and higher education more attractive.

Psacharopoulos (1981) finds that private returns to primary and secondary education slightly decline over time. Montenegro and Patrinos (2014) states that the common believe that returns to education are highest at the primary level is “no longer considered true.” Using the Mincerian method and data from 139 countries and 819 harmonized households from 1970 to 2013, the study finds that globally, the returns to tertiary education are highest, at 17%, followed by primary at, 10%; the lowest returns are for secondary schooling, at round 6%. Moreover, it shows that returns to tertiary education are highest in in Africa, at 22%, where returns to primary education is also the highest, at 13% (ibid). Similarly, using data from India from 1961 to 2001, Castello-Climent and Mukhopadhyay (2013) found that a reduction in the share of illiterates, even if the new literates complete primary education, scarcely has an impact on growth while in increasing the population with tertiary education have a significant effect: a one percent change in tertiary education has the same effect on growth as a 13% decrease in illiteracy rates (ibid).

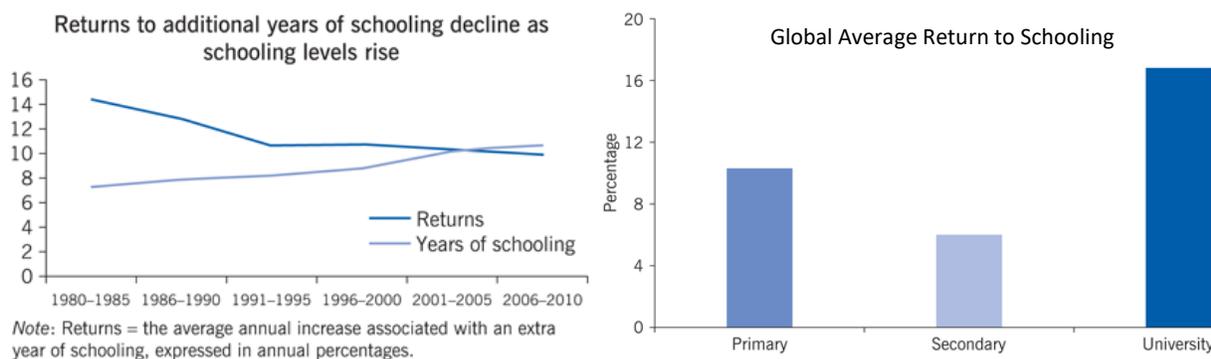


Figure 2 and Figure 3. Source: Montenegro, & Patrinos, H. A. (2014).

Based on the empirical literature, the link between education and growth is strong. However, as the world coming closer to reaching the target of universal primary education, the economic return to continuing expanding access to primary education may be less significant

compared to that of higher education, so instead of continuing the global effort to achieve universal primary education, there may be a tendency toward greater investment in the expansion and quality of higher education for those who already completed basic education.

Adding to existing literatures which primarily follow the human capital school and focus on the economic returns to education, this paper examines nonmonetary returns to education in terms of human well-being and argues that the continuing investment in universal basic education should remain a policy imperative because it has benefits to human well-being beyond economic returns.

Methodology: The Compounding Benefits of Capability Accumulation

The model used in this paper to study the return to education on the capabilities is inspired by Heckman curve. Instead of focusing on economic returns to investment in education, the proposed model hypothesizes that the capability-returns on investment in education are higher during the early stages of schooling and these early benefits carry over to impact the accumulation and benefits of subsequent gains in capabilities associated with further educational attainment.

A. The Heckman Curve

Heckman (2008) demonstrates that investments in the early years of life achieve significantly higher returns than investments made later on. The Heckman Curve shows that the highest rate of economic returns comes from the earliest investments in children. It shows the economic benefits of investing early and “building skill upon skill.” It supports early investment in children for four main reasons: preventing the achievement gap, improving health outcome, boosting earnings, and reducing social spending (Heckman, 2017). This model is deeply rooted

in the human capital tradition, viewing investment in education as a means to increasing productivity.

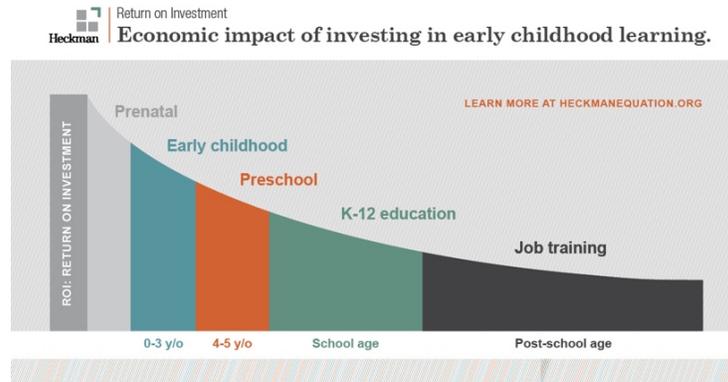


Figure 4: Heckman Curve. Source: heckmanequation.org

B. Proposed Model: Capability Returns to Education

This model of capability returns to education parallels the Heckman curve and provides an alternative theological framework consistent with the human capability approach for analyzing the effect of education on human development. It hypothesizes that returns on investment in education measured by capabilities associated with investment in education are higher during the early stages of schooling and decreases as age/level of education increases.

