

Caesarea
Forum
Since 1992

The Eli Hurvitz Conference on Economy and Society

November 6–7, 2013

Hilton Eilat Queen of Sheba Hotel, Eilat



2013 Conference Materials



קרן דליה ואלי הורביץ בע"מ

DALIA AND ELI HURVITZ FOUNDATION LTD.



In cooperation with



Contents

Foreword

1. Toward a New Paradigm in Israeli Education (Report)

Working Group

Preface

- **Teacher Policy along a Pedagogical Fault Line**
- **Restructuring Educational Human Resource Management in the Israeli Education System**
- **Human Resource Management in the Israeli Education System: A Minority View**
- **Toward a New Paradigm of Education: The International Perspective**

2. Inequality – It's Bad for Our Health (Report)

Working Group

Abstract

Introduction

- **Inequalities in Health in Israel: The Current Situation, Explanations, and Ways to Narrow the Inequities**
- **The Economic Cost of Inequalities in Health**
- **Ways to Achieve an Ongoing Reduction of Inequalities in Health**

3. When the Start Up Nation Matures (Abstract)

Working Group

Abstract

4. Charting a New Course for Israel's Civil Service (Abstracts)

Democratic Governance

Working Group

Abstract

Management and Labor Relations in the Civil Service

Working Group

Abstract

5. From Encouraging Employment to Boosting Productivity

Working Team

Abstract

**Caesarea
Forum**
Since 1992

The Eli Hurvitz Conference on Economy and Society

November 6–7, 2013 | **Hilton Eilat Queen of Sheba Hotel, Eilat**



Foreword

Foreword

The Eli Hurvitz Conference on Economy and Society (the Caesarea Forum), which is convening for its 21st year, has succeeded in establishing a unique tradition of professional, responsible, in-depth, and impartial discussion on the core issues in Israeli public life. The annual conference is the culmination of comprehensive work conducted in recent months by a federation of the leading research institutes in Israel and included meetings of heterogeneous teams of experts, sessions with decision makers, and research and writing of conclusions and recommendations.

In the preliminary planning for the work of the professional teams and for the conference, we focused this year on three main principles that guided their efforts, and shaped the final output presented to us and the structure of the conference. The first and most important principle we decided to spotlight throughout the conference is **to strengthen the impact of the conference's output on decision makers in Israel**. The professional working groups indeed closely studied the selected issues, and we set as a goal for ourselves to do our utmost to ensure that the reports submitted to the decision makers would be beneficial to them in their daily work. The second principle is **to examine each of the core issues over a period of five years**, with the aim of **generating output that reflects comprehensive and long-term thinking**. The third principle is **the goal to innovate**. Indeed, the uniqueness of the working groups of the Eli Hurvitz Conference on Economy and Society is, among other things, their ability to mobilize professional and experienced forces for making recommendations that are innovative from the perspective of the decision makers.

The conference offers an additional opportunity to emphasize and reinforce these three principles through plenary sessions and workshops in which decision makers of various echelons will participate.

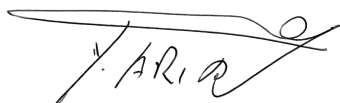
The conference will concentrate this year on five subjects:

1. **Toward a New Paradigm in Israeli Education.** The working group, headed by Prof. Dan Inbar and the Van Leer Jerusalem Institute, focused on the teacher workforce and addressed two subjects:
 - a. The policy of teacher training, professional development, and the processes of certification and work relations in an era of profound societal changes.
 - b. The management of the teacher workforce in the education system and examining a process of cooperative discussion aimed at clarifying and defining the roles, authorities, and responsibilities involved in managing teaching personnel.
2. **Inequality – It's Bad for Our Health.** The working group, headed by Prof. Orly Manor and the National Institute for Health Policy Research (NIHP) studied the national costs attributable to the failure to narrow the ongoing inequalities in health. The team, in complex and extensive work, was able to quantify the costs stemming from the ongoing health disparities, which affect numerous national systems and not only the health system. Among other things, the team offered ideas whose implementation would lead to a reduction in these inequalities, with an emphasis on models that would be economically sustainable from a national perspective.

3. **When the Start Up Nation Matures.** Innovative environments are characterized by decentralized knowledge and multiple sources that put innovation processes into practice. The working group, led by Dr. Leonid Bakman and the Israel Innovation Institute, focused on the steps needed to transform the State of Israel into a state that fosters a systematic and planned culture of innovation, as opposed to spontaneous innovation based mainly on the talents of outstanding individuals. The team also addressed the need to institutionalize cross-sector activity in order to sustain the Israeli innovation engine and continue to develop it.
4. **Charting a New Course for Israel's Civil Service.** The working group focused on the steps required to strengthen the governance of the civil service and on the mechanisms for organizing the management of work relations in the service. Two sub-groups worked in this team: One, led by Mr. Ilan Levin, studied flexibility in work relations and management, and focused on work relations in the civil service; the second, led by Dr. Gayil Talshir and Mr. Ron Tzur and in collaboration with the Federmann School of Public Policy and Government at the Hebrew University of Jerusalem, examined integration and inclusion in the civil service and discussed the possibility of a new paradigm of governance that is different than that of a welfare state or free market state.
5. **From Encouraging Employment to Boosting Productivity.** The working group, headed by Prof. Michel Strawczynski, discussed productivity and the desired policy for boosting growth. The working paper indicates that while the current policy for encouraging productivity – From Welfare to Employment – has indeed increased employment, some of the new employees are characterized by particularly low productivity. Therefore, the recommendation is to transition to a policy of “From Employment to Productivity”. The team focused on the demographic aspect and primarily on boosting the productivity of weak populations in the society.

We will meet, listen, and speak at the plenary sessions, workshops, formal meetings, and less formal ones. All of us – government ministers, public officials, senior bank executives, the top echelon of the Ministry of Finance and other ministries, members of Knesset, members of academia, chairpersons of public committees, leading figures in the business sector (chairpersons and CEOs of corporations, conglomerates, and associations), journalists and guests from abroad – **will roll up our sleeves and make an impact on the economic and social fortitude of the State of Israel.**

Thank you and see you at the conference.



Mr. Yarom Ariav

Conference Director

The Eli Hurvitz Conference on Economy and Society 2013

This conference is made possible by the generosity of the Dalia and Eli Hurvitz Foundation.

Caesarea
Forum
Since 1992

The Eli Hurvitz Conference on Economy and Society



Toward a New Paradigm
in Israeli Education

Toward a New Paradigm in Israeli Education

November 6–7, 2013 Hilton Eilat Queen of Sheba Hotel, Eilat

The Working Group

Head **Prof. Dan Inbar**, Chair, Education Department, The Van Leer Jerusalem Institute

Members **Dr. Amnon Karmon**, Research Fellow, Education Department, The Van Leer Jerusalem Institute; Author of position paper: “Teacher Policy along a Pedagogical Fault Line”

Dr. Varda Shiffer, Research Fellow, Education Department, The Van Leer Jerusalem Institute; Author of position paper: “Restructuring Educational Human Resource Management in the Israeli Education System”

Prof. Shlomit Amichai, Chairperson, Teach First Israel, JDC-Israel

Prof. Tamar Ariav, President, Beit Berl College and Chair, RAMA (Council of Education Colleges)

Mr. Ido Avgar, Junior Researcher, Education Department, The Van Leer Jerusalem Institute

Prof. Michal Beller, Director-General of RAMA: National Authority for Measurement and Evaluation in Education

Ms. Yael Guron, Principal of Hartuv High School, literature and citizenship teacher; Fellow, Mandel School for Educational Leadership

Ms. Nurit Herman-Almoznino, Director, Education Department, The Van Leer Jerusalem Institute

Mr. Avi Kaminsky, Director of Educational Division, Municipality of Rosh Ha'ayin; Chairman, Israel Union of Education Directors in Local Municipalities

Ms. Ravit Mizrahi Shtelman, Junior Researcher, Education Department, The Van Leer Jerusalem Institute

Ms. Amira Perlov, Principal of Experimental-Integrative School, Kfar-Adumim

Ms. Naomi Riftin, Chair, Pedagogical Secretariat, Israel Teachers Union

Mr. Noam Zussman, Economist, Research Department, Bank of Israel

Preface

Prof. Dan Inbar

In recent decades, deep fault lines have developed between schools and the social environment in which they operate. The school's activity in its current format is not only dysfunctional but also harmful from important educational and social perspectives. At the heart of the tensions between the school and the society are the teachers, who draw fire from all directions: the pupils, the parents, the school principal, the Ministry of Education and the general public.

In light of this, we propose that the 2013 Eli Hurvitz Conference on Economy and Society serve as a starting point and catalyst for a process of strategic thinking about alternative paradigms for the school – worthy and feasible paradigms for the Israeli reality in the early 21st century. We propose using these paradigms to derive practical recommendations for teacher-related policies: the comprehensive array of training processes, professional development, accreditation and employment of teachers in the education system.

In preparation for the Conference, and based on the activities carried out over the last three years at the Van Leer Jerusalem Institute, we hereby present two position papers.

The first position paper analyzes five fractures or “fault lines” that have emerged in recent decades between the school and society and the questions they raise as well as the educational damage inherent in them. This is followed by a description of the problems these rifts create for the community of teachers. The problems created by the growing rift between the school and society are different from regular problems in education for two main reasons: the first is that understanding and confronting them requires a broader perspective that transcends the field of education. A discussion that remains within the bounds of education will not suffice; a more extensive look at the totality of social phenomena is required. Second, the fault lines create a structural mismatch between the elements on either side that require significant movement to mend them. First-order changes are not enough; second-order changes are necessary.

The second position paper outlines a collaborative and gradual process of deliberations aimed at clarifying and defining the roles, powers, and responsibilities associated with the management of the teaching workforce and redistributing these roles, powers, and responsibilities between the central government (primarily the Ministry of Education) and the local authorities in a well-thought-out and mutually acceptable fashion. The outline for discussion will generate the readiness and commitment necessary for the success of the process, and will boost the trust among all stakeholders in the field of education.

This is a process aimed at development of a supportive team of teachers who are committed to all of the pupils in the community, a work environment that encourages creativity, partnership, and trust—which are prerequisites for enhancing the teaching and learning processes and of the education system in general. The goal is to weaken the strong and longstanding correlation between

socioeconomic status and educational achievement. In other words, the goal is do away with the intolerable gaps in educational services between the center of the country and the geographic and social periphery, once and for all.

Teacher Policy along a Pedagogical Fault Line

Dr. Amnon Karmon

Executive Summary

In recent decades, deep fault lines have developed between schools and the social environment in which they operate. The school's activity in its current format is not only dysfunctional but also harmful from important educational and social perspectives. At the heart of the tensions between the school and the society are the teachers, who draw fire from all directions: the pupils, the parents, the school principal, the Ministry of Education, and the general public. In light of this, we propose that the 2013 Eli Hurvitz Conference on Economy and Society serve as a starting point and catalyst for a process of strategic thinking about alternative paradigms for the school – worthy and feasible paradigms for the Israeli reality in the early 21st century. We propose using these paradigms to derive practical recommendations for teacher-related policies: the comprehensive array of training processes, professional development, accreditation and employment of teachers in the education system.

The document presents five fault lines between schools and society that require innovative thinking:

1. Schools are affiliated with a particular nation-state, but operate in a global environment.
2. Schools educate for economic, individual and national competitiveness, but operate in the context of a global environmental crisis that is largely attributable to this competitiveness.
3. Schools are “industrial,” but are supposed to train workers for a knowledge economy.
4. Schools are based on the print medium, but operate in a digital environment.
5. Schools assume frameworks of family, childhood and adolescence, but these frameworks have fundamentally weakened.

The combination of these contradictions poses four central problems for teachers: an excessive workload, low effectiveness, lack of relevance and a developing rift between the state and teachers. These problems require a new policy for teachers. The State of Israel must devise and build institutions, tools and processes that will facilitate strategic thinking and planning in the field of education and create the essential conditions for successfully contended with the problems of the fault lines associated with the teacher's work today.

Therefore, the document presents six main recommendations. The four initial recommendations address institutions and tools required for driving the processes of strategic thinking and planning; the other two recommendations refer to the teacher policy needed today. The recommendations pertaining to strategic thinking in education are:

1. Establish a center for strategic thinking in education.

2. Establish a strategic planning unit in the Ministry of Education.
3. Initiate a short-term process of formulating a future education vision for the State of Israel.
4. Create “laboratory units” within the education system for testing the proposed changes.

The recommendations in the field of teacher policy are:

1. Establish an entity to integrate and lead the proposed pedagogical changes.
2. Make the training and professional development of teachers transformative in nature.

Introduction

The nature of professional training, professional development, and accreditation and hiring procedures of professionals should be determined by the overarching goals, role, and patterns of activity in the social institution in which these professionals are meant to work. Therefore, the prevalent discussion of these topics with regard to teachers (which we will call “teacher policy” as an inclusive term for all these processes) takes for granted the current patterns of activity, goals, and role of schools. Most of the outlines for teacher policy offer frameworks, content, teaching methods, and evaluation and accreditation mechanisms that enable teachers to work in the best way possible in the existing school.

But how should we approach questions related to teacher policy when the current overarching goals and role of schools are in doubt and many eminent educationists are searching for alternatives? And what is to be done when it becomes apparent that school’s activity in its current format is not only dysfunctional but also harmful from important educational and social perspectives? In this case, addressing teacher policy requires that a clear choice be made between two options: adopt the existing paradigm of the school and suggest recommendations to improve it, or set in motion a process of strategic thinking to examine alternative paradigms that are suitable for the Israeli reality in the early 21st century. We propose that the 2013 Eli Hurvitz Conference on Economy and Society serve as a starting point and catalyst for a process of strategic thinking about alternative paradigms for the school – worthy and feasible paradigms for the Israeli reality in the early 21st century.

