# The Capabilities Approach as a Lifelong Competency Assessment Framework

#### Merija Jirgensons

Distance Study Education Centre (DESC), Riga Technical University, Riga, Latvia

Keywords: Capabilities Approach, Capabilities Framework, Competencies, Lifelong Learning, Amartya Sen.

Abstract: The Capabilities Approach is an interdisciplinary tool that is applicable in a number of settings. The approach was developed by economist and philosopher Amartya Sen in his work with quality of life issues in India that led to the creation of the Human Development Index (HDI). Sen's contribution is in the assessment of quality of life issues. For Sen, human well-being is as important a factor as traditional economic concepts such as GDP and cost-benefit analysis. Moreover, the Capabilities Approach moves beyond human capital theory that views human labor, education, and other activities as tandem to the GNP and instead, provides a human centered analytical concept. The framework helps planners to orientate projects, to measure the satisfaction of target groups, and promote accessibility and egalitarian resource distribution. The effectiveness of the capabilities approach is analyzed in terms of functionings. The dynamic interdisciplinary character of the approach has allowed to be applied as an analytical tool to a number of disciplines. The author argues that the capabilities approach is also applicable to education in a lifelong competency-based learning context that offers a feasible alternative pathway to adult learners by addressing issues of quality, personal aspirations and satisfactions that make education and life worthwhile. Sen's approach has been criticized for being incomplete. Yet its contribution is undeniable. The Capabilities Approach highlights particular spaces for evaluating individual opportunities and successes that are particularly applicable to a lifelong learning context.

## 1 INTRODUCTION: THE CAPABILITIES APPROACH, COMPETENCY ASSESSMENT AND LIFELONG LEARNING

The Capabilities Approach or CA takes competency based learning to the next higher level. It is a theoretical framework developed by Amartya Sen to analyze social and economic well-being and can be applied to education and to the lifelong learning process as a feasible alternative pathway available to adult learners (Delors, 2013, pp. 326-327). It addresses issues of quality-personal aspirations and satisfactions that make education and life worthwhile. While competency based learning addresses the development of skills-the outer person-the capabilities approach is concerned with the inner person and personal satisfaction and autonomy. The capabilities approach and competency based learning can be viewed as comprising "two halves of the same walnut"-to quote Harry Truman's old adage-or a holistic educational experience. Moreover, the holistic framework addresses current trends in lifelong learning as well as in education in general. The benchmark study in this regard was the Delors report The Treasure Within (1996) that argued for the human dimensions of the educational experience. Additionally, the framework can be used to outline and analyze learning goals and outcomes including issues of personal growth. The Capabilities Approach argues for substantive freedom. This is not freedom as an abstract theory-although it grapples with issues such as justice and fairness--but the freedom of daily life where people in their daily round of activities may make real choices among a range of options and construct lives that they regard as valuable and meaningful. These are the capabilities that Sen's theory addresses, the ordinary 'beings and doings' and the small victories people realized by their various achievements (Sen, 2007, pp. 271, 274). Yet Sen also recognizes that there are constraints that may limit human experience; that people's choices may be limited by economics, politics, culture, environment, and educational barriers. Therefore, the framework may also identify constraints, assess them

Jirgensons M..

In Proceedings of the 7th International Conference on Computer Supported Education (CSEDU-2015), pages 501-509 ISBN: 978-989-758-1107-6

The Capabilities Approach as a Lifelong Competency Assessment Framework. DOI: 10.5220/0005493205010509

Copyright © 2015 SCITEPRESS (Science and Technology Publications, Lda.)

and remedy them where possible. Sen is not a radical but he favors change and recognizes that a proper diagnosis is the first step to change.

The capabilities approach is relevant to education because it seeks to identify the capabilities that people possess and create opportunities for their development. Not only does education enhance the quality of life, it also acts as a leaven for identifying future choices and opportunities setting in motion a transformative process. Education is so significant because it operates on so many levels at once: educational, professional, personal, and social and enhances economic opportunities. Sen identifies capabilities in sets as educational, personal, professional that may be specifically listed for each context. The capabilities framework is also dynamic because it seeks to assess the interaction and transformative potential of the capabilities in question through the operation of conversion factors that are personal, social and environmental. The result is the achieved functioning. Ideally, the achieved functioning, will act as a spur to prompt individuals to reach out to new experiences and opportunities that identify further capabilities that can then be converted into more achieved functionings and by this process create a dynamic growth pattern. (Sen, Justice, 235-237). The capabilities are identified in functionings, and they vary according to context. Capabilities are the genuine opportunities and freedoms that people realize in their functionings (Robeyns, 2006, 351). In analyzing poverty in a developing country the variable may be few and simple: nourishment and shelter, avoidance of morbidity, longevity and similar factors. What is being analyzed is the interpersonal and antisocial relationship between functionings and capabilities, i.e. what an individual may aspire to within a set of circumstances and what are the constraints. (Sen, 2007, p. 272). In a higher education context, however, they would be more complex and focused on knowledge, skills, cognitive development and peer group interactions. Sen also recognizes that there are constraints that may limit experiences that educational (abilities, are personal levels, motivation), social (prejudice against women, bigotry, tradition), political (an authoritarian state), economic (poverty); but it is also possible to assess and measure these and address them where possible (Sen, 2010, pp. 254-257).