Education is referred to as foundational to other capabilities, which means that it can facilitate the development of other capabilities (Unterhalter, 2002). At the simplest level, basic education at the primary level allows an individual to become literate and numerate. These are basic skills that one needs to participate in the formal labor market to obtain a job that they can value. Basic literacy and numeracy are also required for individuals to participate fully in the political life of their society, to vote, and to protect their rights. These skills obtained from basic education at the primary level enable an array of functions and capabilities that people may otherwise be deprived of, and the benefits of these capabilities are compounding and long term.

Education at higher levels can further enhance human capabilities. For example, technological literacy is often taught in higher levels of education in lower-income countries. While technological literacy is critical for productivity in today's world, one's ability to obtain technological literacy is dependent on other capabilities they developed in earlier stages of education such as literacy, thoughts, and problem-solving skills. Thus, basic education provides individuals with fundamental capabilities that are directly associated with one's well-being, and they also impact the accumulation of capabilities in later stages of education.

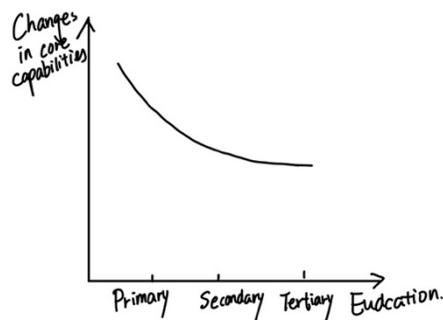


Figure 5: Return to Education Measured with Capabilities

C. Research Synthesis

With this model in mind, this paper synthesizes ideas from multiple disciplines including ethics, economics, and education to generate an integrated interdisciplinary perspective on the relatively high benefits of basic education accounting for social and private gains are accounted for. It examines the relationship between basic education and fundamental capabilities and argues that basic education plays an important role in shaping and fostering these capabilities and advocates for the necessity of a global commitment to the universal provision of basic education.

Ethical Analysis: Basic Education as a Moral Imperative

The debate between the human capital approach and the human capability approach of measuring the benefits of education can be extended to one of utilitarianism and contractualism.

The utilitarian argument consists of two main ways of evaluating well-being: “welfarism” and “resourcism” (Wigley and Akkoyunlu-Wigley, 2006). According to welfarism, an individual’s well-being is measured by their total level of mental satisfaction. Whereas in resourcism, which is more directly related to the human capital school, an individual’s quality of life is gauged based on the “real income or commodity holdings at [their] disposal” (Akkoyunlu-Wigley and Wigley, 2008). If the action that provides the most utility (ie. resources) is the morally right action, then this utilitarian understanding of well-being does not require extending education to all children. For example, policy priority may be given to enhancing the length and the quality of higher-level schooling for those who already completed basic education based on the expectation that investment in high education will contribute to more growth (Wigley and Akkoyunlu-Wigley, 2006). Further, the utilitarian approach can also justify addressing income deprivation by relying on the trickling down effect of growth or through redistribution instead of directly investing in enhancing the personal earning potential of the individuals in need. Thus, under the utilitarian approach, some capability deprivations of the individuals can be defended on the ground that greater growth can be achieved (ibid).

In contrast, the capability approach contends that the correct metric to measure the value of education and human well-being is the capability to achieve valuable functionings (Akkoyunlu-Wigley and Wigley, 2008). The next section will discuss in depth what is the value of education under the capabilities approach and what capabilities can be enhanced through education. The capability approaches align with contractualism which contends that “an act is

wrong if its performance under the circumstances would be disallowed by any set of principles for the general regulation of behavior that no one could reasonably reject as a basis for informed, unforced, general agreement” (Scanlon, 1998). That is the permissibility of action is decided through the process of “contract making” rather than the result only. From a contractualist perspective, no one should be denied the right to basic education or basic capabilities that education enables. The Rawlsian theory of justice also follows from the contractualist theory and can be invoked to complement the capability approach in arguing for the importance of extending education to all.