The Israeli discourse on education currently addresses matters of teacher policy in terms of the existing paradigm. However, we now have an opportunity to begin an educational deliberation of a different type. Therefore, the current document does not take the form of a standard position paper that presents a defined problem and alternative solutions. Instead, it focuses on explaining the need to change the existing school paradigm and suggests the institutions, tools, and processes essential for setting in motion a methodical process of designing an alternative paradigm.

The paper begins by presenting five “faults lines” that have developed over recent decades between the school and society and points out the issues they raise and the educational harm inherent in them, followed by the problems these rifts create for teachers. Six vital recommendations for mending these faults are introduced in the last part of the paper.

The Fault Lines between the School and the Environment in which It Operates

The relationship between the school and the social environment in which it operates in the early 21st century can be compared to a geological-pedagogical fault (Karmon 2009, Apeloig and Shalev-Vigiser 2010). A geological fault is caused when forces inside the Earth cause layers of rock to move. When such a fault occurs, a mismatch is created between layers of rock that previously

constituted a single continuum. In this metaphor, the school and its surrounding environment once constituted a strong, continuous rock formation created by powerful social forces. However, various social forces gradually created a fault line between school and society; society moved from its location along the fault while the other side—school—remained firmly in place. This geological-pedagogical fault developed from the combination of three processes: (1) the creation of the (modern) school in the late 19th century, in the context of the needs and values of that era; (2) the institutionalization of school patterns and the creation of powerful mechanisms that maintain them; and (3) fundamental changes that have taken place in all the social factors that created the school. The fault emerged as a result of schools' failure to undergo the necessary changes that would have addressed those social changes.

Below we review several major social changes that created the fault-line and examine some questions that these changes pose for the school. It is important to note that this list of social changes deemed significant for education is incomplete. The goal of presenting them is to demonstrate the magnitude of the rift rather than to describe it fully.

Five fundamental social changes have taken place in recent decades: globalization, an ecological crisis, the rise of a knowledge-based economy, the development of digital media, and a basic change in the institution of the family.

1. Globalization: The school was created as a key institution of the nation-state. It would not have been possible to mold the national ethos of the nation-state or its citizens without the school, and it would have been impossible to establish the modern school—which provides free compulsory education to all—without the nation-state. The school structure, its rituals, curriculum, and teaching style were all designed to serve the goals and needs of the new nation-state (Gellner 1983, Green 1990). Globalization poses difficult questions for the school. For example, in addition to “building the nation,” should school also construct “global citizenship”? What is the proper approach toward globalization—integration or segregation (Karmon 2011, Nussbaum 1994, Appiah 2008)? Should providing tools to compete successfully in the global economy become the overarching goal of the school? Does this goal require the standardization, international tests, and strict inspection that have become endemic in the educational systems throughout the world and in Israel (Alexander 2010, Ravitch 2010, Sahlberg 2011)? Can the school, which was meant to serve the nation-state, cope with the challenges of globalization (Resnik 2008, 2009; Ben-Peretz 2009)?

2. Ecological Crisis: The tremendous economic and demographic growth, which has proceeded at an unprecedented pace since the 1950s, has created the conditions for an extremely grave ecological crisis. Most of the researchers in the field insist that in the absence of far-reaching changes in basic political, economic, cultural, and technological patterns, on both national and global levels, we will fail to prevent the impending crisis (Worldwatch Institute 2013). What role should school play in this context? Should it make education for sustainability one of its

overarching goals? Should schools lay down the foundations for the supranational and intercultural collaborations that will be necessary for addressing ecological problems? If so, what does this mean for methods of teaching and learning and their constitutive content and values?¹ For example, should the “core subjects” continue to be the same fields of knowledge that train graduates for economic competition, or should a new “core curriculum” be designed that emphasizes entirely different social needs and values?

3. **The Knowledge Economy:** The school was founded to train workers for the industrial age, and the factory served as the model for the school’s organizational structure and work patterns. The nature of educational assignments, methods of evaluation, teacher-student relations, promotion from grade to grade, and awarding of a diploma upon completion of uniform standards, can all be explained by that strong link between the school and the factory. The problem is that, in the early 21st century, most jobs in Western economies are associated with the knowledge economy rather than the factory. The knowledge economy requires a capacity for active and creative processing of knowledge, advanced learning skills, and teamwork, whereas schools in their present format teach for the repetition and reiteration of knowledge on tests, do not convey necessary learning skills, and focus on individual and competitive learning (Aviram 2010, Fiske 1992). How, then, should a school that trains its graduates for the knowledge economy look? On what pedagogy should it rest? What methods of student evaluation would be appropriate? And, of course, what would be the role of teachers in such a school? Would their main work still be limited to transmitting knowledge in a classroom?
4. **Digital Media:** The Hebrew word for school “*beit hasefer*,” lives up to its name, “house of the book”; it is still based on the print medium that reigned when it was first established. But today, the dominant medium throughout the world is digital and Web-centric. Education systems world-wide are engaged in accelerated and expensive processes to computerize the school. In most cases, this means integrating new technologies into the existing school structure with little or any in-depth thinking about the changes required of schools in order to make the most of these new tools (Salomon 2000). Even more serious is the fact that almost no one in the school system has stopped to examine the effect of many hours of exposure to digital media on students or the educational ramifications of these effects.² We must emphasize that schools cannot ignore digital technologies, since they affect students, teachers, as well as the nature and transmission of knowledge and information. This leads to the inevitable question: How does one learn and how should one teach in the digital age? Should the school become as digitized as possible or should it instead try to create a “sterile field” that is mostly free of digital technologies? And

¹ For an attempt to address these questions, see Karmon et al. (2012).

² In recent years, scientific demonstrations of the profound and disturbing effects of the Internet on our cognitive skills, emotional system, construction of identity, and even brain structure have been proliferating (Turkle 2011, Carr 2011).

what of the printed book and the reading of long texts? Should these be abandoned, or should there be a deliberate effort to preserve them and the thinking, concentration, and imaginative and creative skills that their study entails?

5. **Family:** The existing school is founded on a concept of family and childhood that has been significantly weakened in recent decades (Postman 1982; Lemish 2006). The school is predicated on the assumption that the family provides a child with his or her “initial socialization,” by showing acceptable patterns of behavior, setting clear boundaries, and offering crucial emotional support. In this arrangement, the school is charged with the task of conveying the knowledge and skills needed for the suitable civic and economic functioning of these individuals in the modern state. But what role should schools play when many families no longer provide their children with parental presence and support, or set clear boundaries and instead employ a permissive style of parenting that clashes with the traditional authority figure that prevails in school (Mayseless and Scharf 2009). Should the school become a “substitute” for the family and take on a significant share of parental functions? Should it change its defined target group and include parents as part of that target group? And what are the implications of this for the teacher’s role and the main patterns of school organization and operation?

These five fault lines present the school with difficult questions that necessitate re-examination of the entire paradigm of the school in its current form. The lack of such a discussion and the continued operation of the school as it functions today threaten to lead to some extremely significant social and educational ills, including:

1. **The information flood** – The harmful effects of the flood of information on children (and adults) is becoming clearer, and is manifested in attention deficit disorder, superficiality, distraction, fragmented thinking, emotional apathy, etc. (Carr 2011, Turkle 2011). The school as it currently exists, with the constant transmission of masses of information, exacerbates the situation.
2. **Alienation** – Current pedagogy pays little attention to the crises and problems of pupils in the classroom, who express alienation from and boredom with the current learning format. Many young people wonder aloud why they have to listen to long lists of facts from their teachers in the classroom when they could get the same information with the click of a button. Alienation is a main cause (though not the only one) of the many disciplinary problems and disruptions in the classroom, and, even more, contributes to the development of a negative attitude toward learning and prevents serious engagement with knowledge. The school has lost the narrative that can justify teaching for teachers and learning for students (Postman 1995).

- 3. Instrumentality** – The hidden (but sometimes overt) message children receive at school today is that one studies in order to “to succeed in the test” and eventually to “make a career” for oneself. This message is readily absorbed; high-school graduates go on to college and university in order to “get a degree.” This explicitly instrumentalist attitude, which is becoming the only “reason” for secondary and higher education, is undermining the foundations of schools and higher education as they now exist and could lead to their collapse in the not-too-distant future.³

Teachers on the Fault Line

The social changes described raise difficult questions regarding all aspects of the school paradigm, but teachers—more than any other players—stand on the edge of this fault and the teachers are the ones who draw fire from all directions—pupils, parents, the school principal, the Ministry of Education, and the general public.

This claim is strongly corroborated by the conclusions of the first Van Leer Jerusalem Institute conference on education, entitled “Education from Vision and Policy to Implementation,” which took place in May 2009, with the participation of directors general and educators from 14 OECD countries. One of the main conclusions of the conference was that teachers are the factor that has the greatest impact on the quality of education. Teachers’ importance for the nature of the education system came up again in the deliberations of two subsequent Van Leer conferences—on teachers and teaching policy (2010) and on regulation and trust in the education system (2012). In this context, the statement in the McKinsey Report that “the quality of an education system cannot exceed the quality of its teachers” is well known (Barber and Mourshed 2007, 13).⁴

The convergence of the fault lines described earlier creates a series of “fault line problems.” These problems, created by the growing rift between the school and society, are different from regular problems in education for two main reasons: the first is that understanding and confronting them requires a broader perspective that transcends the field of education. A discussion that remains within the bounds of education will not suffice; a more extensive look at the totality of social phenomena is required. Second, the fault lines create a structural mismatch between the elements on either side that require significant movement to mend them. First-order changes are not enough; second-order changes are necessary.

Below are four problems affecting the work of teachers, each one the result of the interactions of the educational fault lines described earlier:

³ See Almog and Almog (2013) and a number of responses to their article by young people, which appear in the subsequent issue of *Hed Hahinukh*.

⁴ Restructuring Educational Human Resource Management in the Israeli Education System.”

1. **Overload** – Each of the fault lines contributes its part to this, which is perhaps the most serious problem of all. In addition to the traditional job of teaching—which is a difficult task in and of itself—today’s teachers must act *in loco parentis* to give emotional support and set the boundaries that are often not established by the parents, teach pupils who have become accustomed to a different educational approach at home, teach digital-age children with the antiquated tools of chalk and blackboard, prepare students who have no interest in abstract ideas for matriculation exams, and meet the demands for accountability that are frequently made of them (Ariav 2013).⁵
2. **Low effectiveness** – Teachers’ educational influence is decreasing even as the demands made of them are increasing. This problem is the combined effect of two processes: (1) during the past several decades, in-school education has gained rivals of unprecedented power. Children today spend more time in front of screens—televisions, computers, and smartphones—than in front of teachers in school; moreover, the latter are stimulating pastimes as opposed to the alienating “distraction” of school (Carr 2011, Turkle 2011); (2) today’s teachers perform in an environment where they are subject to many and contradictory educational demands, which stem from contradictory educational ideologies operating at the system, school, and teacher levels (Back, in press).
3. **Irrelevance** – The fields that are truly essential for teachers to address today are ones that teachers are unable to tackle in schools in their current format. For example, instead of encouraging teachers to discuss questions of identity and values with which students are struggling, they are told to prepare them for tests using pedagogical methods and materials that are far from the students’ world of association and are also distant from the teachers’ own educational aspirations. As a result, all those involved in in-school education—pupils, teachers, and parents—have a growing sense that the school as it currently exists is losing its relevance and educational importance.⁶
4. **The rift between the State and teachers** – This last problem is a result of the previous three, but also stands on its own. The combination of overload, lack of effectiveness, and sense of irrelevance, exacerbated by the lack of support from the education system and the general public—leads many teachers to feel alienated, frustrated, and distrustful. Adding to these the attitude that teachers are an “economic resource” to be exploited for success in the global economy, further exacerbates their sense of alienation and diminishes their social standing (Back, in press). We are on the brink of a mutual crisis of faith between teachers and the State.

⁵ A notable and tangible expression of this situation can be seen in an article by a teacher, Gili David, in a booklet entitled *Dear Education Minister: 30 Suggestions for a Beginning Education Minister*, which was published in 2009 by *Hed Hahinukh*. The title of her contribution, “Teachers in Israel need fresh air” (p. 18) speaks for itself.

⁶ See a selection of remarks by teachers at a conference at the Van Leer Jerusalem Institute in 2007 that took place during a strike of secondary-school teachers (Karmon, 2009).

In this situation even initiatives designed to improve conditions for teachers are met by them with skepticism.

From Analysis to Action

The situation described above leads to three main conclusions:

1. We must recognize that the current school paradigm has outlived its usefulness. Consequently, Israel needs to set in motion a process to change the educational paradigm.
2. A change of this type requires the development of institutions, tools, and processes that enable effective and long-term strategic thinking and planning in the field of education.
3. Teacher policy must create the essential conditions that will make it possible to deal with these fault-line problems affecting teachers' work today and lay the foundations for the necessary paradigm changes.