The Capabilities Approach has received notice as a leading framework for analyzing human well-being (Leßmann and Bonvin, 2011, p. 85). It is an emancipatory theory for human development intended to give people freedom and options to act. It is anti-utilitarian because it does not regard human happiness as distributive (the greatest happiness for the greatest number) but an individual experience and the result of personal choice. Yet Sen remains consequence sensitive; personal responsibility is an important part of his philosophy (Sen, 2010, 220-221). Sen views education as central for human development. He advocates it for both men and women and regards it as crucial for expanding personal and social choice (Sen, 2010, p. 112). Jacques Delors-chairman of the influential UN report Learning: the Treasure Within (1996) viewed Sen's Capability Approach as an important pathway for achieving the goals of a holistic education within a lifelong learning context (Delors, 2013, pp. 226-227). Yet even though education is an important component of Sen's Human Development Index (HDI) on which CA is based, to date the method has been little applied to education and less to higher education although some promising studies exist that show the potential of CA as a sophisticated analytical tool that is people centered and interdisciplinary. As an approach to eLearning, CA is new but becoming appreciated by leading Open Universities and Distance learning providers (Tait, 2013, pp. 3-5). How applicable as a framework is CA to education especially in a lifelong learning context? What does it add and what are its shortcomings? How could it be meaningfully readapted? These are questions this paper will explore and attempt to find some answers.

### 2 DEFINING THE CAPABILITIES APPROACH

The Capabilities Approach was pioneered in the field of economics by Amartva Sen, winner of the Nobel Prize in economics in 1998. It originated with his work in accessing quality of life issues in India. It is not a theory but an analytical framework to measure quality of life issues. As recently as the 1990s, the World Bank applied the GDP as the measurement of a nation's well-being. But Sen and the Pakistani economist Mahbub ul Haq with their work at the UN understood that a nation's development must also measure quality of life issues, closing linking the social and economic dynamic to human development and educational levels and access. The result was that in 1990 the UN created the Human Development Programme (UNDP) and published the Human Development Reports that included the statistical report Human Development Index (HDI) that measure human capabilities and achievements

(UNDP 2014, Robeyns, 2006, 351). These reports have been published continuously to the present. Sen's Capabilities Approach is derived from a microeconomics framework to profile human development. But it is a human centered analytical concept that separates human development from human capital theory that views human labor, education, and other activities as tandem to the GNP (Saito, 2003, pp. 8, 24; Walker, 2006, p. 21). Sen's framework puts the human being first and shows his relationship to economic growth as a consequence of human well-being. While economic growth remains desirable, it is not the immediate goal. Sen's theory is intended to promote human freedom; when people have the freedom to choose and undertake selfdirected activities, it is assumed that economics will also be positively affected. One of the attractive features of Sen's theory is that it focuses on quality of life issues and understands that human satisfaction, achievements, security and the like must precede economic development and not the other way around. Its focus is life enrichment and as such it is particularly relevant to education because education includes both personal satisfaction and potential economic productivity. One of the factors Sen's theory measures is a composite profile of education attainment, but also understands their limits: i.e., constraints, barriers and needs. The framework helps planners to orientate projects, to measure the satisfaction of target groups, and promote accessibility and egalitarian resource distribution. The effectiveness of the capabilities approach is analyzed in terms of functionings. Functionings are qualitative attributes such as access to education, health care or a clean environment that give life satisfaction and enable individual choice. These are identified as sets of assets that promote the good life or result in constraints or even deprivations. For example, nourishment is an important functioning and an indicator of human well-being or its contrary-hunger or famine-is a deprivation. Sen claims that capabilities and functionings are to be identified as situation specific; they are related to context (Sen, Capabilities, 2007, p. 272). He has consistently refused to present a list of capabilities that would serve as a benchmark to gauge human development that Melanie Walker has called the Core Capabilities (Walker, 2010, p. 898). His framework is dynamic; its essence is change. Its dynamism is achieved by converting capabilities into functionings that are transformative and form part of an ongoing process of reaching out and converting more capabilities into functionings. The framework operates by asking the question that after a certain set