Rawls (1971) develops the thought experiment of the veil of ignorance and uses self-interest behind a veil of ignorance to represent a state of justice that no one can reasonably reject. The first principle states that all citizens have an equal right to basic liberties. The second is a principle of equality stating that social and economic inequalities ought to be arranged so that the least advantaged members of society should receive a greater number of benefits, and no one person would be blocked from occupying any position or office under conditions of fair equality of opportunity.

While the Rawlsian principle of justice may not immediately seem compatible with the capabilities approach, both theories address pluralism (D’amato, 2014). The Rawlsian principle is a classical contract theory that provides “Justice as fairness is a theory of public consensus in a democratic society” where people hold different private conceptions of the Good but share the common liberal values like freedom and democracy. While the capability approach also emphasizes individual autonomy, it claims that there is a shared “thick concept” of the Good amongst all people on earth (ibid). Rawls (2001) presents a list of the primary goods as the metric of justice including: basic rights and liberties; freedom of movement; powers and

prerogatives of offices; income and wealth; and the social bases of self-respect. Sen's most important critique on Rawlsian justice concerns the inflexibility of social primary goods as the metric of justice. Countering this criticism, Rawls argued that this critique implies that the capability approach endorses a comprehensive moral doctrine and criticized the capability approach for its vagueness and failing to provide a workable and public conception of political justice (D'amato, 2014). Despite these differences, it is possible to use the Rawlsian theory of justice and the capability approach complimentary in practical policy analysis. D'amato (2014) theorizes that "Rawlsian justice can provide the theoretical basis for the institutionalization of some principles and leave the rest to the space of capability."

For the purpose of universal basic education, the Rawlsian principle of difference provides that the least advantaged members of society should receive the greatest benefits. That is, the opportunity for basic education should be extended to the least well-off members of society, so they have a chance to reach for fair equality of opportunities. Instead of measuring human well-being strictly using the primary goods as Rawls listed, the metric can be expanded to the broader framework of capability endorsed by Sen and Nussbaum.

Analysis

A. Value of Education under the Capability Framework

The advantages of analyzing the values of education using the capability method go beyond the ethical argument. Educational results and benefits are viewed as multidimensional under the capability framework. Measuring education benefits as substantial freedom gained not only includes education's *instrumental* values for productivity gain but also takes into consideration the *intrinsic* and *positional* values of education (Brighouse and Unterhalter, 2010).

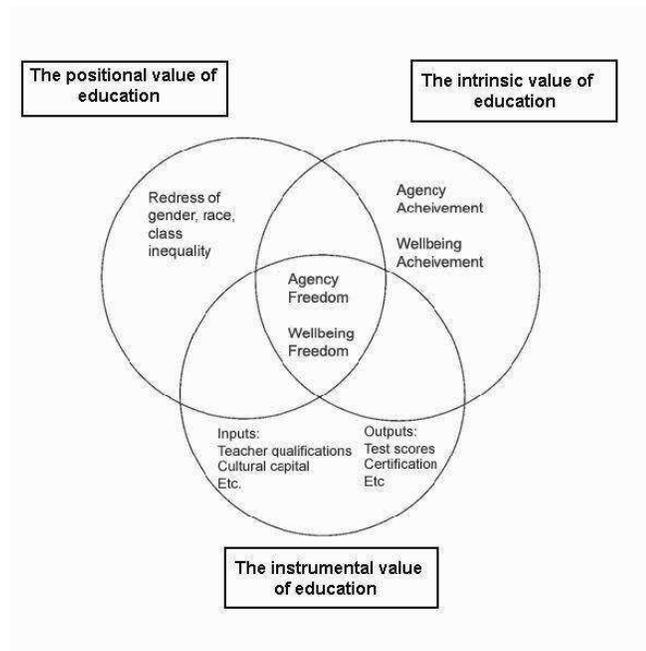
The instrumental value of education enables individuals to secure work at a certain level and political and social participation in certain forms (ibid). Without basic education, one can be denied vital aspects of well-being and the agency needed to live a dignified life. The instrumental value of education also speaks to the interconnection among capabilities. Education deprivation can lead to many other kinds of deprivations. For example, when people are uneducated and illiterate, their ability to understand and invoke their legal rights can be very limited (Sen, 2002).

Sen (2002) states that “illiteracy and innumeracy are forms of insecurity in themselves,” so basic education that removes these insecurities have intrinsic value in itself. The intrinsic value of education refers to the benefits a person gets from education which are not merely instrumental for some other benefit they may be able to use it to get. Education can foster intellectual functionings of intrinsic value that are entirely neglected in the standard human capital model. Martha Nussbaum (2003) argues that a child who does not participate in basic education is denied the chance to cultivate the human powers of imagination and inquiry. That is, the educated individual may have a different understanding of their self-worth and they may develop a more rewarding and complex mental life than they had before being educated regardless of whether the education helps them gain employment or income (Brighouse and Unterhalter, 2010). For example, they might consider themselves a more integrated member of their community or find enjoyment in reading literature.