We must keep in mind that substantial change in education can occur only as a result of an intelligent and dynamic combination of “top-down” and “bottom-up” changes. Attempts at change should be encouraged at the level of local authorities, schools, and teachers in the classroom. The Israeli education system is full of such initiatives for change, but today many are undertaken “subversively” and, therefore, do not receive the support and mentoring they desperately need. Moreover, many of these attempts at change are not studied and researched and have no impact beyond the specific context in which they are undertaken.⁷ At the same time, suitable institutions should be established to change the top-down patterns of action in the Education Ministry. Eliciting grassroots ideas is effective only to a certain point. A single school or a single local authority cannot amass the academic expertise, practical knowledge, ability to conceptualize, and budget necessary to bring about second-order change in education. To bring about change of this magnitude and order requires systematic collaboration between various entities, in-depth and ongoing research, and, above all, the integration of knowledge and experience from Israel and the rest of the world. Although the futility of educational changes that are dictated from the top down is now known, this is insufficient reason to reject initiatives for change that originate in the Ministry of Education or other central institutions. In fact, some of the most interesting attempts at change have been taken at the Ministry's initiative, employing incentives instead of coercion from on high.⁸ Therefore, the Ministry should encourage changes that originate in the field and, at the same time, establish the

⁷ The exception in this field is the Education Ministry's Department for Experimental Schools. We welcome its work and call for a massive expansion of such work.

⁸ For example, the 30 Localities Project, which was undertaken in the 1990s under the guidance of then-chair of the Pedagogical Secretariat, the late Prof. David Gordon, and the Pedagogical Horizon project, led by the past chair of the Pedagogical Secretariat, Prof. Anat Zohar.

institutions and organizations that will allow such changes to develop, expand, and take root over time. Some of our recommendations below will relate to this.

The past several decades have been characterized by numerous attempts to introduce educational reforms, both in Israel and abroad. Most of these attempts failed, for a variety of reasons (Cohen 1989, Cuban 1990, Eisner 1992, Tyack and Cuban 1995). Important lessons should certainly be learned from the extensive research on reforms, but we believe that the very concept at the root of the commonly accepted idea of “reform” is not suitable for the type of change recommended here. “Reform” is generally viewed as a transition from state A to state B within a given number of years. However, the situation described in the earlier sections of this document does not permit reform of this type. We do not yet have a clear description of state B; and even should such a description exist in the future, it should be as tentative and flexible as possible. At the same time, it is clear to us that during the years in which this change is in progress, there will also be significant social changes that will require amendment of the initial changes. Therefore, rather than suggest another “reform,” we propose creating the tools for crafting a culture of ongoing change that can be monitored on a routine and regular basis.

Recommendations for Action

Below are six recommendations of various types of action. Some of the recommendations focus on creating the tools needed for setting in motion and managing the strategic process of changing the educational paradigm; others suggest processes in the field of teacher policy that are essential for laying the foundations essential for that change. Some of the recommendations are more open and propose desirable lines of thought without deciding among them; others propose more concrete courses of action.

1. Establish a Center for Strategic Thinking in Education

We propose establishing a national center for strategic thinking in education, which will operate separately from the Education Ministry but will nonetheless maintain close ties to it. This past April, the Van Leer Jerusalem Institute held an international seminar for researchers and experts in strategic thinking from all over the world; its goal was to discuss strategic thinking in education and the nature of a center that would work in this field. Here are the main recommendations regarding the nature of such a center that came up during the seminar.

- The center should have a structure that enables fruitful interaction by professionals from the field and academic experts. Its main goal is to examine and suggest educational structures, methods, and practices from Israel and abroad and to share them with parties of interest.
- The center should create a basis for gathering information about the Israeli education system. There is a need to consolidate as broad a picture as possible regarding the education system over

time and independent of changes in the political regime. The database should include qualitative and quantitative information about students, teachers, parents, etc.

- The center should make use of external experts as mentors. It is important to bring in experts from Israel and abroad on various issues in order to create a deep and informed discussion of the meaning of the information.
- The center should find and create successful links between academic research and decision-makers. It should translate academic knowledge in a way that is accessible and available for decision-makers.
- The center should present its products to decision-makers and educators in the field and submit them for broad public discussion.
- A critical role of the center is to help the media understand the research findings and the conclusions that can be reached from them, so as to generate fairer and more trustworthy reporting about education.
- The center should create a system for the flow of information between various entities that deal with education. One way to create such a system is to bring representatives of various organizations together in order to discuss a variety of education issues.
- The center should train young researchers to specialize in education policy.

2. Establish a Strategic Planning Unit in the Education Ministry

It is important to make a clear distinction between strategic planning and strategic thinking: planning is an action taken by governments, whereas strategic thinking should be conducted in an environment that is as free as possible from immediate political and economic constraints. “External” thinking should support the “internal” strategic planning. The planning unit in the Education Ministry will mediate between the center for strategic thinking and decision-makers. Based on the thinking done outside the Ministry, it must propose courses of action that are realistic and feasible from a political and budgetary standpoint. At the same time, it should help provide the statistics and information that the strategic thinking institutions need.

The strategic thinking and planning institutions must make decisions on three basic issues related to teacher policy: pedagogy, organization, and content.

- a. **Pedagogy** – Because the heart of school pedagogy is the teacher’s presentation of information in the classroom, it is not surprising that a substantial portion of the teacher-training process addresses this facet of the job. But this aspect is currently surrounded by many questions that stem, first and foremost, from the possibilities offered by digital technology and the needs and skills necessary for finding employment in the knowledge economy. For example, the technique of flipped classes, in which information is presented outside the classroom by digital means (e.g., TED, Coursera, Khan Academy), after which the classroom session itself is used for processing the information with the teacher’s help, is quickly taking over higher education, and there are signs that it is on the way to taking over

a significant portion of teaching time in schools as well (Christensen, Horn, and Johnson 2010). How should a teacher-training program whose main pedagogical strategy is the flipped class look like? What skills are needed by a teacher whose main job is processing information presented by an external (digital) entity?

- b. **Organization** – The dominant organizational pattern in the school is that of a single teacher who has many roles (which are increasing in number); the teacher-training process is based on this assumption. The modern teacher is supposed to specialize in one or more fields of knowledge, in the didactic methods relevant for those subjects, in integrating pupils with special needs, in individual tutoring, in working with parents, in dealing with their pupils' emotional sides, and more. Any new need that arises from changes in the external environment is quickly translated into additional knowledge or skills that the teacher must acquire during the training process. This inflation of the teacher's role demands a rethinking of the premise that underlies this organizational pattern. Should there be a move to a different organizational pattern in which a school has a staff of "educators" of different types who work in tandem? If so, what types of educators are needed and how should each be trained?
- c. **Content** – What is the most important content that each teacher or educator needs to learn during training? Can we still get by with the "holy trinity" of teacher training: mastering the subject, the didactics and practical training for teaching that subject, and the basics of education? What is the place of the social processes described in the previous section? Should the core of teacher training include material related to globalization, sustainability, the impact of digital media, shaping identity in a digital environment, and so on? Moreover, if the main burden of presenting information is indeed passed along to "über-teachers" who employ digital media, what place in teacher training should be allotted to subject specialization? None of these questions has a clear answer as of yet, and we must give them serious and in-depth consideration.

3. Initiate a Short-term Process of Formulating a Future Educational Vision for the State of Israel

Actions that are visible and effective in the short-term are needed to set in motion the strategic change process proposed here. One of the main recommendations made at this year's international seminar at the Van Leer Institute was to create a process that would last no more than one year and aim at drafting a serious document of a future educational vision. This vision document will be a catalyst and starting point for the strategic thinking and planning processes in education. The idea is to gather a small group of Israeli and foreign education experts for an intensive discussion, lasting a few days, of Israel's future educational vision. The experts group will produce a short document that includes the main aspects of the proposed vision alongside the proposed decisions about each of them. This document will serve as a basis for discussion in

focus groups convened all over the country, conducted in both homogeneous and heterogeneous settings, and composed of educators from the field and the academy, prominent public figures and intellectuals, representatives of various sectors of Israeli society, parents, and pupils. The comments by the various focus groups will be collected and integrated into a broader vision document, which will be revised in light of these comments.

The first three recommendations propose action that should be taken as soon as possible. They are meant to create structures, tools, and an organizational culture that will make it easier to base educational decision-making on (1) a long-term strategic view, (2) an intelligent and broad theoretical and ethical dialogue, and (3) credible scientific evidence rather than short-term political considerations.

4. Create “Laboratory Units” within the Education System for Testing Proposed Changes

Education is by nature practical and is therefore extremely sensitive to the various contexts in which it takes place. In addition, as a practical subject, much of the knowledge it requires is not theoretical but hands-on, amassed only through reflective experience. Furthermore, when it comes to significant changes in education, there is no reason to initiate them horizontally before they have been duly tested on a more limited basis. Therefore, we recommend that the Education Ministry encourage and provide incentives for “educational units” on various levels of operation (meaning a local authority, network of schools, or individual school, or a specific classroom subject) to serve as living laboratories to test the changes, with professional, research, and budgetary support by the Ministry, if necessary. The findings gleaned from the “laboratory units” will serve as a database of essential information for implementing the changes on a wider level.

5. Establish an Entity to Integrate the Proposed Pedagogical Changes

Currently, the Education Ministry does not have the requisite means to introduce pedagogical change throughout the Israeli education system. In theory, the chief inspectors of the various subjects, who are subordinate to the chair of the Pedagogical Secretariat, are responsible for the materials taught in a subject and the way that subject is taught and tested. However, the chief inspectors are entrusted with implementing the instructional methods that currently exist and focus on methods of teaching in their field of instruction. By contrast, what is needed to introduce comprehensive pedagogical change is ground breaking thought about teaching and learning and a focus on generic pedagogy, namely the pedagogical aspects that are common to the various subjects. In the absence of a generic and comprehensive pedagogical outlook (tailored to each specific subject area), there is no way to bring about the changes discussed above.

Therefore, we propose establishing an entity to integrate the process of the pedagogical change chosen. This body could be an arm of the Pedagogical Secretariat and work together with the chief inspectors, an independent unit within the Education Ministry, or an adjunct unit

of the Education Ministry (like the National Center for Testing and Evaluation). We recommend that the Education Ministry examine the various options and work to establish such an entity as soon as possible.

We recommend that the integrating pedagogical entity be based on several main patterns of action:

- Learning from successful pedagogical approaches in Israeli schools. The system has chalked up a long list of successful pedagogical initiatives. Because, as noted, most of them have never been studied methodically, valuable practical knowledge about pedagogy is going to waste.
- Learning from successful pedagogical models abroad, including concrete models that have been implemented in the field as well as the theoretical literature.
- Creating mechanisms to support and mentor teachers in schools, and, in particular, developing and mentoring professional communities of teachers within a school or in several schools.
- Running training programs for pedagogical facilitators, with the goal of modifying the current form of pedagogy in the schools. These facilitators will be selected from among outstanding teachers, who will be offered a career advancement track.
- Extensive involvement by teachers and principals in thinking and planning.
- Creating mechanisms of evaluation (primarily formative) and feedback to examine the processes of pedagogical change and the manner in which they are implemented.

In addition, the integrated pedagogical entity must have three main characteristics:

1. **Continuity** – It takes time to implement pedagogical change (usually 3–5 years). Consequently, this body must have a robust ability to withstand the frequent political changes that characterize our education system.
2. **Professionalism** – It must be composed primarily of professionals in the field of education.
3. **Collaboration** – It should create novel mechanisms for including and integrating many public sectors in thinking, planning, and monitoring the implementation processes.

6. Make the Training and Professional Development of Teachers Transformative in Nature

Teacher training should be viewed as a tool for changing the education system. Namely, it should bring about a transformation—a thorough and permanent change—in future teachers' educational outlook and methods of action, thereby facilitating the transformation required by the education system as a whole. Such a demand runs counter to the natural tendency of a professional training program, whose role, in normal circumstances, is to prepare people to teach in the existing system. However, the fault lines described above require teacher-training institutes to operate with an internal tension that is difficult to bear but unavoidable. On the one

hand, they must teach their students to function appropriately in schools as they currently exist; on the other hand, they must train teachers (or at least some of them) to be agents of change. Teachers who are agents of change will arrive at their schools dedicated to changing them and trained to do so. This task is complex and sometimes frustrating, but it is possible so long as it is discussed openly as part of the training process and is continued during the teachers' development in the field. Therefore, transformative teacher training requires, first, an in-depth discussion of the basic questions that affect the state of teachers today, especially teachers' appropriate professional identity in the knowledge age, and second, to change the processes of teaching and learning used in the training program itself so that trainees experience first-hand alternative forms of pedagogy they will need to apply in the future.