of capabilities have been achieved, what else can an individual do to enrich his / her life? Change in Sen's framework operates multi-dimensionally on three levels: personal, social and environmental; it is multidimensional that is both personal and has wider social and environmental ramifications (Sen, 2010, p. 248). Martha Nussbaum, Sen's sometime collaborator, has also been his harshest critic in his failure to provide a benchmark list of capabilities. Nussbaum has identified ten capabilities that she claims represent the threshold of human well-being (Nussbaum, 2000, p. 75). Among these she includes health, imagination and self-expression, practical reason and critical thinking, play and similar attributes (Nussbaum, 2000), 78-80. She views the list as a proposal, as the basis for political negotiations for the achievement of human rights. But Sen demurs from such lists, feeling that they are inappropriate to a dynamic analysis where cluster sets are always changing and new ones are evolving. Another criticism that was aimed at both Sen and Nussbaum is that the capabilities approach is too individualistic. It is true that Sen is an advocate of pluralism, individual autonomy and liberal democracy. The focus of his works has been human freedom. He feels that identifying people in terms of traditional group identities, has given traditional groups such as family, ethnic groups and religion creeds too narrow a focus and as a result has missed the dynamic of individual aspirations and choice (Sen, 2010, 246-247). Sen is anti-parochial, he feel that traditional groups have kept people down, especially women. He is a cosmopolitan who favors individual autonomy that he refers to as agency. Yet Sen emphasizes the importance of participation, especially in developing solutions to common problems (Zheng and Stahl, 2011, p. 69). He is an advocate for sociability and bonding by mutual attraction, an Enlightenment idea and Adam Smith figures prominently in his analysis. Sen's ideas reach-out beyond networking and include a broad range of human associations such as friendship, personal associations, and professional interests. Sen has also been criticized that he does not ascribe to a method to measure the various functionings —he is quite low keyed in regards to measurement--for evaluations he does recommend interviews and most of all public discussions—he is interested that people create forums to find solutions for common problems (Sen, 2010, pp. 242-243). But critics have pointed out that Sen's functionings do require some objective measurement for validation (Unterhalter, Vaughan and Walker, 2007, p. 5). Instead, he advocates evaluating each situation on a case-by-case bases and does not identify a single criterion. Sen's great

strength may be that he teaches the art of identifying human capabilities within an environment of functionings and diagnosing their potential impact on personal, social and environmental factors.

## 3 THE CAPABILITIES APPROACH AS A COMPETENCY ASSESSMENT FRAMEWORK

The Capabilities Approach is a human development indicator that measures human capacity and its potential to transform peoples' lives and offer new opportunities. Its attraction lies with its multidimensional and dynamic quality that provides a measurement tool to assess potential change, an elusive but significant category for assessing educational growth. It has a dynamic and interdisciplinary character that has been applied as an analytical tool to a number of disciplines: Nussbaum to ethics, philosophy and gender issues, Ingrid Robeyns to Political Science, Sociology and gender issues, Sabine Alkire to Poverty Studies, Elaine Unterhalter to gender and social justice issues, Lorella Terzi to Special Education and Social inclusion strategies, Madoka Saito has linked it to education-the first serious paper in this regard, (Saito, 2003, p. 17), and Mathias Hatakka and Jenny Langsten have treated it as a tool for development evaluation in Informatics (Hatakka and Langsten, 2012, p. 23). In higher education Melanie Walker has been one of the first to embrace the Capabilities Approach and has argued that it is a as a transformative tool for individuals and society for democratic educational delivery (Walker, 2010, p. 899). More recently, it has been taken-up by elearning educators and administrators, although research in this area it has barely scratched the surface. In a resounding statement Alan Tait, Director of International Development, Open University UK, has noted: Open Universities and universities delivering distance education do not accept currently available educational options as either fair or adequate and are intent on changing that and giving both access and self-realization opportunities; to give everyone a chance at self-actualization including women, minority groups and the disabled (Tait, 2013, p. 5). This ringing endorsement clearly articulates the potential for positive change that the Capability Approach offers.