The positional value affects the social relations one establishes and their access to positional goods (Lanzi, 2007). According to Akkoyunlu-Wigley and Wigley (2008), the positional aspect of educational achievement can affect one’s capability to function in three ways. First, it can affect the individual’s earnings. Second, it will determine the extent of influence one has in their family, community, and political domain. This not only increases their

ability to influence the decision-making that has an impact on their capability to achieve valued functioning but also increases gives them the agency to make decisions for themselves. Third, a person's capability of exercising anancy is recognized as a significant determinant of health in the science field, and lack of control over one's life can elevate stress levels and negatively impact their mental and physical health (Marmot, 2001 and 2006).

Thus, instead of evaluating the value of education from a single instrumental dimension as the human capital model does, the capability model provides a multidimensional assessment of education's value in terms of the capability to achieve valued functionings. The capability analysis provides a stronger argument that society is duty-bound to enable each child to complete at least a basic education, irrespective of their potential contributions to economic growth (Wigley and Akkoyunlu-Wigley, 2005).



Source: Brighouse & Unterhalter, 2010: 208.

The significance of education under the capability framework is that it enables the acquisition of a basic set of cognitive functionings – reading, writing, calculating, practical

reasoning, and so on – that are the necessary, but not sufficient, preconditions for achieving other important functionings. In other words, they enable the capability to function in various other ways (Akkoyunlu-Wigley and Wigley, 2008).

B. What Capabilities are Promoted by Basic Education?

a. Three Categories of Capabilities

Since the benefits of education are multifaced and can be better measured using the capability framework, then, measuring the benefit of basic education requires examining what capabilities can basic education enhance and how.

While Sen (1999) defined capabilities as “the real freedoms that people have to achieve their potential doings and beings,” he did not provide an identifiable list of capabilities. For Sen, the concept of relevance is key to the capabilities approach, and he sees capabilities as being entirely situated, so the necessary capabilities for an individual will be based on their situation and location (Parkinson and Kester, 2017). This is where Nussbaum’s approach contrasts with that of Sen. Sen argues that if a list of “central capabilities” is provided, then the “prescriptiveness” of the list would reduce what was previously an approach becomes a theory (ibid). For Nussbaum, listing the capabilities specifies the ends themselves and enhances the applicability of the capability approach in policymaking. Thus, Nussbaum (2000) defines a list of 10 basic capabilities including life; bodily health; bodily integrity; senses, imagination, and thought; freedom to feel and express emotion; practical reason; affiliation; other species; play; and control over one’s environment. While Nussbaum recognizes that this list is not exhaustive, she describes these 10 capabilities as a “bare minimum” level that should be guaranteed as universal entitlements (Nussbaum, 2000).

To find a middle ground between these two approaches, Lanzi (2007) divided capabilities into three broad categories. Doing so allows for flexibility in the interpretation and use of the capability approach as Sen intended and provides a framework to identify and measure capabilities for policy purposes. The first category (S-caps) follows directly from the list of central capabilities Nussbaum proposed and refers to a person's abilities, concrete skills, and knowledge. The S-caps can be understood as the internal capabilities individuals need to achieve vital functionings independent of what legal rights, public policies, or external social conditions allow them to achieve (Lanzi, 2007). However, having the S-caps alone is insufficient for translating these capabilities into valued functions. One's life is heavily influenced by external factors and rules frequently outside the individual's control. The external capabilities (E-caps) are shaped by formal rights, informal norms, ascribed social roles, and inborn qualities of an individual such as race and gender. These E-caps may have a direct effect on what S-caps an individual has the opportunity to achieve. Taken together, the internal and external capabilities describe the sum of the possible functionings one can achieve. The third category considers moral capabilities (M-caps). According to Gasper (2002), the concept of human freedom exceeds what the individual does (functionings) or could do (S-cap+E-cap), it is also defined by how much the individual does is consistent with what they believe is worth doing (Lanzi, 2007). Thus, in addition to the traditional understanding of capabilities, M-caps "enables the individual to form purpose and identities, to internalize ethical principles, and to rate different lifepaths" (Lanzi, 2007). Dividing the umbrella term "capabilities" into these three categories allows us to operationalize this concept and study the role basic education play in promoting all three categories of capabilities.

b. Basic Education Enhances Internal Capabilities (S-caps)