References

- Alexander, A. 2010. The Perils of Policy: Success, Amnesia and Collateral Damage in Systemic Educational Reform, Miegunyah Distinguished Visiting Fellowship Program Public Lecture, 10 March 2010.
- Almog, O. and T. Almog. 2013. "On Graduates and Lies." *Hed Hahinukh* 87 (4) 60–63.
- Apeloig, N. and Y. Shalev-Vigiser. 2010. "The teacher's role at the start of the twenty-first century." Working Paper for Van Leer Education Conference 2010. Jerusalem: Van Leer Jerusalem Institute. Available at: http://www.vanleer.org.il/Data/UploadedFiles/ITEC_SitePages/23-sFileRedirEn.pdf.
- Appiah, K. A. 2008. Education for Global Citizenship, in: *Yearbook of the National Society for the Study of Education* 107 (1): 83–99.
- Ariav, T. 2013. *The Education of Teachers: Characteristics and Challenges*. Paper presented at the 6th International Conference on Teacher Education: Changing Reality through Education. The David Yellin Academic College of Education.
- Aviram, A. 2010. *Navigating through the Storm: Reinventing Education for Postmodern Democracies*. Boston: Sense. [Originally published as Aviram, R. (1999). *Lenavet base'ara: Hinukh b'demokratiya postmodernit*. Tel Aviv, Masada.]
- Back, S. (in press). *Teachers Identity: A Story of Crisis*.
- Barber, M. and M. Mourshed. 2007. *How the World's Best Performing School Systems Come out on Top*. Available at: http://mckinseyonsociety.com/downloads/reports/Education/Worlds_School_Systems_Final.pdf.
- Ben-Peretz, M. 2009. *Policy-Making in Education: A Holistic Approach in Response to Global Changes*. New York: Rowman.
- Karmon, A. 2009. "Teacher Training along Geological-pedagogical Fault Lines." *Hed Hahinukh* 84 (3): 54–56 [Hebrew].
- Karmon, A. 2011. "Education must Cultivate a Critical Global Awareness." *Hed Hahinukh* 85 (5): 28–31 [Hebrew].
- Karmon, A., L. Ettinger, T. Harel, and D. Dunetz. 2012. *Education to Broad Sustainability: A Plan for the Twenty-first Century School*. Policy paper presented to the Green Network and the Heschel Center. Available at: <http://tinyurl.com/np28vkb> [Hebrew].
- Carr, N. 2011. *The Shallows: What the Internet is Doing to Our Brains*. New York: W.W. Norton.
- Christensen, C., M. Horn, and C. Johnson. 2010. *Disrupting Class: How Disruptive Innovation will Change the Way the World Learns*. Expanded Edition, New York: McGraw-Hill.

- Cohen, D. K. 1989. "Teaching Practice: Plus que ça change . . ." In P. W. Jackson (ed.), *Contributing to Educational Change: Perspectives on Research and Practice*. Berkeley, CA: McCutchan, pp. 27–84.
- Cuban, L. 1990. "Reforming Again, Again, and Again." *Educational Researcher* 19 (1): 3–13, doi: 10.3102/0013189X019001003
- Eisner, E. 1992. "Educational Reform and the Ecology of Schooling." *Teachers College Record* 93 (4): 610–27.
- Fiske, E. 1991. *Smart Schools, Smart Kids: Why Do Some Schools Work?* New York: Simon & Schuster.
- Gellner, E. 1983. *Nations and Nationalism*. Ithaca: Cornell University Press.
- Green, A. 1990. *Education and State Formation*. New York: St. Martin's.
- Lemish, D. 2006 "Reexamining the Concept of Childhood." *Panim* 37:14–21.
- Mayseless, O. and M. Scharf. 2009. "Patterns of Parenting and School Functioning." *Hed Hahinukh* 83 (7): 50–54 [Hebrew].
- Nussbaum, Martha C. 1994. Patriotism and cosmopolitanism. *Boston Review* 19 (5): 3–16.
- Postman, N. 1982. *The Disappearance of Childhood*. New York: Delacorte.
- _____. 1995. *The End of Education: Redefining the Value of School*. New York: Knopf.
- Ravitch, D. 2010. *The Death and Life of the Great American School System: How Testing and Choice Are Undermining Education*. New York: Basic Books.
- Resnik, J. 2008. "The Challenges of Globalization." *Hed Hahinukh* 10:44–48 [Hebrew].
- Resnik, J. (forthcoming). "Globalization and Education: The Structuration of a Managerial Discourse in Israel." *Alpayim* 34:82–110 [Hebrew].
- Sahlberg, P. 2011. *Finnish Lessons: What the World can Learn from Educational Change in Finland*. New York: Teachers College Press.
- Salomon, G. 2000. *Technology and Education in the Information Age*. Tel Aviv: Zmora Bitan [Hebrew].
- Turkle, S. 2011. *Alone Together*. New York: Basic Books.
- Tyack, D. & L. Cuban. 1995. *Tinkering Toward Utopia*. Cambridge, MA: Harvard University Press.
- Worldwatch Institute. 2013. "Vital Signs: The Trends that Are Shaping Our Future," Vol. 20.

Restructuring Educational Human Resource Management in the Israeli Education System

Dr. Varda Shiffer

Executive Summary

This position paper addresses two problems: The first is the ongoing failure by the Education Ministry, as the principal employer of teachers in the education system (and particularly in elementary education, to regulate the distribution of teachers in a way that ensures a comparable quality of teachers in all parts of the country and in all educational subsystems. This failure is particularly evident with regard to the training of teachers in the core subjects, including the sciences, English, and mathematics and the assignment of teachers of these subjects to schools in the periphery and in localities categorized among the lowest socioeconomic clusters. The second is the continuing distortion in the distribution of powers, roles, and responsibilities between the central government and the local government. This distribution does not take into account the transformations that have occurred in local governments since the enactment of the Law for the Direct Election of Mayors; it also fails to take into consideration the responsibilities the local authorities have assumed in order to provide a range of services to their residents.

It is suggested that these two problems hinder the development of a teacher workforce that could significantly improve teaching and learning in the entire education system. These shortcomings impede the development of a supportive team of teachers who are committed to all of the pupils in the community, a work environment that encourages creativity, partnership, and trust—which are prerequisites for enhancing the teaching and learning processes.

The paper outlines a collaborative and gradual process of deliberations aimed at clarifying and defining the roles, powers, and responsibilities associated with the management of the teaching workforce and redistributing these roles, powers, and responsibilities between the central government (primarily the Ministry of Education) and the local authorities in a well-thought-out and mutually acceptable fashion. The proposed outline for discussion will generate the readiness and commitment necessary for the success of the process, and will boost the trust among all stakeholders in the field of education. In the medium and long term, such a redistribution process, in which all stakeholders in the field of education will take part, will help resolve the undesirable phenomena described, and may consequently weaken the strong and longstanding correlation between socioeconomic status and educational achievement, to which these phenomena significantly contribute.

Other positive outcomes of the process proposed here would include an enhancement of the status of the Ministry of Education as the agent responsible for providing a genuine opportunity for all children to fully exploit their abilities and become active members of society, regardless of the

socioeconomic status of their family or locality. This would require the Ministry of Education to outline a comprehensive policy for teachers that includes, inter alia, a policy of regulation and incentives to ensure appropriate compensation for weak local authorities. The local authorities—after engaging in study, improvement, and empowerment—would assume responsibility and authority for creating a work environment that is safe, open, and encourages creativity and trust for teachers in the community's education system, and that improves the teaching and learning processes, and enhances the teacher's standing.

Introduction

Technological advances, population migration, the presence of minority groups that are not necessarily interested in integrating into the majority culture, the demands of the global economy, open and readily accessible modes of communications, and more—all of these exert a major influence on the political and social systems of every country, including of course, their education systems. Reports by the OECD (2005) and research on the education systems in its member states highlight the profound changes they have undergone in recent decades and the vagueness and uncertainty of the work environments that serve as the basis for defining policy and making decisions that are relevant for the well-being of future generations. In most countries, the importance of schools as the main entity in which education activity takes place has increased, and there have been changes in the work methods of education ministries, in the division of powers, and principles of regulation.

The possible approaches to the governance of education systems and schools are influenced by changes experienced by the public sector in all democracies since the early 1980s, including the shift from bureaucratic administration to what is called “New Public Management” (NPM), with the emphasis that the latter places on privatization, outsourcing, performance evaluation, and outcomes.

Israel is one of the few democracies that has not undertaken a planned and comprehensive reform of its civil service (until today, when discussions are finally taking place about the reform of human resources management in the civil service), even though, like the civil service in other countries, it too has been hit by repeated cuts in budgets and personnel. In Israel, services have been privatized or outsourced, due to budgetary constraints (and sometimes to intentional “drying up”) rather than as the result of a comprehensive and coherent policy.

The education system in Israel faces unique challenges: in tandem with the huge cuts in social-service budgets during the 1980s, the middle of that decade saw the start of waves of immigration by two groups with unique characteristics—new immigrants from the former Soviet Union and from Ethiopia—who required a specific organizing effort by the educational and welfare services. The population—both long-time residents and new immigrants—expected that the younger generation would receive an education that would enable its members to participate in the global economy and enjoy an improved standard of living, of the sort blazoned in the—also global—media. The expectations held of schools in Israel and in most democracies swelled. In the 1990s it seemed that the principles of NPM would provide the answer and help education systems meet the new challenges. Standards, local and international tests, differential compensation for successful teachers, and increasing the autonomy of the school as the unit in which teaching and learning take place are several examples of the application of the principles of NPM to education.

By the early years of the present century, questions were being asked about the ability of the NPM reforms to cope with the challenges, especially those facing education systems. According to

Mulford (2003), most education systems in the OECD countries switched from classic (Weberian) bureaucratic regimes to regimes that upheld values borrowed from the business world—meaning, for education, NPM methods, which include, as noted, decentralization of power to the schools but also centralization of curricula and evaluation, encouragement of competition among schools, mobilization of resources from the public and NGOs, and greater supervision over the subjects of instruction. But this did not lead to the anticipated results. Mulford (2003) notes further that in some OECD countries (and Israel is a classic example) there is a hodgepodge of models, which frequently generates internal contradictions and incoherence between the elements of bureaucratic centralization left over from the old regime and the demand that the schools be accountable and satisfy performance metrics. According to the findings of Dunleavy and colleagues (Dunleavy et al., 2005), supported by other researchers as well, NPM has increased the complexity of the systems (a single bureaucratic organization that controls all elements of the system has been replaced by a proliferation of entities, a lack of clarity about authority and responsibility, and so on) but has made absolutely no headway toward finding solutions for social problems. Dunleavy, like Mulford (2003) and De Vries (2010), looked for a way to reconnect the divided social sectors and crystallize agreements, and to do so as part of a redefinition of the role of the state that does not include a return to paralyzing centralization.

Any proposal to improve some component of the public services, and in particular a complex and sensitive system such as education and the management of the teacher workforce, must take account of these developments and the ideas associated with them.

Management of the Teacher Workforce in Israel: The Current Situation

Teachers in Israel are employed by three main entities (or types of entities).

1. Most teachers are employed directly by the Education Ministry, through its districts. The Ministry's Division for Senior Personnel in Education is the employer of record of teachers in the "official" educational streams (meaning schools that are "owned" by the state or local authorities). This responsibility includes assigning and transferring teachers, hiring and firing them, as well as handling their retirement, social benefits, and promotion.
2. The teaching personnel of senior high schools and some junior high schools are employed by the school's "proprietor"—educational networks, NPOs, and sometimes corporations. A few secondary schools (both junior and senior high schools) are owned by local authorities.
3. Many teachers (their number is not known) are employed through intermediate agencies, some of which are NPOs that work in the schools (State Comptroller 2012a), while others are organizations that have no direct link to the school's activities and serve exclusively as employment contractors. Recently, the issue of teachers employed by outside agencies has been

a frequent topic of public discussion, with the emphasis on the abusive modes of employment and the fact that this method of employment creates different categories of teachers within the same school.⁹

A chapter of the State Comptroller's Report 63c for 2012 is devoted to aspects of personnel management in the education system (State Comptroller 2013), with the focus on teachers who are employed directly by the Education Ministry, mainly in elementary schools. According to the report, in 2011/2012 there were 107,900 teachers in the official education systems, filling 86,200 full-time positions. Roughly one-third of them taught in junior high schools. That same year, there were also 53,000 teachers in senior high schools, some of them employed by the local authorities with supervision by the Education Ministry. The report avoids specifying how many of these teachers were employed by the Ministry and makes do with the statement that the Ministry employs more than 100,000 teachers. Apparently the precise number of those directly employed by the Ministry at any given time is not known. The findings of the State Comptroller's report would suffice to tell us that the Education Ministry does not carry out the complex task of managing the teaching workforce appropriately. Here we will briefly survey some of the findings:

- The Ministry's databases of teaching personnel do not constitute an adequate management infrastructure or basis for forecasting future needs in light of changes in the supply.
- The Ministry has no tools to plan the complex apparatus of teaching personnel and has not allocated any budgets or full-time personnel for this task.
- Thousands of teachers in senior high schools are teaching subjects for which they were not trained. This includes 50% of those teaching civics and a similar proportion of those teaching Hebrew literature. In history, geography, and Hebrew language, the percentage of teachers with no training in these subjects approaches 40%.
- The Ministry has no reliable information about subjects of instruction in which teachers specialized before they were hired and does not cross-check the information at its disposal against that held by the teacher's colleges. This makes the assignment of teachers to the different districts and placement according to needs impossible.
- With regard to methods for identifying candidates for teaching positions, examining them, screening them, and finding places for them, the State Comptroller writes that these functions "are insufficiently structured and are not conducted in accordance with detailed guidelines that would guarantee an orderly and efficient process" (ibid., p. 994). A

⁹ On this topic, see also: Knesset Research and Information Center, "Employment of Teachers by Outside Entities" (Vurgan 2011); Van Leer Jerusalem Institute, Yaacov Hazan Center for Social Justice and Democracy, "On the Seam between Private and Public: Privatization and Nationalization in Israel—Annual Report" (Amir Paz-Fuchs and Sarit Bensimhon-Peleg 2012); "Director General's Report on the Employment of Teaching Personnel through Personnel Firms in the Education System" (Ministry of Education 2012).

conspicuous example of the deficiencies in these areas is the fact that many teachers are informed about their placements only a few days before the start of the school year.