Moreover, the Capabilities Approach offers a framework to structure and facilitate the

implementation of competency-based higher education that is currently under discussion. The connection between Competency based learning and the Capabilities Approach has been presented by Lozano et al (2012, p. 132) as charting an important direction in Competency assessment, but not analyzed in detail-the research in this area is still very recent. Competency assessment has recently emerged as an influential education trend-setter and along with it lifelong learning has come to exert a central role. While Lifelong learning is probably as old as civilization at the end of the twentieth century globalization and technological because of innovations the term has assumed a new significance and became linked to skills development and competence building to last throughout the human lifecycle. Official recognition from the EU in its efforts to standardize qualifications, not only across the EU nations but to apply globally as well, has given competency based learning and lifelong learning a boost (EU: summaries, 2006). The EU has recognized that learning is not confined to the classroom but may be achieved in less structured settings: by non-formal means that may or may not be structured for which participants may or may not receive certification such as foreign language clubs; and informal learning that is experience gained from job performance or personal satisfaction. Lifelong learning and competency assessment became formally a part of the EU agenda with the Bologna process (1999) that also launched the European Higher Education Area (EHEA) whose purpose was to create a compatible and coherent systems of higher education in Europe (http://www.ehea.info/). While the EU has made a start in this area and has even developed a European Qualifications Framework that has been adapted by nearly all the national frameworks of the EU nations, in Europe a single credential criteria is still, except in the vocational education area, an ideal rather than a reality. But it is important that the model has been created and may be developed in the future. Moreover, employers and global organizations with real clout such as the Organization of Economic Cooperation and Development (OECD) and the World Bank are pushing for this change (ERI SEE, Blog, 2009). In the area of competency based assessment for higher education, the United States is in the forefront, perhaps because business has more influence in that nation. Moreover, President Obama has asserted leadership in this area. Federal aid to education is a Democratic priority, but Obama is especially committed to increase the higher education graduation rates while lowing education costs and

views competency-based assessment as one of the means. And his goal is shared by powerful allies such as the Bill and Melinda Gates Foundation and the Lumina Foundation. Currently, a federal experimental project is underway involving forty higher education institutions in the United States, dubbed the Competency-Based Education Network (C-BEN), to test the feasibility of competency and prior leaning assessment, even granting a waiver from certain rules that govern financial aid to students (Fain, January 13, 2015)

Yet, while competency assessment has become an important educational priority, definitions of what constitutes "competence" are in flux as are models to structure the competency learning experience. Lumina's Degree Qualifications Profile (DQP) is a major effort in the United States to bring order to the credentials uncertainty (Lumina, January 2014, pp. 13, 60). But at this time, the framework lacks criteria for assessing the doctorate and it is an untried tool even though the C-BEN project, that uses the Lumina model, should produce valuable results. An attractive feature of the Capabilities Approach is its flexibility. It may be used alone as a framework to identify key competencies and the developmental freedoms that it seeks to promote as well as the constraints that may hinder achievement. Another feature of the Capabilities Approach is that it may be used in tandem with other theoretical models such as Critical theory used to analyze cultural assumptions and their potential for re-structuring or other theoretical models linked to human development and ethical norm formulation. The Capabilities Approach describes a broad educational profile; not only does it indicate learning outcomes; but, more significantly, it identifies the individual transformations attributes that the educational experience is intended to achieve.

The Capabilities Approach transforms the educational experience into a more holistic, multidimensional personal, social and professional event.

#### 4 CAPABILITIES APPROACH AS AN OPEN FRAMEWORK

The Capabilities Approach is an open framework that can live with a great deal of conflict and unresolved thought (Sen, 2010, 135). The flexibility of the framework can be easily adapted to the shifts of identity that competency-based learning has undergone and give it structure and direction. In the 1990s competency based learning was about upgrading individual skills with focus on ICT skills. In the twenty-first century, however, competency based learning has become much more inclusive and the context is now considerably broader that includes socio-political, psychological and educational dimensions that recognize that individuals are not solitary beings but interact with society and organizations (Jirgensons, 2015, p. 142). The benchmark study for this new holistic thinking was the 1996 UNESCO report The Treasure Within (commonly known as the Delors report) that clearly moved lifelong learning beyond skills retraining and recognized a broad range of human capacities. It organized the new learning around the "Four Pillars of Learning" or four fundamental types of learning needed throughout a person's lifetime: to "Know," (including the "tools" numeracy, literacy, and life skills), "Do," (applied learning, critical thinking), "Live Together" (understanding cultural diversity, tolerance, learning to interact positively with others), "Be" (developing an autonomous human identity) (Delors, 1996, 85-91). The report argued that all forms of learning needed to be organized around these four pillars: "so that education is regarded as a total experience throughout life, dealing with both understanding and application, and focusing on both the individual and the individual's place in society" (Delors, 1996, p. 86).