Basic education can enhance an individual's internal capabilities in many ways. For example, to evaluate education in terms of the capability to achieve valued functionings rather than monetary returns, Wigley and Akkoyunlu-Wigley (2006) compare the life expectancy (health functionings) that are achieved by the income growth generated by educational attainment (years of schooling) with the total health functionings achieved by educational attainment using data from 35 developing countries from the years 1990, 1995, 2000. They established a simple model that estimates:

$$\text{Life expectancy} = b_0 + b_1\text{GDP} + e$$

$$\text{Life expectancy} = b_0 + b_1\text{GDP} + b_2\text{Education Attainment} + e$$

The study finds that a 1% increase in per capita income increases life expectancy by 0.073954%, while a 1% increase in average years of schooling directly increases life expectancy by 0.055324%. Thus, Wigley and Akkoyunlu-Wigley (2006) conclude that educational attainment has a significant effect on life expectancy independently of its effect on income growth.

c. Basic Education Enhances External Capabilities (E-caps)

The positional value of education is especially important in increasing an individual's external capabilities. Nussbaum (2006) points out that education gives an individual an ability to be bound to all other human beings by ties of recognition and concern. Recognition is one of Nussbaum's central capabilities, and according to Fraser (2000), recognition refers to "institutionalized value patterns that not only advantage some people but also give them more respect and status." Thus, misrecognition is a result of unequal status patterns that give rise to disrespect and indignity.

Drawing on a longitudinal study following 120 youths in Tanzania and Uganda for 5 years during and after an education program, DeJaeghere (2019) found that recognition can be fostered through educational practices. According to DeJaeghere, out-of-school youth who do not complete a basic education are “essentially excluded from being citizens of their societies” because they usually cannot participate in the formal labor market. They not only lose “work membership” in society but also are often relegated to hazardous work that generates further injuries, poverty, and inequalities. Moreover, these youth without basic education are often (or deemed by their community as) not literate enough to participate in the social and political life of the community. Interviews of the former out-of-school youths confirm this observation, and the youths spoke to the positive change education has made to the external capability of recognition.

A Tanzanian girl, Nayla, had been living on the street before enrolling in school described a change in recognition and inclusion in her community: “...I was not respected before, because I didn’t have a job, but now I am respected [and] now I can be called...to give advice to others.” Similarly, Julius, a young man from Uganda, explained that after the training program, he became recognized by his family and community: “it encouraged me very much because people in my family have started to recognize me” (DeJaeghere, 2019).

For these youth, being recognized is not only important for building their self-worth but also for building social relationships with others in their community. To become a full member of their society, it is critical that community members recognize the youths as equal humans with equal worth and the ability to participate in work, social, and political life (ibid). Education gives the youths the opportunity to enter the formal labor market and contribute to their community. By removing the misrecognition of idle and lazy because of limited education, the youth can regain the respect and dignity they deserve in their community.

On a macro scale, increased access to basic education can also affect social changes and thus enhance E-caps for disadvantaged members of society. For example, in western countries, equal and better education for women has led to improvement in women's rights in society. Topics that used to be considered taboos such as gender roles, reproductive effort distribution, and unequal pay have entered public discussions. The empowerment of women through education has led to more than the increased internal capabilities of women but also the renegotiation of social rules (Lanzi, 2007). Thus, expanding access to education to those traditionally disadvantaged groups is especially important because it does not only create private benefit but also leads to beneficial social changes.

d. Basic Education Enhances Moral Capabilities (M-caps)

Education contributes to the formation of an individual's "identity, self-respect and social representation;" these qualities in turn influence one's moral capabilities (Lanzi, 2007). Analyzing responses from the same longitude study, DeJaeghere (2019) also found that education increases the students' capability to imagine alternative futures. For many out-of-school youths in the study, their aspirations and opportunities had been limited by their circumstances. For example, girls may be told that continuing their education is meaningless, and boys may be encouraged to quit school and start working (DeJaeghere, 2019). These conditions curb the girls' and boys' aspiration of (and opportunity to) finishing their education and pursuing a career in the formal labor market. Such changes in the things one values for their well-being are described by Sen (1992) as "adaptive preferences." For Sen, adaptive preference is the "manifestations of self-abnegation" under conditions of adversity and injustice. Adaptive preference manifests when the individual is influenced by their circumstances and excluded from the process of determining what they have reasons to value (Watts and Ridely, 2008). Education

provides the potential to challenge this insidious structure that constrains aspirations and their realization of them. In the interviews analyzed by DeJaeghere (2019), Rafael from rural Tanzania reports after enrolling in the education program that:

“The way I am growing, I am thinking a lot of big things, you find me doing other things. Because now my brain is becoming bigger [my mind is expanding] and my thinking capacity is also becoming large, [and] I am doing what I think is better for me.”