Post-Primary Education: Human Resource Management in the Thicket of Ownerships

Post-primary education refers to grades 7–12 (divided into junior high school, grades 7–9, and senior high school, grades 10–12). Both the State Comptroller's report referenced above (63c, 2013) and a study by the Knesset Research and Information Center on "Junior High Schools and their Place in the Structure of Post-Primary Education in the Education System" (Vurgan 2010) note the diversity and lack of uniformity between the junior and senior divisions and within each division from school to school. Most junior high schools—462 (Vurgan 2010)—are attached to senior high schools to compose six-year schools. The Education Ministry prefers this arrangement, because it is compatible with the recommendations of the report of the Commission to Study Reform in the Education System (Dovrat Commission 2005) that it is preferable for children to experience only one transfer between schools during their scholastic career. Nevertheless there were still 174 independent junior high schools in 2010 (Vurgan 2010).

Most junior high schools are state-owned, like the elementary schools,¹⁰ whereas senior high schools have various proprietors, including local authorities, school networks, and NPOs. Teachers, too, are affiliated with different organizations: junior high-school teachers in the lower classes are members of the Histadrut Teachers' Union, whereas those in post-primary education belong to the Secondary School Teachers' Association. In junior high schools, and especially in six-year post-primary schools, faculty colleagues may have different terms of employment and status. In recent years, with the implementation of the Ofeq Hadash reform, and even more so the start of the introduction of the Oz Litmura reform (promoted by the Secondary School Teachers' Association), the friction and disagreements between the different groups of teachers have risen to the surface and are threatening to impede the implementation of Oz Litmura in the schools in question.

Another factor that is particularly prominent in weaker local authorities is the transfer of administrative authority and sometimes even part-ownership of post-primary schools to private entities—mainly networks that specialize in school administration. Officials of those local authorities say that they lack the knowledge and experience required for effective administration of schools and consequently prefer to transfer the post-primary system in their towns to specialist organizations. Interviews with officials indicated that the Education Ministry encourages them to

¹⁰ The reason for this is that the two lower grades of junior high school, seventh and eighth, were attached to elementary schools before the Rimait Committee reform that modified the structure of the school system from eight years of primary education and four years of post-primary education to a six-year elementary school, three-year junior high school, and three-year senior high school.

follow this path (see also HCJ 7947/05, *Sederot Parents' Committee v. the Sederot Municipality and the Ministry of Education*). These networks include the veteran ORT and Amal, Amit, the relatively new Darca Schools founded by the Rashi Foundation, Atid and Tomashin (both of them evidently commercial enterprises), and Sakhnin College (there may be others as well).

We are unaware of any longitudinal studies of whether scholastic achievement rose in localities where outside networks and entities took over administration of the schools. However, a focused study of several local authorities¹¹ found a school that was transferred from one network to another after having been on the verge of collapse, and the transfer of all the post-primary schools in a locality to a network with a particular worldview, thus affecting the 'neutrality' of the public education.

These phenomena indicate the absence of a clear overarching policy and principles of regulation that would define the obligations of the authorities (whether central or local) toward their residents, guarantee their implementation, and support public and open education that gives expression to the full spectrum of acceptable worldviews, as may be expected of public education. The role of the local authority with regard to outside owners—whether school networks or affiliation with the various species of recognized but unofficial education—is insufficiently clear. As a consequence, local authorities have a limited ability to contribute to an improvement in teaching and learning processes.

As stated above, the lion's share of teachers are employed by the Education Ministry and school owners. An increasing number, however, are employed by intermediaries—NPOs and organizations (such as local foundations; NPO's and For Profit corporations)—that are not directly linked to the schools. As indicated by the reports cited above (State Comptroller 2012b; Ministry of Education 2012), as well as the reports of the Hazan Center for Social Justice and Democracy at the Van Leer Institute (Paz-Fuchs and Bensimhon-Peleg 2012), the employment terms of these teachers—referred to as “contract teachers” and frequently defined as coaches or counselors rather than as teachers—are intolerable. Frequently they are paid by the hour, or for only ten months a year, and denied social benefits. The Education Ministry has no information about their qualifications (State Comptroller 2012b); status differences emerge among teachers in the same schools (Education Ministry 2012). In the wake of the recommendations of the Commission for Socioeconomic Change (the Trajtenberg Commission) and the decision to lengthen the school day for preschoolers and lower-grade elementary school pupils, in July 2012 the Education Ministry invited bids (Ministry of Education, 17/6.2011) for operation of all components of the extra hours of children's presence in preschools and schools. This means that the Education Ministry itself is encouraging the employment of an additional 15,000 workers through a contractor, in inappropriate working conditions.

¹¹ Including Tira, Yeroham, and Sderot.

The impression is that the Education Ministry (like the Israeli civil service in general) prefers to have teachers without tenure and social benefits, who can be transferred freely and dismissed at will, and to whom the employer has no commitment. In these conditions, can teachers function as they should? Can they be committed to their pupils, invest in them, and engage in their own professional development?

How Are Teachers Employed in the OECD Countries?

In most OECD countries, teachers are employed by local authorities (or regional education authorities) or directly by the schools. In the Netherlands, the most decentralized country with regard to personnel management, the school (in practice the school principal) is responsible for hiring, training, managing, and dismissing faculty members. England has a mixed system: Teachers in State schools are employed by the local (or sometimes regional) authorities, while those in private schools (independent, or academies with the status of independent schools) employ their teachers directly (Royal Statistical Society 2012). The greatest centralization is found in Germany and France. In France, the State employs teachers, while in Germany it is the individual federal states (the *Länder*), rather than the national government, that does so (OECD 2005). In addition, in all OECD countries:

- Teachers are unionized and have an impressive ability to negotiate their salaries.
- The salary terms at all levels of instruction are fixed and obligate all public schools. In many cases, private schools adopt the same terms (although some do not). Private schools may offer additional compensation in forms other than salary.
- The salaries of teachers in public systems vary from the mean per capita national product to twice that, and tend to be higher in poorer countries.
- The scope of the position (an average of 190 working days a year) and of paid professional development days (in-service programs)—an average of five days a year—is also fixed in collective agreements and apply to all teachers in the public systems.
- The employer is responsible for the hiring and firing of teachers, career development, and retaining good teachers.
- In most countries, pensions are defined in collective agreements.
- Most countries have centralized their teacher evaluation system by means of tests. Based on the findings of the OECD, however, peer evaluation and the creation of teacher communities (by their employers) have a greater impact on the quality of instruction than outside evaluations do.
- The phenomenon of the employment of teachers by entities other than public agencies and school proprietors is not mentioned in the reports or relevant literature. The proprietors of educational institutions may be NPOs, but there is no phenomenon of the use of intermediaries exclusively for the purpose of employing teachers.

The Gulf between the Legal Status and the Real Situation in which the Local Authorities Operate

The local authorities in Israel operate in a vague environment, one that is full of internal contradictions and sometimes even hostile, particularly with regard to the attitude of the central government. From the administrative and structural perspective, local authorities, whose heads have been directly elected since 1978 (in addition to elections for their councils), are government agencies in every respect, an intermediate level between citizens and the central government in the democratic structure of governance in Israel, which faithfully represents its residents. However, the change in how council heads are elected was not accompanied by a corresponding modification of the legislation that defines the functions of local authorities; in practice, there is no agreed upon definition of the “basket of services” that local authorities are expected to provide to their residents; nor is there a clear (or indeed any) policy as to the division of powers between the central government and local governments. An attempt to enact a new Municipalities Law in 2007 was unsuccessful. The local authorities’ role in various domains is defined only in part and these definitions are scattered in a host of different laws and regulations. With regard to education, the most important text, which could be the basis for the changes proposed in the present document, is §7(b) of the Compulsory Education Law (5709-1949), which reads as follows:

The existence of official education institutions to provide free compulsory education under this law to children and teenagers who live within the jurisdiction of a particular local educational authority will be the joint responsibility of the State and of that local education authority. The Minister, in consultation with the Minister of the Interior and with the Knesset Education and Culture Committee, will stipulate, in an order published in the Official Gazette, for each school year and for each local educational authority, the relative participation of the State and of the local education system in supporting the official education institutions in which compulsory education is provided to the children and teenagers who live within the jurisdiction of that local educational authority.

A later section of the law gives the Education Ministry the power to neutralize and curtail this “partnership” and, for example, to compel a local authority to establish recognized but unofficial schools (§10).

The same law (Compulsory Education Law 5708-1949) stipulates that schools maintained by the local authorities, whether by the authorities themselves or in partnership with the Education Ministry, are “official” schools. That is, with regard to school ownership, the status of the local authorities is the same as that of the Education Ministry. Under the same law, the local authority is required to register all children who attend schools within its jurisdiction; but if the authority fails to

do so, or does not do so properly, the Education Ministry is entitled to transfer this power to some other body.

The State Education Law 5713-1953, the second constitutive act of the education system in Israel, deals with the goals of education, with curricula, with the registration of recognized but unofficial schools and their courses of instruction, with experimental programs, and with supplementary programs and the status of parents in these contexts. This key law includes two references to local authorities—once with regard to the registration requirement and schools' obligation to report pupils' enrollment to the local authority (§22), and again as those whom the minister can compel to merge schools (§10(a) and (b)).

Despite this antiquated and largely ossified legislative underpinning, there have been significant and substantial changes related to local authorities since the early 1990s. On the one hand, State grants to local authorities, which make it possible for the authorities to provide basic services to their residents, have been cut sharply. On the other hand, with the start of the mass wave of immigration from the former Soviet Union (1989), local authorities took upon themselves the implementation and execution of the absorption process—assigning immigrant pupils to schools, offering welfare services and occupational counseling, and providing housing.

During that same period, and in the wake of vigorous activity by the Union of Local Authorities, education department directors were mandated for local authorities (incidentally requiring the establishment of education departments) and required to have advanced degrees and experience in education (Local Authorities Law [Education Department Director] 5761-2001). For the past two decades, then, the local authorities have been developing an infrastructure of abilities and resources to provide diverse educational services.

The local authorities' enlistment in the key national task of absorbing a million immigrants, even if done without choice, encouraged some localities (those which enjoyed a new burst of construction and economic development with a concomitant increased capacity to raise revenues locally) to move ahead, but accelerated the decline of others. Since the 1990s, the differences and disparities between local authorities have been increasing. Local authorities that enjoyed a surge of development and the consequent revenue stream have largely been freed of their dependence on the central government; but others, especially in the periphery, must cope with broad cuts in their budgets that impair their ability to provide basic services, exacerbated by failed leadership and corruption (Ben Elia 2007).

The term "local authorities" refers to cities and rural regional councils with sparse populations, as well as to local authorities with hundreds of thousands of residents. As noted, some local authorities enjoy large revenues from local commercial enterprises and do not receive balancing grants from the State (these are organized in the Forum of Fifteen); they provide their citizens with a fairly high level of services. By contrast, there are local authorities that provide only those services funded by the State, and those on a low level. There is the center and there is the periphery, and some places have been deprived of the right to elected officials and are run by appointed councils.

Many local authorities have had their powers trimmed and have been subjected to a comptroller, auditor, or some other oversight functionary assigned by the central government. The diversity and differences are so great that it is doubtful whether one could research, write, or recommend a policy that would be relevant to all local authorities in Israel as a monolithic unit.

Attempts to Regulate the Relations between the Central Government and Local Governments

At least five different committees have been established to study the relationship between the central government and local governments. Some of them referred directly to the education system:

- In 1980, the Sanbar Commission recommended transferring the bulk of educational activity to the local authorities.
- In 1992, the Harmelech Commission determined that the central government should set policy and supervise, while local government should implement the policy.
- In 1993, the Suari Commission recommended the encouragement of privatization and reduced involvement of the central government, while permitting greater freedom of action to various entities, including local governments.
- In 1993, the Volansky Commission focused specifically on education and recommended the establishment of regional education corporations and the pooling of educational resources.
- In 2004, the Dovrat Commission focused specifically on education and recommended that the entire education system be organized into three levels—the Education Ministry, regional educational administrations, and the schools themselves.

In addition to these commissions, many research and policy papers have been written (including that by Ronit Tirosh and Victor Lavy for the 2003 Caesarea Conference, which mentioned many of the issues and problems raised in the present document as well). Most of the committees and policy papers recommend some form of decentralization of powers to local authorities or to regional authorities.

In 2012, a largely voluntary process began for the consolidation of local authorities into clusters. These clusters file papers of incorporation and decide what domains they want to address. At the time of writing this paper, there are six such clusters, which are supported and encouraged by the Interior Ministry. The creation of such joint ventures provides the opportunity of learning to cooperate, share, and relinquish the preference for exclusivity and separation.

In light of these efforts, we may well wonder whether the present document can say anything new and what added value it can contribute. Unlike most of the commission reports and position papers, this document does not deal with decentralization, but with a process the aim of which is to realize a new division of powers and responsibilities between levels of government, while bolstering

the status, powers, and ability of each authority to set objectives and implement the tasks it takes upon itself. It should be added that the present document focuses on one specific though clearly important corollary of teacher and pedagogic policy—not a sweeping reform, but a gradual intersection with processes that are already under way.

A Description of the Undesirable Trends: A Definition of Problems

The research and legislative infrastructure reviewed above highlights a number of undesirable phenomena that can be classified under two headings and in two different domains. The first is the educational human resource management apparatus that operates with no overall policy framework and embodies essential contradictions. It is also marked by a lack of coherence among its goals, which include improving teaching and learning processes, enhancing teachers' professional abilities, and empowering teachers, on the one hand, and its operating methods, which include flawed regulation and placement of teachers, defective oversight of their hiring (Blass 2010, Donitsa-Schmidt and Zuzovsky 2012), and the increasing transfer of the employment of educational personnel (teachers, preschool teachers, counselors, and others) to intermediate entities with no direct link to the schools where those teachers work. All of these weaken schools and teachers and reduce their commitment to their pupils.