Delors report was followed by other educational initiatives. In 2005 the Organization for Economic Cooperation and Development (OECD) issued the DeSeCo report that identified the key competencies for lifelong learning and was administered by the Swiss Federal Statistical Office and provided support by the American Departments of Education and National Center for Educational Statistics (OECD / OCDE, Revised December 2001). The Americans as well were developing lifelong learning and competency initiatives and competency-based assessment is currently making serious inroads in the United States. The DeSeCo competencies were modeled on the Programme for Student Assessment (PISA) that is also an OECD programme. The DeSeCo competencies created a framework for identifying key competencies, a method for demonstrating their interdependence, and an approach for identifying and adding new competences, recognizing that change and reformulation are necessary. Moreover, it provided criteria for their assessment. The competencies were classified in three broad, interrelated categories: Use tools interactively (i.e. language, technology); interact effectively with heterogeneous groups; and act autonomously (OECD, May 2005). These categories became the basis for identifying and

mapping key competencies. DeSeCo key competencies became the model for the European qualifications framework (EQF) that is the key component of the European Higher Education Area. The EQF is the standard for the EU nations to classify their education systems according to its requirements, especially in the lifelong learning area (EQF) (Jirgensons, 2015, p. 143) Nearly all the EU nations have formulated their own National Qualifications Frameworks (NQF) to correspond to the EQF criteria and other European states such as Switzerland, Norway as well as Turkey are restructuring their educational systems to match the EU system.

While the Capabilities Approach shares much with the DeSeCo competencies framework, there are some important differences. Both models address all dimensions of the human being in the educational development process (Lozano, Boni, Peris and Hueso, 2012, p.137), but Sen's notion of capabilities is more expansive and intrinsically orientated. It argues for human freedom and personal autonomy as its goal (Lozano, Boni, Peris and Hueso, 2012, p. 140). The notion of individual agency and choice is central to Sen's framework where an individual has the freedom to select among various capabilities in order to transform himself and society. While individual development is paramount to Sen, he recognizes that an individual is not an isolated being but is potentially a transformative agent within a broader social context. Both the Capabilities Approach and DeSeCo competencies are pragmatic and recognize the economic and utilitarian dimensions of the educational process; but Sen moves beyond pragmatism to an ethical dimension where Justice and freedom are at the core and the strengthening of individual agency and personal autonomy is the focus. The DeSeCo competencies are still guided by Human Capital theory where education is regarded as the key driver for economic productivity (Lozano, Boni, Peris and Hueso, 2012, p. 136). Sen moves beyond a narrow economic considerations and regards education as a much more holistic experience, a rich mosaic of capabilities and achievements. Sen's theory focuses on the individual and issues of quality. While the DeSeCo competencies and other competency orientated programmes are geared more to the needs of the market (Lozano, Boni, Peris and Hueso, 2012, p. 139). Yet today economist measure development not just by income and narrow income considerations, but a broad range of quality of life indicators such as political freedoms, educational attainment, gender gap, levels of medical care and other quality of life issues (Robeyns, 2003, 64). The focus is on

institutional and community capacity building with a range of factors including personal ones that inform the analysis (Alkire, 2005, p. 10). Sen is an economist, but he is also a philosopher. His freedoms are about development that focus on individual transformations, but move outward to also interact with and change society and institutions. Capabilities in Sen's theory represent potential functionings. They are intended to give an individual more life choices or freedoms. Achieved functionings give individuals a broader opportunity selection menu that may be used for further growth and development. Sen has consistently demurred from providing a list; instead he feels capabilities are context specific and are apt to change as circumstances and priorities changes. Sen's system is adjustable and adaptable and is relative to circumstances. Sen is satisfied with partial results because he views capabilities transformation as part of an ongoing process. Sen is a democrat and for him capability "sets" are arrived at through public discussion. A "capabilities set" in this case can be identified with personal, educational, and professional factors (Hatakka and Langsten, 2012, p. 35), and they are to be applied to measure human levels of functionings and deprivations. These levels are a person's resources that may be converted into functionings. The capability to convert goods into functionings varies from person to person. In this case, conversion of goods is broadly applied, meaning the idea is not restricted to economics but also includes an individual's inner resources and social support mechanisms. People must interact within the parameters set by these "goods"-they are not just independent or isolated or static (Sen, 1979, p. 219). If an individual's resources are meagre, it may identify a situation of deprivation where an individual has only limited capabilities to convert resources into functionings. In fact, poverty can be a cause of capabilities deprivation as can other factors such as age, disability and gender (Sen, 2010, pp. 254-257). These constraints need intervention and a measure of equity injected if they are to be overcome. Public discussion and debate play a key role in the formulation of a capabilities strategy. In this process, Sen draws upon social choice theory that indicate individual advantages and disadvantages within a certain "capability set". One of the drawbacks of open public discussion is that it may lead to the "impossibility theorem" or "gridlock." But for Sen the stalemate represents a contribution to public discussion by bringing into focus questions that may not have been sufficiently addressed in order to arrive at a clearer, more informed understanding of the issues (Sen, 2010, pp. 279-280, 314). Capabilities are