Rafael’s account shows that education increased his ability to think about a future beyond what he could have “seen” within his circumstances. This contributes to one central capability in Nussbaum’s list called “practical reason.” Practical reason is of central importance to the autonomy of an individual, and it refers to being able to be independent, “to form a concept of the good, and to engage in critical reflection about the planning of one’s life” (Nussbaum, 2000). Thus, access to education positively impacts moral capabilities because it allows an individual to break from constraining adaptive preferences and use their autonomy to determine what they value in their future. On a large scale, these empowered individuals have the opportunity “to discuss, criticize, and change dominant social roles,” which can promote social change toward more equality and justice (Lanzi, 2007).

This analysis shows that education can promote capabilities in all three categories. Thus, using the capability approach reveals the multifaceted benefits and values of basic education related to all three categories of capabilities. Basic capabilities achieved through education like health, recognition, and imagination have positive compound effects throughout one’s life and can impact subsequent gains in capabilities associated with further educational attainment. Achieving these capabilities early through basic education would be the most effective and efficient. Therefore, analyzing the benefits of education from a capability not only provides a

strong argument that society is duty bound to provide at least a basic education for all but also shows that invest in basic education to build these capabilities is desirable for its high returns and continuing benefits in the long term.

Policy Recommendations: Capabilities Oriented Education Policies

Following the 2000 World Education Forum in 2000 in Dakar, Senegal, a number of countries have developed Education for All (EFA) action plans integrating the six goals outlined in the Dakar Framework for Action (2000). These goals include expanding childhood care and education; ensuring free and compulsory primary education of good quality; improving adult literacy rate; gender equality; and improving education quality in literacy, numeracy, and life skill. The Dakar framework further contends that all young people and adults have “the human right to benefit from an education that will meet their basic learning needs in the best and fullest sense of the term, an education that includes learning to know, to do, to live together and to be.” This principle is relevant to the capability approach as it not only recognizes basic education as a human right that should be guaranteed to citizens of all countries but also evaluates education quality using the individual’s capabilities to “know, to do, to live together and to be.”

The analysis of education through the capability approach has established the necessity of a global commitment to universal basic education. However, access does not guarantee quality. It is also important to examine and create education policies that target these valued capabilities. Many nations witnessed the construction of schools and increased class enrollments without the expected improvement in pupil performance (Adams, 1993).

This paper argues that there are two main policy directions that policymakers should focus on when creating education curriculums: relevance and inclusion.

A. Relevance

The relevance dimension of education quality is concerned with developing the capabilities and functionings that the learners, communities, and national governments have reason to value, and it should recognize and reflect the different identities and needs of different groups. Since the benefits of education are not limited to productivity or monetary gains, but also multifaceted capabilities including “life skills and life-options in terms of being able to know, to act and to live together in a social environment,” quality education policy and curriculum designs should include life skills education (Tikly and Barrett, 2011).

According to Hoffmann (2006), the benefits of life skills education on general educational outcomes are increasingly acknowledged at all levels. Of all 41 national EFA national action plans incorporated some notion of human capabilities, and 26 out of 41 countries included life skills education in their plan. For example, the India National Curriculum Framework for School Education of 2001 included life skills in areas linked to “health, consumer rights, and legal literacy.” Some countries have life skills infused throughout or into the curriculum (ibid). According to an Education Sector Global HIV/AIDS Readiness Survey, 59 out of 70 countries report having life skill or life orientation programs in their education systems at the primary level, and 58 at secondary levels (ibid). These curricula cover issues such as “health promotion, family planning, health and family life education, personal and social development, religious education, physical education, and, in some countries also HIV/AIDS awareness” (ibid).

Kirby et al. (2005) found that there exist some underlying principles that should be considered when planning and implementing a life skills education program to increase their chances of success. The most important thing is to keep the life skills relevant to the specific groups of learners. They found that identified goals need to be “appropriate to the age,

knowledge and experience of the learner, which implies full participation in planning, implementing and evaluating activities” (Hoffmann, 2006). The skills imparted should aim to cover relevant life skills for “problem-solving, autonomy and a sense of purpose, and social ability” (ibid). Overall, to be relevant to the learners, the program design should properly identify the concerns of the learners and their community and actively address these concerns.

B. Inclusion

The inclusion dimension aims to foster the external capabilities of the learners. According to DeJaeghere (2019), fostering recognition to redress status inequalities means “creating opportunities for young people to engage with adults and other youth in the community.” Learning is a social process and through dialogues with parents, peers, teachers, and community members, the learner can not only derive meaning to develop their internal capabilities but also external ones such as recognition (Lanzi, 2007).