The second phenomenon is linked to the absence of a clear policy on the role of local authorities in the education system in general, and in the management of educational human resources in particular. Consequently, when it comes to the local authorities, everyone does as he or she pleases. This phenomenon distorts the relationship between the situation in the field and the statutory situation and leads to redundancy and waste of resources that are in short supply. The absence of a clear division of responsibility between the Education Ministry and the local authorities is one of the main causes of the large disparities in per pupil investment between strong and weak localities.

Taken together, these two phenomena ensure the impressive and worrisome stability of the correlation between socioeconomic class and educational achievement, a link that the State, despite its investments, has not been able to weaken. All the investments by the State, by strong local authorities, and by nonprofit organizations have fallen wide of the mark, which is the need to reorganize the management of the educational human resources, with a more effective utilization of capacities and resources, and a coherent structure that creates a strong foundation for the desired improvement in the quality of the entire education system.

Definition of the Problem

The problem is *the absence of a clear policy concerning the division of responsibilities between the Education Ministry and the local authorities in the area of educational human resource management*. This lack of policy generates uncertainty and confusion with regard to power and authority in areas related to the management of educational personnel, the employment of educational workers via personnel companies, and deficient supervision. The lack of a clear policy also reflects the failure of the stake holders to reach agreements. The result is obvious: *an inability to create and maintain a supportive work environment, one that builds teachers' trust and develops their professionalism and their commitment to their pupils*.

This definition locates the problem in the domain of policymaking. The process of reaching agreements is essential for policy formulation. The process proposed to “solve” the problem incorporates a shift to new modes of operation, by both the Ministry and local authorities.

Recommendations

The crux of the proposal below is a *process* the goal of which is to arrive at a clear division, accepted by all stake holders, regarding the powers and responsibilities related to the management of educational human resources. In addition, the process should encourage learning, foster the development of abilities, and produce a new understanding of the function of each level of government in the complex field of management of educational human resources.

An effective division of responsibilities that takes into account the various government powers, and the responsibilities of each governmental agency vis-à-vis its citizens will lead to the creation of a cohesive local team of teachers (without regard for who owns the schools) that feels a commitment to all pupils (including those attending nearby or other schools), who work in concert to advance the professional capacity of all those involved in the work of education, create a system of trust, and cooperate to enhance teaching and learning in the locality.

Proposed Process

1. The Education Ministry and the Union of Local Authorities, together with the teachers' unions, the Interior Ministry, and the Finance Ministry (hereinafter “the inner team”), will decide and declare that the *restructuring of educational human resource management and a rational division of the related responsibilities between the Education Ministry and the local authorities is a key objective for the Ministry (or the government) and will be achieved within a decade*.

They will also declare that the restructuring process will take place with the full and perceptive participation of the local authorities and other stake holders.

2. The Education Ministry, the Union of Local Authorities, and the teachers' unions will decide which organizations will take part in the policymaking process (a total of 15 to 20, hereinafter the "expanded team") and will appoint a senior personality to lead the process. During this stage, the inner team (the Education Ministry, Union of Local Authorities, and teachers' unions) will suggest four or five local authorities as the sites of a pilot of the policymaking process and its implementation; the team leader will negotiate with the local authorities to obtain their consent.
3. The expanded team will meet to clarify the goals, set the rules of procedure for the deliberations (allotted speaking time, required attendance, and so on), define the rules for making decisions (e.g., majority or consensus), decide which documents will accompany its draft proposals, and set rules for reports by the process leader and his or her superiors (including who receives the reports in each ministry). *An important function of the members of the expanded team is to guarantee that every proposal, in every area of educational human resource management, is compatible with and satisfies the requirements of good governance, as detailed below.*
4. The expanded team's first task will be to analyze and describe the various elements of educational human resource management and to propose options for a division of the attendant responsibilities between the central government and local authorities (most countries already have agreements and customs in some areas, such as the assignment to the central government of teacher licensing and definition of salary grades). The three proposals with the greatest support will be forwarded for study, comments, and remarks by a broader group of interested parties and perhaps the general public via the Internet.
5. Drawing on this feedback, one proposal acceptable to all members of the team will be formulated and forwarded to the next stage of the process.
6. In the next stage, the team will split up into smaller groups (three to five, corresponding to the number of local authorities in the pilot). Each of these smaller teams will then co-opt representatives of the local authorities (the mayor, head of the education department, legal advisor) in the pilot. The smaller teams will investigate and clarify which of the functions recommended for conveyance to the local authority they are in fact prepared to take on, how they believe it feasible to implement these tasks, what assistance and support they will require, how fast they can move ahead, what learning processes they must go through, and so on. The members of the expanded team who are part of these smaller groups will play an important role in transmitting the culture of debate and imposing the rules and criteria that have been agreed upon.

7. The outcome of this process and the insights reached by the members of the smaller teams will be forwarded to the expanded team. It will use them to outline the policymaking process agreed upon (or perhaps two or three different processes), which the selected local authorities will begin to implement. The expectation is that these seven stages, leading to the crystallization of a policy and its mode of implementation, will take about two years. The implementation process will be accompanied both by the expanded team and by such professional consultants as may be required.
8. During the implementation process, negotiations to expand the pilot will begin with other local authorities.

The process¹² will leave it to the participants to decide how to divide up the powers and responsibilities and assumes that the agreements and the learning and negotiations process will ensure successful implementation. Nevertheless, taking into account the situation in Israel and the experience of most of the OECD countries, the process should produce the following:

- The State will formulate a clear policy of education, which guarantees all children with a genuine opportunity to realize the potential of their talents and skills. This means outlining ways for a better management of educational resources, including policies to provide incentives and compensation to teachers in the periphery.
- There will be a clear and coherent definition of the roles of the State on the one hand and of the local authorities (or cluster of authorities) on the other hand with regard to educational human resource management. Solutions will be found for the duplications and waste in the system.
- A clear policy will be enunciated about the conditions for teachers' initial intake, perhaps including the creation of a countrywide database of certified teachers (including graduates of preparatory programs).
- Negotiations will take place with the participation of the Finance Ministry and the teachers' unions about salary frameworks, stages of professional advancement, and more flexible terms of hiring and dismissal, taking performance evaluations into account as well. The Ministry of Education will guarantee that the proprietors of schools comply with the agreements reached.
- Teachers will be employed exclusively by government agencies or by school proprietors; the employment of teaching staff through personnel companies will be banned.
- The Education Ministry will provide local authorities with professional and budgetary support so that they can fulfill their responsibilities.

¹² The process proposed here was influenced by one on the same topic carried out in Great Britain in 2011/2012, under the title, "Action Research into the Evolving Role of the Local Authority in Education" (Parish, Baxter, and Sandals 2012), with the support of the Local Government Association in Great Britain.

- The local authorities will develop a professional capability to manage the recruitment and placement of teachers within their geographic jurisdiction, as well as salary management; the idea is that, within a decade, the local authorities (or clusters) will become the employers of teachers in the public (official) education.
- The local authorities will create a community of schools and teachers within their jurisdictions as well as a system of professional development correlated with needs (of schools, the locality, and individuals), based on a locality-wide perspective.
- The local authorities, together with the Education Ministry and teachers' unions will devise multiple career tracks with a locality-wide perspective that includes cooperation among schools.
- The local authorities will be partners in operating the measurement and evaluation scheme for the schools and teachers within their jurisdiction, in accordance with their responsibility for the teachers' career tracks (and, in the future, hiring and dismissal as well).
- A clear policy will be formulated as to the respective roles of the Education Ministry and the local authorities with regard to "recognized but unofficial" schools and those affiliated with networks, which are located within a local authority's jurisdiction.

Main Principles of the Policy Definition Processes

The principles suggested below are compatible with the good governance recommendations of the European Union (Commission of the European Communities 2001), the goal of which is to open up policymaking processes and involve more individuals and organizations in formulating and implementing EU policy. This goal is valid for Israel as well; its principles are applicable to a process that requires broad consensus and cooperation between government agencies and civil-society organizations:

- Openness: The process and related documents must be made accessible, phrased in clear language, and available in media that are open to all.
- Participation: Decision-makers are responsible for inviting the participation of all stake holders, and especially government agencies (local and regional authorities) and civil-society organizations, in every stage of the decision-making process.
- Accountability: There needs to be greater clarity as to the various participants' roles in policymaking and their responsibility to report to the public and their partner agencies.
- Effectiveness: Policy must be based on clear goals; it must relate to needs and satisfy them promptly.
- Coherence: It is essential to see the big picture and avoid internal contradictions, while presenting the policy in a way that all can understand.

To these five principles enunciated by the European Union we can add, in the specific context of the present proposal, one other point that is relevant to the situation of the local authorities in Israel:

gradual implementation, adapting the process to the local authorities' situation. In other words, independent authorities with a recognized administrative capacity can switch to the new model in the early stages, whereas others will be able to do so only after a period of study, preparation, and experimentation. As noted, local authorities, with the encouragement of the Interior Ministry but on a strictly voluntary basis, have begun to form clusters and to operate in concert in certain areas of their choosing. It is possible that after a training and learning period, it will be desirable and possible to transfer the educational human resource management function to the clusters and their executives (the clusters are registered as corporations in every respect). It is important to remember that this is a long-term process and could take ten to twelve years to be completed.

In conclusion, it must be emphasized that government ministries are profoundly mistrustful of local authorities; the public also does not have great confidence in local authorities' ability to do their job. The proliferation of criminal investigations of mayors in the last year only increases this skepticism. Nevertheless, the story is more complex. On the one hand, in some places a significant improvement in educational achievements can be credited to the intervention of the local authorities. Towns such as Beer Sheva, Bat Yam, and Dimona (not to mention Ra'anana and Kfar Saba), as well as others, have improved their pupils' educational performance (as well as their citizens' confidence in them) by means of educational intervention projects that apply to the entire town. On the other hand, in recent years the Education Ministry has been working from a position of weakness and prefers to hand over the employment of teachers to outside contractors, who have no commitment to the pupils and are not concerned about the professional development of teachers or their job security; this undermines the possibility of improving the education system as a whole. The process proposed here, if carried out wisely, and made resistant to pressure or demands that it be speeded up, can lead to greater confidence among the various entities and to improved teaching and learning processes in every school.

We need to begin the process with medium-sized communities that have a reliable leadership (Beer Sheva, Holon, Umm al-Fahm) rather than with the big cities, where there are entrenched patterns of the distribution of roles that are not based on deliberate policy, but on a balance of power that in practice dwarfs the role of the State.

As for weak local authorities, as noted, they must first undergo training and recovery processes, supplemented, to the extent possible, by the formation of clusters, inasmuch as the outline may not be suitable for very small localities. In light of the impressive progress currently being made in the development of these clusters, we may hope that by the time we reach the second stage of the process there will be clusters that are interested in signing up for the process and are ready to do so.

References

Articles

- Ben-Elia, Nahum. 2007. "The Lost Decade in Local Government." Jerusalem: Floersheimer Institute for Policy Studies, p. 1
- Blass, Nachum. 2010. "Is There A Shortage of Teachers?" Jerusalem: Taub Center for Social Policy Studies in Israel, policy paper 2010.14 [Hebrew].
- De Vries, Jouke. 2010. "Is New Public Management Really Dead?," *OECD Journal on Budgeting* 2010/1.
- Donitsa-Schmidt, Smadar, and Ruth Zuzovsky. 2012. "Supply and Demand of Teachers in the Education System," *Bishvilei Mehqar* 18: 45–51 [Hebrew].
- Dunleavy, P. et al. 2005. "New Public Management is Dead: Long Live Digital-Era Governance," *Journal of Public Administration Research and Theory*, September.
- Lavy, Victor, and Ronit Tirosh (team leaders). 2003. "Proposal for Reorganizing Public School Education in Israel Based on Decentralization and Zoning" Jerusalem: Israel Democracy Institute, position paper 44 [Hebrew].
- Mulford, Bill. 2003. School Leaders: Changing Roles and Impact on Teachers and School Effectiveness, OECD.
- Parish, Natalie, Andrew Baxter, and Leigh Sandals. 2012. *Action Research into the Evolving Role of the Local Authority in Education*, UK Department of Education, Research Report DFE-RR224.
- Paz-Fuchs, Amir and Sarit Bensimhon-Peleg. 2012. *On the Seam between the Public and the Private: Privatization and Nationalization in Israel—Annual Report 2012*. Jerusalem, Van Leer Jerusalem Institute, Yaakov Hazan Center for Social Justice and Democracy, pp. 32–33 [Hebrew].

Reports and Court Verdicts

- Commission of the European Communities. 2001. *European Governance: A White Paper*. Brussels, 25.7.2001, COM (2001) 428 final.
- Harmelech Committee. 1992. "Report of the Interministry Team on Definition of Levels of Service and Budgets related to Education and Social Welfare in the Local Authorities." Jerusalem [Hebrew].
- High Court of Justice 7947/05, Sederot Parents' Committee v. the Ministry of Education, Culture, and Sport, the Sederot Municipality, and Amit Women [Hebrew].
- Israel Ministry of Education. 2012. Invitation for Bids 17/6.2011, "Operation of a Comprehensive System for educational day programs and supplementary programs" www.education.gov.il/michrazim/documents/3769.doc [Hebrew].