potentialities or potential functionings. The capabilities sets may be transformed by conversion factors that are personal, social and environmental. These are the factors that activate the conversion process. The conversion factors are important because they may improve an individual's life chances or serve as constraints. The personal conversion factors may include the level of education, income levels, access to learning, and motivation (the "inner resources" factors). The social conversion factors may include social and family support or antagonism and social, political and religious attitudes that may be traditional or authoritarian and restrictive of learning. The environmental conversion factors include the infrastructure (buildings, libraries, and access to materials), costs, geographic distance, and technological access that may compensate for distance. In Competency-based education a Capabilities Framework can provide the strategy to address a number of learning potentialities that can be used to identify and plan a "capabilities set" or certain strategies capable of achieving desired learning outcomes. In this author's opinion a capabilities strategy for education needs to address the following factors: intellectual growth, skills enhancement, improved economic prospects, and social inclusion through improved social interactions, self-confidence and life satisfaction. If these learning outcomes are successfully achieved and a higher level of functioning is the result, they may lead to lead to personal, social and professional satisfaction or as Sen states a life a person may value. These in turn become the platform from which an individual reaches to attain further capabilities and achievements. The failure to achieve can lead to frustration. Sen is aware of the constraints or deprivations from which an individual may suffer. The constraints in a competency-based learning context can result in-and again, in this author's opinion-inhibited intellectual growth, poor work and life skills, poor economic prospects, social exclusion, feelings of inadequacy, a sense of failure and an impoverished life. Sen recognizes the adaptive phenomena that people in reduced circumstances may exhibit as may be shown by subjugated women and oppressed minorities who scale-down their expectations to gain a measure of pleasure in small mercies. But Sen has no patience with these "practical adjustments" and instead advocates "creative discontent" (Sen, 2010, pp. 274-275, 283). In many life circumstances "creative discontent" can be the catalyst that prompts individuals to take action, often through organized actions such as women's group or the formation of other social networks, advocacy or

self-help groups and, of course, education. The lifelong learning pathway could be the result of these prompting brought on by a desire to overcome feelings of alienation from personal, social and professional achievements. This used to be called the digital divide, but now it is understood as being multidimensional and a dynamic that operates on many human and social levels at once.

### 5 CONCLUSION: EVALUATING THE CAPABILITIES APPROACH

Sen has often been criticized for not providing a "list of capabilities" that can be used as a benchmark for gauging the impact of social and economic strategies. Martha Nussbaum has been his most vocal critic in this regard and has presented a much noted list that was discussed earlier. Robert Sugden, on the other hand, argues that the approach is not operational because of the problem of assigning weights to the capabilities sets since quality of life issues are so individualized. He feels more comfortable to applying the traditional Marshallian economic tools that measure real income and provide cost-benefit analysis (Sugden cited in Robeyns, 2006, p. 352). Yet Sugden discomfort indicates mainstream economist squeamishness with quality of life issues. It is true, it is difficult to measure these precisely; yet they need to be incorporated by some means since they provide a more rounded picture of what people actually value; just to side-step these issues does not appear to be the answer. Sen's theory addresses human aspiration and quality of life issues. He may be the first economist to recognize that human life cannot be measured just in terms of income, commodities and assets, but must include quality of life evaluations that are intrinsic and highly individualized. At first such an analysis may seem lopsided, but Sen is right, there must be a bridge between the "hard facts" of mainstream economics and their impact on individual lives-the daily "doings and beings" that figure so prominently in Sen's writings (Sen, 2007, p. 271). By Sen's own admission, the Capabilities Approach is incomplete, but it can be used with different methods to assign weights and perform evaluations (Sen, 2007, p. 277). Sen's approach in fact serves as a critical lens that cultivates critical thinking. It examines the empirical evidence in each set of circumstances from a multilayered perspective and arrives at a list of factors to be addressed through a Socratic process of discussion, debate, and participatory dialogue