Lanzi (2007) creates a table (Table 1) mapping the UNDP principles for capacity development principles to education policies. Capacity has been defined by the UNDP (1995) as the: “abilities, skills, understandings, attitudes, values, relationships, behaviors, motivations, resources and conditions that enable individuals as well as institutions to carry out functions and identify and achieve their development objectives over time.” That is, capacity development is concerned with the institutional changes needed for sustainable and socially inclusive developmental paths. The concept of capacity development is heavily influenced by the capability approach, and its concerns are directly related to the development of external capabilities. Thus, the education policies informed by these capacity development principles also align with the education policies that promote external capabilities of inclusion and recognition. implementing these polices will help build a stronger connection between the educators, the

learners, and their community, so the youth develop the external capability of recognition.

Targeting the external capabilities through inclusion will allow the learner to become a more integrated member of their society and development more confidence in themselves.

Table 1 Educational policies and UN's capacity development principles, Source: Lanzi (2007)

UN's capacity development principles suggest to		educational policies could respond fostering
<ul style="list-style-type: none"> ● Promote multilateral partnerships in knowledge provision ● Foster intrinsic motivations, local learning processes and community empowerment ● Discuss and understand local values, myths and rites ● Mobilize local resources ● Sustain shared ownership of resources or open access to them ● Provide civic engagement through open-governance, effective voice or proper accountability systems ● Foster participation at the micro and macro level ● Support knowledge generating/sharing networks or communities 	<ul style="list-style-type: none"> ● Full interdisciplinary interaction between teachers, students, scientific communities, technology developers and firms ● Learning and knowledge acquisition anchored to local needs, bottom-up experiences, individual/community values ● In-school and out-school discussions on responsible citizenship, societal norms and ethical values ● Full interaction between the educative system and local productive sectors ● Opening the school system to school–society–family projects or activities ● Models of accountability and modalities for participation in the school system governance ● Peer-to-peer relations and associations 	

Conclusion

Overall, this paper argues that the human capital view of education is limited in realizing the full value of education, and the capability approach should be adopted. Using the capability approach reveals that education has benefits beyond the instrumental value of increasing productivity but intrinsic and positional ones. Moreover, education comprehensively enhances capabilities of all categories: internal capabilities, external capabilities, and moral capabilities. Thus, universal basic education should remain a policy priority, and quality education should be provided for citizens of all countries so all can secure valued capabilities. To maximize the benefit of education through policy design, this paper focuses on two policy directions: relevance

and inclusion. Including relevant life skills in the educational curriculum can enhance the learner's internal capabilities and promoting inclusion can create more favorable external capabilities for a just society.

Works Cited

- Adams. (1993). Defining Educational Quality. *Educational Planning*, 9(3), 3.
- Akkoyunlu-Wigley, A. & Wigley, S (2008), Basic Education and Capability Development in Turkey (August 4, 2008). *EDUCATION IN TURKEY*, A. M. Nohl, A. Akkoyunlu-Wigley, S. Wigley, eds., Waxmann Publishing, New York/Münster.
- Arneson. (1990). Primary Goods Reconsidered. *Noûs* (Bloomington, Indiana), 24(3), 429–454.
<https://doi.org/10.2307/2215774>
- Becker, G.S. (1964) *Human Capital: A Theoretical and Empirical Analysis, with Special Reference to Education*. University of Chicago Press, Chicago.
- Brighouse, H. and E. Unterhalter (2010), 'Education for Primary Goods or for Capabilities?'. In: H. Brighouse and I. Robeyns (eds), *Measuring Justice. Primary Goods and Capabilities*. Cambridge: Cambridge University Press.
- Bryman, A. (2006), *Social Research Methods*. Third Edition. Oxford University Press.
- Castelló-Climent, & Mukhopadhyay, A. (2013). Mass education or a minority well educated elite in the process of growth: The case of India. *Journal of Development Economics*, 105, 303–320. <https://doi.org/10.1016/j.jdeveco.2013.03.012>
- D'amato, C. (2014). Rawls and Capabilities: The Current Debate.
- DeJaeghere. (2021). A capability pedagogy for excluded youth: Fostering recognition and imagining alternative futures. *Education, Citizenship and Social Justice*, 16(2), 99–113.
<https://doi.org/10.1177/1746197919886859>
- Gordon, R., Marston, L., Rose, P., & Zubairi, A. (2019). *12 Years of Quality Education for All Girls: A Commonwealth Perspective*. REAL Center. University of Cambridge.