- Israel Ministry of Education. 2012. *The Director General's Committee to Examine the Employment of Educational Personal as Contract Workers in the Education System: Report and Recommendations, December 2011* [Hebrew].
- Israel State Comptroller. 2012a. *Third-Sector and Business-Sector Involvement in the Education System*. Annual report 62 (2011 fiscal year), pp. 629–661 [Hebrew].
- Israel State Comptroller. 2012b. *The CRB Foundation: Leading, Supervision, and Monitoring by the Education Ministry*. Annual report 62 (2011 fiscal year), pp. 663–697 [Hebrew].
- Israel State Comptroller. 2013. *Aspects of Personnel Management in the Education System*. Annual report 63c (2012 fiscal year), pp. 971–1010 [Hebrew].
- OECD. 2005. *Teachers Matter: Attracting, Developing and Retaining Effective Teachers*.
<http://www.oecd.org/education/school/attractingdevelopingandretainingeffectiveteachers-homepage.htm>
- Royal Statistical Society. 2012. *Who Employs Teachers?*
<http://www.rss.org.uk/site/cms/contentviewarticle.asp?article=822>
- Suari, Itzhak, et al..1993. "Recommendations of the Committee to Set Criteria for the Allocation of Balancing Grants to Local Authorities." Tel Aviv [Hebrew].
- Vurgan, Yuval. 2005. "Junior High Schools and their Place in the Structure of Post-Primary Education in the Education System." Knesset Research and Information Center [Hebrew].
- Vurgan, Yuval. 2011. "Employment of Teachers by Intermediaries." Knesset Research and Information Center [Hebrew].

Human Resource Management in the Israeli Education System:

A Minority View

Noam Zussman, Research Division, Bank of Israel¹

One of the key recommendations of this position paper is to transfer the human resource management in the recognized system to the local authorities, including hiring, placement, dismissal, salaries, and promotion. I reject this idea for the following reasons:

National solidarity

Supreme importance attaches to equipping pupils with a common set of core values and reducing fissures and sectarianism. Because education is a key element in molding society, to guarantee such a core and avoid politicization of the system, it must remain fully within the responsibility of the state. Because teachers are the key factor in the education system, it is the state that should manage educational personnel.

Equality

Decentralization of powers will lead to a strengthening of the link between socioeconomic class and scholastic achievements and to increased inequality, for two main reasons: First, there are significant differences in the abilities of local authorities to administer the education system, and these differences are correlated with the locality's socioeconomic ranking. In practice, today many of the weaker local authorities are hard put to run those aspects of education that currently fall in their purview and consequently transfer these powers to outside agencies (other proprietors and NPOs). In many cases, the latter provide educational services of an inferior quality. This phenomenon would undoubtedly expand in the wake of the decentralization of powers and expansion of the domains within the responsibility of the local authorities. Second, if the salary management function is transferred to the local authorities, stronger localities will be able to offer handsome financial incentives to attract better teachers than weak and resource-poor localities can, thereby increasing inequality in education.

¹ My views do not necessarily reflect those of the Bank of Israel.

The transfer of powers to the local authorities is liable to exacerbate the phenomenon of outsourcing of teacher employment (through personnel contractors), as has occurred, for example, with regard to social workers in local welfare offices. This would have implications not only for educational services (as noted previously) but also for inequality in the labor market.

In order to decentralize powers, it would be necessary to grant the weaker authorities significant budgets so that they can run their local education systems properly. This would be in addition to the support currently given them under the rubric of the affirmative action policy adopted by the Ministry of Education for pupils from a weaker socioeconomic background.

Management considerations

If the human resource management is transferred to the local authorities, it will be impossible to guarantee that teachers meet professional standards and it will be impossible to guarantee them equal opportunities in hiring, promotion, and dismissal, on the basis of fair and uniform criteria. These phenomena are liable to get worse as a result of the polarization in society, which frequently reflects geographical lines and municipal boundaries. The processes for evaluating teachers and measuring their performance must remain in the exclusive domain of the state in order to guarantee uniform and high standards. Allowing the local authorities to have a part would open the door to preferential treatment of certain teachers for irrelevant reasons and deviations from sound management practices.

If the administrative failures of local government—mentioned in the position paper—really do exist, they should be repaired in the present format. We may assume, with a high level of confidence, that if responsibility for administration of education is transferred to the local authorities, it will suffer the same management failures that are currently widespread in local authorities, including human resource management. This applies with even greater force to weak (from the socioeconomic perspective) local authorities.

It is almost certain that the decentralization of powers will create administrative redundancy in the education system, because the management echelons on the local level will not replace all of the personnel in the Education Ministry but will be in addition to them, at least to some extent.

There is no research basis to the idea that intervention programs in Israel, conducted at the initiative of local authorities and under their management, have led to higher achievements than those of pupils in programs run by the Ministry of Education. The same applies to schools that have been transferred to self-management. What is more, the state alone runs elementary schools, whereas post-primary education is run by local authorities or private owners. Nevertheless, there is no evidence that the high schools are better administered than are elementary schools, including from the personnel aspect, nor do the outputs appear to be superior.

Naomi Riftin, Chair of the Pedagogical Secretariat, Israel Teachers Union

The responsibility of the state in general, and of the Ministry of Education as its administrative arm, is to provide equal education to all children in Israel and not to slough off this responsibility by transferring it to others. In light of the complex socioeconomic and security situation, education must be run by the state. Only the Education Ministry, an arm of central government, can handle all this complexity and balance it. The state has to concern itself with the education system and see as a primary goal to preserve its resilience. It is incumbent on the state to provide good educators who enjoy appropriate working conditions. The State of Israel is a heterogeneous country in all aspects of life and its institutions must balance between the strong and weak localities so as to provide all with optimum and equal education. The contribution of the local authorities is important as part of the system, in coordination and partnership with the Education Ministry as the main player. The proposals in this document would lead to a differentiation between local authorities and are liable to expand the disparities between them if responsibility for the education system is transferred to them.

Yael Guron, Fellow, Mandel School for Educational Leadership

The paper in question draws on how the education system sees its role and its pedagogical and social goals. The transfer of responsibility for these areas from the Education Ministry to the local authorities, even in part, would be similar to privatization, in that the strong would get stronger and the socioeconomically weaker would fall further behind. The effect would be not only economic privatization, but also the elimination of the state's responsibility for teachers' professionalism and status and the transfer of their fate to the local authorities. In the crisis situation in which teachers find themselves today in any case,² there could be no more problematic and abusive step than this. The position paper clearly highlights the serious problems that currently exist in teacher policy in Israel, but proposes a solution that I believe would merely intensify them instead of eliminating them. If teachers are important to the education system and the State of Israel, we must find the tools and way to provide them with the appropriate professional space, one that does not depend on the operation of this or that school or this or that local authority. Recognition of teaching as a profession, and appropriate professional development of teachers, is not an impossible dream. The time has not yet come to transfer this fragile and important domain and drown it in the swamp of local politics.

² The various reasons for which are detailed in the position paper, "Teacher Policy along a Pedagogical Fault Line."



Toward a New Paradigm of Education: The International Perspective

Comments by Dirk Van Damme¹

Introduction – 21st Century Education Systems Need Transformative Change

When economies and societies at large change at a rapid pace, education systems come into an awkward position. This is because they have a specific relation to time, which is different from many other social institutions. Education also serves to transmit the human heritage built over the entire history of mankind to the future generations. On the other hand school prepares not so much for the immediate future but for a lifetime and even beyond: educated parents raise their children with different skills and values than low-educated parents do, so education even has an impact across generations. So the time impact of education is huge. That's why education systems have a certain inherent slowness. It was the pioneering education philosopher and sociologist Emile Durkheim who saw education as a kind of 'condensation' of human society's history, its culture and its social structure, thus basically following social change.

On the other hand reformers want to have education playing a much more pro-active role, not only following social change, but instead preparing, anticipating and fostering change. They step in the footsteps of the American pragmatist educational reformer John Dewey, who saw education as driving social change by stressing the transformative capacities of education. In many countries policy makers and innovators ask not only whether education does things right, but also whether education does the right things. Are we preparing young people for the skills the economies and societies of the 21st century will need?; are we teaching the right kind of subjects in contemporary curricula?; are we making full use of the potential of new technologies?; have we fully understood how learning happens according to the latest research findings on learning; and do we have the best teachers, and the best teacher training and professional development, to make all this happen? In

¹ Head of the Innovation and Measuring Progress Division, Directorate for Education and Skills, Organisation for Economic Cooperation and Development (OECD). This comment is written in my personal name and does not necessarily reflect the view of the OECD.

many countries these questions are on the table. The OECD has done a lot of work on all these questions and stands ready to support countries in driving educational transformation. Experiences of educational transformation in countries can greatly help other countries to improve processes and governance of educational change and to avoid commonly encountered pitfalls.

The document *Toward a new Paradigm of Education* is a good example of the reformist and innovative perspective that is developing around the globe. Obviously, it is fuelled by concerns on particular challenges for the Israeli educational system, but it very much shares the concerns that similar approaches have developed in other countries. The paper on *Teacher Policy along a Pedagogical Fault Line* summarizes the main challenges of contemporary education systems in a short-list of five “fault lines” and then looks at the problems teachers face in dealing with them. I will mainly focus my comments on this paper.

In reviewing this paper my main comment will be that the challenges discussed are very relevant and that the general direction of innovative transformation aspired is the right one, but that the some challenges are exaggerated while others seem to be missing. Still, I do very much support the essence of the recommendations formulated at the end.

Change, Transformation, Fault Lines and Paradigm Shifts

The document adopts quite dramatic language to describe the challenges facing the Israeli education system by adopting a geological concept in a metaphoric manner and to argue for a ‘paradigm shift’. The geological concept of fault lines might be appealing to the imagination and raise interest; the question is whether it is helpful in fostering an analytical understanding of what’s going on. Together with concepts such as paradigm shifts (referring to Thomas Kuhn’s *The Structure of Scientific Revolutions*) these concepts suggest the need and desirability of sudden, dramatic changes in education.

Evidence on education change shows that education systems almost never go through such periods of short-term, dramatic, radical change. Most processes of change and transformation in education do not correspond to this image. Even from a rhetorical perspective such concepts might miss the point, as they might deter major stakeholders in the process of transformation. Also in political rhetoric language is critically important and one must be careful in choosing the right kinds of metaphors. A better metaphor might be that education systems are ‘out of tune’ with major societal transformations and need to be brought closer to what the economy and society needs. Probably a condition of being ‘out of tune’ is the case most of the time; education systems rarely precede social change. The question is how to decide whether an education system is *too much* out of tune with what is happening in society. It’s a problem of quantitative gradation, not of absolute qualitative discontinuity as concepts such as fault lines and paradigm shifts seem to suggest.

The OECD, and the Centre for Educational Research and Innovation in particular, has done a lot of work on educational innovation. Projects such as *The Innovation Strategy for Education and Training*, *Innovative Learning Environments* and *Innovative Teaching for Effective Learning* have accumulated a lot of knowledge and policy experiences on contemporary educational change, its rationales and challenges. A closer look into this international knowledge base undoubtedly could have improved the analytical quality and policy relevance of the paper. OECD/CERI is planning to hold an international conference in November 2014 on the topic of innovation in education, to which our Israeli colleagues already are warmly invited.

The Multidimensionality of Educational Innovation

More serious than the language question is whether the challenges to innovate educational systems have been well conceptualised in the paper. The main origins of challenges (or “fault lines”) are situated outside the educational systems. This is of course right: most education systems change because of external pressures, when they become so much out of tune that change is inevitable. There are very few examples of relevant change which are driven by internal forces. The paper focuses on globalisation, the ecological crisis, the demands of the knowledge society, the impact of technology and digital media, and the fading role of the family in socialisation. All these external factors are very relevant, but there are probably many more.

The main problem with the paper is that the precise ways in which these external factors translate into educational challenges and issues for educational policy and practice remain unclear. The paper briefly discusses three “educational ills” (again a very dramatic term) such as the information flood, alienation and instrumentality. Next the paper immediately jumps into the main problems with which teachers, who find themselves “on the fault line”, are confronted.

From the OECD knowledge base educational reform and innovation need to be conceptualised from a more comprehensive perspective. Space and time are lacking to discuss these issues at length, so I will confine myself to a very short overview with the help of a couple of tables. My main point is that it would be wrong to conceptualise the changing professional roles of teachers in a decontextualized way, without looking at the system-wide changes needed.

A perspective on educational transformation should first of all look into the skills demands, the consequences for the curriculum and the changes at the level of pedagogy. The following table summarizes the direction of change on a number of dimensions. Others could be added, but my main point is that any view on educational change should first of all look into the essential questions of the ‘what’ and the ‘how’ in education. All education systems around the world find themselves somewhere along the way in transforming from an industrial view on teaching and learning into a 21st century perspective. I don’t know where exactly Israel would stand in any of these continuums, but certainly it will not completely be on the left of the diagram. And in some indicators it might maybe be already rather at the right side of the axis.

SKILLS AND PEDAGOGY	
Industrial societies	21st century societies
Cognitive skills	Cognitive, social and emotional skills
Discipline	Character
Routine skills	Non-routine skills
Curriculum centred	Skills centred
Linear concepts of learning	Non-linearity
‘Learning to the test’	‘Joy of learning’
Formal education centred	Continuum from formal to informal
Evidence-poor learning environments	Evidence-rich learning environments
Pedagogy for selection of few	Pedagogy of success of all

These changes have enormous consequences on the institutional contexts and the organisation of learning, as the following table makes clear. Institutionalised teaching and learning takes place in environments which we commonly label as ‘schools’, but the reality of what we imagine in schools may be quite diverse.