(Lozano et al, 2012, p. 44). Sen's Capability Approach has been applied together with Nussbaum's Aristotelian theory of Justice (Sen, 2007, p. 281), John Rawls' arguments for resource conversion (Sen, 2010, p. 264), the emancipatory or critical theories of philosophers Jürgen Habermas' and Michel Foucault that argue for institutional structural change (Zheng and Stahl 2011, pp.72, 75), Lorella Terzi's who argues for social inclusion of individuals with special needs (Terzi, in Walker and Unterhalter, 2007, p. 25), and Yingquin Zheng who argues from the ICT perspective and advises that the Capabilities Approach can be most effective as a critical lens for evaluating technological developments as a human centered usability sets contributions to (Zheng, 2009, pp. 10-11).

Sen has repeatedly argued that the Capabilities Approach cannot be based on prior agreements (or standard lists), but must be decided within each specific context and its range of variables empirically identified (Sen, 2007, 280). The selection process could be arduous, but Ingrid Robeyns has developed a five criteria selection process that can serve as a useful guide for developing capability sets (Robeyns, 2003, pp. 70-71). She recommends that: (1) explicit formulations; (2)present methodological justification; (3) Context sensitivity—that means the theoretical framework and details need to match the context; (4) the list is a two-step process; the first is the "ideal" list and the second is pragmatic that takes constraints into account (or Sen's partial results achievement process); (5) "the criterion of exhaustion and non-reduction": that means non-duplication or overlap of factors; that all elements need to be reduced to the simplest, most explicit terms.

While the details of Sen's approach may appear fuzzy, he has designed a framework that identifies capabilities in the space of functionings that marks the levels of achieved functionings (Sen, 2007, pp. 277-278). For Sen "the fact that the capability approach is consistent and combinable with several different substantive theories need not be a source of embarrassment" (Sen, 2007, p. 283). While this straightforward declaration may raise eyebrows, Sen's approach represents an important method of thinking about problems. He has shown that social and economic circumstances cannot be reduced to several objective factors, but must be human centered-and that the objective and subjective must appear of the same continuum. Sen's approach also offers a pathway for lifelong learning. The new departure was already marked by the Delors report the Treasure Within and was made policy by DeSeCo declaration that defined key competences within a lifelong learning context. Sen's approach adds depth and detail to this trend: the Capabilities Approach highlights particular spaces for evaluating individual opportunities and successes that can be achieved in a lifelong learning context (Sen, 2007, p. 285).

#### ACKNOWLEDGEMENTS

The research and writing of this paper was sponsored by the European Regional Development Fund, Project **Jauzi** (Eng. Trans.: New User behavioural interpretation algorithms to facilitate an efficient transfer of knowledge within an eecosystem)

Nr. 2013/0071/2DP/2.1.1.1.0/13/APIA/VIAA/023



- Alkire, S. (2005), Instrumental Freedoms and Human Capabilities, Draft Paper, pp. 1-14. https:// www.msu.edu/unit/phl/devconference/AlkireInstrume ntal%20Freedoms.pdf (Retrieved 11/2/2015).
- Delors, J. Chairman, (1996) Learning: The Treasure Within: Report to UNESCO of the International Commission on Education for the twenty-first century, Paris, UNESCO.
- Delors, J. (2013) 'The treasure within: Learning to know, learning to do, learning to live together and learning to be.' What is the value of that treasure 15 years after its publication?' International Review of Education, 59:319–330, DOI 10.1007/s11159-013-9350-8, pp. 319-330.
- ERI SEE, Blog A Historical Perspective of Life Long Learning by Ejvis Gishti (December 23, 2009) http://blog.erisee.org/articles/2009/12/a-historicalperspective-of-lifelong-learning/ (retrieved 17/7/2014).
- Europa: Summaries of EU legislation (2006) Key Comptences (sic) for Lifelong Learning, available at http://europa.eu/legislation\_summaries/education\_trai ning\_youth/lifelong\_learning/c11090\_en.htm (retrieved 24/7/2014).
- Fain, P. (2015) Experimenting with Competency Inside Higher Ed, January 13, 2015 https:// www.insidehighered.com/news/2015/01/13/fedsmove-ahead-experimental-sites-competency-basededucation (retrieved January 13, 2015).
- Hatakka, M and Lagsten, J. (2012) The capability approach as a tool for development evaluation – analyzing students' use of internet resources *Information Technology for Development*, 18: 1, January, pp. 23– 41.
- Jirgensons, M. (2015) Direct Assessment Initiatives within a Lifelong learning Context, *Procedia Computer Science*, pp. 141-146, DOI 10.1016/j. procs.2014.12.019.