- Heckman, J. (2008) 'Schools, skills, and synapses', *Economic Inquiry*, 46(3), pp. 289–324. doi: 10.1111/j.1465-7295.2008.00163.x.
- Heckman, J. (2017) 4 Big Benefits of Investing in Early Childhood Development - The Heckman Equation, Heckmanequation. Available at: <https://heckmanequation.org/resource/4-bigbenefits-of-investing-in-early-childhood-development/>
- Hoffmann, A. M. (2006). *The Capability Approach and educational policies and strategies: effective life skills education for sustainable development*, Paris: Agence Française du Développement (AFD).
- Kwon, D. (2009). Human Capital and Its Measurement. *The 3rd OECD World Forum on "Statistics, Knowledge and Policy."* Busan, Korea - 27-30 October 2009\
- Lanzi. (2007). Capabilities, human capital and education. *The Journal of Socio-Economics*, 36(3), 424–435. <https://doi.org/10.1016/j.socec.2006.12.005>
- Lepak, D. P., & Snell, S. A. (1999). The Human Resource Architecture: Toward a Theory of Human Capital Allocation and Development. *The Academy of Management Review*, 24(1), 31–48. <https://doi.org/10.2307/259035>
- Marmot, M.: 2001, Sustainable development and the social gradient in coronary heart disease, *European Heart Journal* 22, pp. 740–750.
- Marmot, M., 2006, 'Social Causes of Social Inequalities in Health,' in Sudhir Anand, Fabienne Peter, and Amartya Sen (eds.) *Public Health, Ethics and Equity* (Oxford: Oxford University Press)
- Montenegro, C. E. & Patrinos, H. A. (2014). Comparable estimates of returns to schooling around the world (Vol. 7020). World Bank, Education Global Practice Group. <https://doi.org/10.1596/1813-9450-7020>

- Nussbaum, M. C. (2000). *Creating capabilities: The human development approach*. Harvard University Press.
- Nussbaum, M. C. (2006). Education and Democratic Citizenship: Capabilities and Quality Education. *Journal of Human Development* (Basingstoke, England), 7(3), 385–395.
<https://doi.org/10.1080/14649880600815974>
- Parkinson, A., & Kester, K. (2017). Competing Paradigms for Basic Education: Human Capital and Human Capabilities and What They Mean for the World Bank and UNESCO. *Cambridge Open-Review Educational Research e-Journal (CORERJ)*, 4 (1), 94-113. <https://doi.org/10.17863/CAM.41168>
- Psacharopoulos, G. (1981). “Returns to Education: an updated international comparison.” *Comparative Education* 17(3): 321-341
- Psacharopoulos, G; Patrinos, H. A. (2018). Returns to Investment in Education : A Decennial Review of the Global Literature. *Policy Research Working Paper;No. 8402*. World Bank, Washington, DC.
- Rawls. (1971). *A theory of justice*. Belknap Press of Harvard University Press.
- Schultz, T. W. (1961). Investment in Human Capital. *The American Economic Review*, 51(1), 1–17. <http://www.jstor.org/stable/1818907>
- Sen, A. (1992). *Basic Education and Human Security*.
- Sen, A. (1993). Capability and Well-being. In *The Quality of Life*, edited by M. Nussbaum and A. Sen. Oxford: Clarendon Press.
- Se, A. (1999). *Development as Freedom* (1st. ed). Knopf.
- Sen, A. (2002). *The Importance of Basic Education*. The Commonwealth education Conference. Edinburgh.

- Stanton, E. (2007). "The Human Development Index: A History," *Working Papers wp127*, Political Economy Research Institute, University of Massachusetts at Amherst.
- Tikly, & Barrett, A. M. (2011). Social justice, capabilities and the quality of education in low income countries. *International Journal of Educational Development*, 31(1), 3–14.
<https://doi.org/10.1016/j.ijedudev.2010.06.001>
- United Nations. <https://www.un.org/en/chronicle/article/goal-4-education-post-2015-sustainable-development-agenda>
- UNDP. (1990). *Human Development Report 1990: Concept and Measurement of Human Development*.
- United Nations Development Program. (1995). *Capacity Development for Sustainable Human Development: Conceptual and Operational Signposts*. Oxford University Press, New York.
- United Nations Development Program. (1995). *Human Development Report*. Oxford University Press, New York.
- UNESCO Institute for Statistics (UIS). (2018). <http://uis.unesco.org/en/topic/out-school-children-and-youth>
- Unterhalter, E. (2002), "The Capabilities Approach and Gendered Education: An Examination of South African Complexities", in *Theory and Research in Education*, 1, 7-22.
- WIGLEY, & AKKOYUNLU-WIGLEY, A. (2006). Human Capabilities versus Human Capital: Gauging the Value of Education in Developing Countries. *Social Indicators Research*, 78(2), 287–304. <https://doi.org/10.1007/s11205-005-0209-7>
- World Conference on Education For All (1990). Background Document. Meeting Basic Learning Needs: A Vision for the 1990s. New York: The Inter-Agency Commission.

World Bank. (1993). *The East Asian Miracle*, World Bank, Washington