- Leßmann, O. and Bonvin, J-M. (2011) Job-satisfaction in the Broader Framework of the Capability Approach Management *Revue*, 22: 1, pp. 84-99 http://www.jstor.org/stable/41783672 (Retrieved: 08/11/2014).
- Lozano, J. Boni, A. Peris, J. and Hueso, A. (2012) Competencies in Higher Education: A Critical Analysis from the Capabilities Approach *Journal of Philosophy* of Education 46: 1, pp. 132-147.
- Lumina Foundation, The Degree Qualification Profile (DQP) 2.0: Draft report, January 2014, available at http://www.luminafoundation.org/publications/DQP/D QP2.0-draft.pdf (retrieved 24/7/2014).
- Nussbaum, M. (2000) Women and Human Development, Cambridge, UK: Cambridge University Press.
- OECD (May 2005) Definition and Selection of Key Competencies: Executive Summary, available at http://www.oecd.org/pisa/35070367.pdf (Retrieved 24/7/2014).
- OECD / OCDE (Revised December 2001), Definition and Selection of Competencies: Theoretical and Conceptual Foundations: Background Paper, available at http://www.oecd.org/education/skills-beyondschool/41529556.pdf (Retrieved: 2/2/2015).
- Robeyns, I. (2006) The Capabilities Approach in Practice, Journal of Political Philosophy, 14:3, pp. 351-356.
- Robeyns, I. (2003) Sen's Capability Approach and Gender Inequality: Selecting Relevant Capabilities *Feminist Economics* 9:2-3, pp. 61-92.
- Saito, M. (2003) Amartya Sen's Capability Approach to Education: A Critical Exploration Journal of Philosophy of Education 37: 1, pp. 17-33.
- Sen, A. (2007) Capability and Well-Being in *The Philosophy of Economics* 3<sup>rd</sup> edition, Daniel M. Hausman (ed.) Cambridge, UK: Cambridge University Press, pp. 270-293.
- Sen, A. (1979) Equality of What? The Tanner Lectures on Human Values Delivered at Stanford University, May 22, 1979.
- Sen, A. (2010) *The Idea of Justice*, London: Penguin Group.
- Sen, A. (2010) Mobile and the World, Creative Commons http://itidjournal.org/itid/article/view/614/254.
- Tait, A. (2013) Distance and E-Learning, Social Justice, and Development: The Relevance of Capability Approaches to the Mission of Open Universities *IRRODL* No. 14 (Sept 2013), pp. 1-18.
- Terzi, L. (2007) The Capability to be Educated in *Amartya* Sen's Capability Approach and Social Justice in Education Melanie Walker and Elaine Unterhalter (eds.), New York: Palgrave MacMillan, pp. 25-43.
- United Nations Development Programme (UNDP) (2014) Human Development Reports, Human Development Index (HDI). http://hdr.undp.org/en/content/humandevelopment-index-hdi (retrieved 24/1/2015).
- Unterhalter, E. Vaughan, R. and Walker, M. (2007) The Capability Approach and Education. Re-publication of article was published in *Prospero*, November 2007 for the Human Development and Capability Association

(HDCA), http://www.capabilityapproach.com/ (retrieved 16/1/2015).

- Walker, M. (2010) Critical Capability Pedagogies and Higher Education *Educational Philosophy and Theory* 42: 8, pp. 898-917 DOI: 10.1111/j.1469-5812.2007.00379.x.
- Walker, M. (2006) *Higher Education Pedagogies*, New York: Open University Press.
- Zheng, Y. (2009) Different Spaces for e-Development: What Can We Learn from the Capability Approach? *Information Technology for Development*, 15: 2, pp. 66-82, DOI: 10.1002/itdj.20115.
- Zheng, Y. and Stahl, B (2011) Technology, capabilities and critical perspectives: what can critical theory contribute to Sen's capability approach? *Ethics and Information Technology*, 13: January, pp. 69–80, DOI 10,1007/s10676-011-9264-8.

JBLIC

PL