ORGANISATION	
Industrial societies	21st century societies
Educational provision	Supported learning
Standardisation and uniformity	Personalisation and flexibility
Focused on the median	Fostering all talents
Confined in time and space	Time and space independent
Bureaucratic control	Devolved local responsibility
Vertical accountability	Horizontal accountability
Capacity at the top	Capacity at point of delivery
Reform by prescription	Schools and teachers reform
Teachers as administrators	Teachers as professionals
Management	Leadership

And, finally, educational transformation also requests some important changes at the level of the system itself.

SYSTEM-LEVEL CHANGE	
Industrial societies	21st century societies
Weak research evidence base	Strong research evidence base
Weak innovation in education	Very innovative education sector
Low knowledge dynamics	High knowledge dynamics
Schools as services	Schools as learning organisations

The main idea behind this short overview is that it would be risky to view one area of innovation, for example teachers, in isolation from the others. While some dimensions might change more rapidly than others, the direction of change in the system as a whole should be in line with changes in all of its dimensions in order to be effective.

The Governance of Educational Transformation

Any discussion of innovative transformation in education systems is confronted with the question how such change can be made to happen. In fact, this is a governance issue and we should understand the complexity of this issue. This issue is briefly discussed in the remarks in the paper on the concept of educational change. While these paragraphs lack clarity, the view which comes out of them – and which also fuels the specific recommendations – is that the top (or ‘centre’) of the system should initiate a culture of continuous change (different from a process of ‘reform’ which is meant to move a system from point A to point B).

There are several problems with this notion. First of all, as already noted, educational change should encompass all levels and dimensions of a system. It is difficult to imagine a process of change where the driver is located in only one part, how powerful it might be. I agree with the need to strengthen the capacity of the system’s centre (the ministry) with regard to strategic analysis and planning. But education systems have become more and more complex, with a multiplication of stakeholders and steering mechanisms, which go beyond the well-known ‘top-down’ and ‘bottom-up’ visualisation. Most education systems have evolved formally or informally in multilevel systems, with their own specificities and governance challenges. OECD/CERI’s project on *Governing Complex Education Systems* specifically looks at the consequences of fully understanding the governance challenges in education from a ‘complexity theory’ perspective. The project also looks into the consequences of multilevel and multi-stakeholder governance for the design of educational change and transformation. The research for example shows that strengthening the capacity of de-central or local nodes is equally important in driving change. It is of crucial interest to have ‘laboratories of change’, but they should not merely be conceived as units where innovations designed elsewhere should be tested. The paper lacks a vision on how to empower local levels in education systems and its many stakeholders in becoming active partners in educational transformation. Schools should no longer be conceived or treated as passive recipients of changes designed elsewhere and implemented on them instead of with them. And teachers are not the administrators of educational change, but are the professionals of educational change.

The second problem – referring to the second note in the paper on the concept of change – has to do with the discrepancy between a model of continuous, adaptive change on the one hand and the recommendations of strategic planning in the centre of the system. The concept of continuous, adaptive change – in contrast to the concept of ‘reform’ – might be a bit naïve: educational

transformation also needs moments of stabilisation (or in the words of the theoretician of change Kurt Lewin: change is a process of ‘de-freezing’ – ‘moving’ – ‘freezing’). But I like the paper’s ambition to initiate a process of continuous transformation, a system designed around transformation rather than stability. But in such a vision of systemic change, it is all the more necessary to locate change in all parts and dimensions of the system, not only in the centre. Mobilising de-central parts and stakeholders might even be of more strategic importance as strengthening the strategic foresight and planning in the centre of the system. One of CERI’s most recent publications, *Innovative Learning Environments*, looks at innovations at the level of schools or individual learning environments and how they fuel and foster change in different directions.

Teachers and Teacher Policies

Apart from the recommendations to strengthen the strategic management capacity at the Ministry, the main focus of the document is on teachers. The first paper includes a few very important statements on teachers, while the second discusses the required changes – mainly with regard to teacher allocation – in greater detail. I feel not very competent to comment on the specific reforms advocated in the second paper, but will formulate a few general points on teachers policies and decentralisation.

The paper describes four main problems affecting the work of teachers, which are overload, low effectiveness, irrelevance and the rift between the state and teachers. While these are important issues and while some of the recommendations for actions are very relevant, a coherent view on teachers’ professionalization is missing. In several publications – such as *Teachers Matter* – and initiatives – such as the Teacher Summits – the OECD has advanced a comprehensive and ambitious view on teachers’ professionalization. Some comments in the document seem to be in line with this view, while others seem to be more out of tune with it. The crucial thought underpinning the OECD’s view on teachers is that modern education systems facing huge challenges and demanding transformative change, need excellent and high-skilled professionals. Teachers are architects of learning in more challenging conditions and environments. Teacher training is a crucial element in the chain of professionalization processes, but certainly is not the only one. As TALIS has demonstrated, continuous professional development throughout the career is as equally important.

The second paper discusses one specific issue in much more detail, namely the process of allocation of teachers, and argues for a radical decentralisation of the allocation and employment regulations of teachers. This position is challenged in a minority report.

Overall, my position is that the issue of central or de-central teacher allocation is not the main issue with regard to bringing transformative change in an education system. While it is true that in the past the OECD has favoured decentralisation in educational governance arrangements, it always has stressed the necessary accompanying conditions and frameworks. Some countries with huge

levels of decentralisation, such as The Netherlands, in general do well in international assessments such as PISA, but there are also counter-examples. There also is a lot of evidence that decentralisation needs to be balanced with specific steering and accountability arrangements. But my main point is that local autonomy in teacher management is not the crucial factor in moving a system to transform itself. I cannot judge very well whether radical decentralisation would provide answers to important challenges in the Israeli education systems (I am somehow sympathetic to the view that an agency is needed which could ensure that the best teachers are allocated to the most demanding environments, a view expressed in the minority report), but in an international perspective local autonomy in teacher management is not a very critical factor.

Conclusion

Contemporary education systems need to engage in processes of innovation and transformative change in order to address the challenges that 21st century economic and social environments put onto them. Over-dramatizing the changes needed will not help to develop the understanding or to raise the political support for them. Changes needed are very comprehensive and deal with all dimensions of educational systems. It will not suffice to modernise pedagogy if the curriculum remains unchallenged. The question of governance of transformative change is a critically important one. Strengthening the strategic management and planning capacity in the centre or top of the system makes a lot of sense, but will remain an ineffective measure if all the decentral parts of the system, including its many stakeholders, would not also acquire a stronger capacity of understanding and action. Teachers are crucial 'nodal points' in any education system and whether a system is ready for the 21st century will ultimately be felt in the work of teachers and their impact on student learning. But teachers should be viewed as competent professionals, not as administrators of innovations designed elsewhere.

Caesarea
Forum
Since 1992

The Eli Hurvitz Conference on Economy and Society



Inequality – It's Bad
for Our Health

Inequality – It's Bad for Our Health

November 6–7, 2013 Hilton Eilat Queen of Sheba Hotel, Eilat

The Working Group

Head	Prof. Orly Manor , Professor of Biostatistics, School of Public Health and Community Medicine, The Hebrew University of Jerusalem and Hadassah
Members	<p>Dr. Emma Averbuch, Coordinator, Reducing Health Inequalities Unit, Ministry of Health; Lecturer in Medical Sociology, School of Public Health and Community Medicine, The Hebrew University of Jerusalem and Hadassah</p> <p>Prof. Alik Aviram, Scientific Director, The Israel National Institute for Health Policy Research</p> <p>Prof. Ran D. Balicer, Director, Health Policy Planning, Clalit Chief Physicians Office; Founding Director, Clalit Research Institute; Associate Professor and Track Director, MPH program, Division of Public Health, Faculty of Health Sciences, Ben-Gurion University of the Negev</p> <p>Prof. Gabi Bin Nun, Associate Professor, Department of Health Systems Management, Ben-Gurion University of the Negev</p> <p>Dr. Nihaya Daoud, Lecturer, Department of Public Health, Faculty of Health Sciences, Ben-Gurion University of the Negev; Director, National Council of Health Promotion, Ministry of Health</p> <p>Prof. Asher Elhayany, Fellow, Taub Center for Social Policy Studies in Israel; Member, National Council for Health in Community; Professor of Health Management, Ariel University</p> <p>Dr. Tuvia Horev, Senior Deputy Director General, Strategic and Economic Planning, Ministry of Health</p> <p>Mr. Nir Kaidar, Deputy Director, Administration for Strategic and Economic Planning, Head, Health Economics Unit, Ministry of Health</p> <p>Ms. Ziva Litvak, Managing Director, The Israel National Institute for Health Policy Research</p> <p>Prof. Gur Ofer, Professor Emeritus, Department of Economics, The Hebrew University of Jerusalem</p> <p>Mr. Eran Politzer, Economist, Public Sector Unit, Research Department, Bank of Israel</p> <p>Dr. Joseph Rosenblum, Director, Medical Informatics Department, Medical Division, Maccabi Health Services</p> <p>Prof. Amir Shmueli, Professor of Health Economics, School of Public Health and Community Medicine, The Hebrew University of Jerusalem and Hadassah</p> <p>Prof. Varda Soskolne, Associate Professor and Deputy Head, The Louis and Gabi Weisfeld School of Social Work, Bar-Ilan University</p>

Inequality: It's Bad for Our Health

Abstract

Health is a fundamental right of every human being and it is an essential resource that contributes to the prosperity of the individual and the development and growth of the society. The National Health Insurance Law, founded upon “principles of justice, equality, and mutual assistance,” seeks to ensure equality in the availability, quality, and accessibility of health services. However, this does not guarantee actual equality in these aspects or in the health status of the entire populace. Along with many countries, Israel joined the World Health Organization’s Ottawa Charter, which calls for “Health for All.”

Health inequalities

Health inequity refers to inequities in health between population groups that are associated with social factors. These inequalities are preventable and thus unfair. In Israel, there are significant inequalities in life expectancy and infant mortality, as well as inequalities in physical and mental illness between segments of the population, based on socio-economic factors, ethnic origin, and more. The association is monotonic, where each decline in socio-economic position is associated with an increased risk of poor health. In recent decades, there is evidence of widening inequalities. The inequalities in socio-economic position, such as the individual’s education and income, are the principal factors explaining the inequalities in health among Jews by country of origin, as well as the inequalities in health between Jews and Arabs.

A combination of factors at the individual, community, and societal levels, and at various stages over the life-course, contributes to the socio-economic inequalities in health. These inequalities are only partially attributed to the lack of material resources and problems of accessibility or infrastructure of health services, as the production function of health does not only depend on input from the health system, but also on many external factors.

The economic cost of health inequalities

Poor health has an economic cost: lower employment, growth, and productivity; a direct cost to the social welfare system; and harm to the wellbeing of the population. An initial calculation of the economic costs of the health inequalities in Israel is based on costs linked to early death (a social value), on the loss of work days, and on the costs of medical care. This calculation indicates a very significant economic burden—about 7% of GDP, a sum that is just slightly below the national expenditure on health. A similar calculation conducted in the European Union showed a similar percentage.

The barriers to narrowing inequalities in health

Despite the potential economic benefit associated with narrowing health inequalities, there are numerous barriers preventing tackling the problem: lack of awareness of the scope and consequences of health inequalities for the society and the economy; lack of an integrative perspective shared by the investing organization (for example, the HMO) and the organization that receives the return on the investment (for example, the social welfare system); a significant time gap between the dates of investment and return; lack of awareness regarding the prices; and the need for a substantial initial investment.

Ways to narrow inequalities in health

It is not possible to completely eliminate inequalities in health, but it is possible to narrow them. The awareness of socio-economic inequalities in health has increased in Israel during the past decade and, as a result, dedicated activity has been initiated to reduce them. However, these activities are still limited. Activities should be based on changing the factors underlying the inequalities. Therefore, comprehensive action is required that combines the forces of the health system with other support systems (social welfare, education, and more), as well as collaboration with the business sector and the third sector in order to achieve an ongoing and sustainable reduction in inequalities.

Tools incorporating assessment and evaluation should be developed to help translate the overall economic benefit to be derived from narrowing the inequalities as a result of investment in suitable interventions. Possible approaches include:

- Creating a mechanism to fund initiatives for narrowing inequalities in view of the associated benefits—for example, by using social impact bonds.
- Creating incubators for funding feasibility studies of initiatives aimed at narrowing the inequalities.
- Adopting *Health (disparities) in All Policies* by defining a mandatory standard for examining the repercussions of key decisions in the work of all government ministries on health and on the widening inequalities in health.
- Activity aimed at narrowing inequalities at the local level.
- Expanding the range of organizations and frameworks engaged in health promotion and disease prevention, including employers, community leaders, and religious leaders.
- Developing dedicated programs in the framework of National Service (*Sherut Leumi*).
- Removing the regulatory barriers to virtual medical services in order to reduce geographic inequalities in accessibility.

Conclusions

Spending on health is an investment that yields positive returns for the economy. Inequality in health has a price, just as there is a price to inequality in income. Improving the health of the weaker segments of the society will lead to an increase in the average level of health in the population, will bring additional groups into the work force, and increase economic growth.

- The investment in narrowing inequalities that produces the best results is investment that focuses on health promotion and disease prevention.
- Intervention should be targeted at the specific points over the lifecourse that will yield a high return on investment.
- In light of the high cost of health inequalities for the individual and the society, and the identified barriers for narrowing them, a clear government policy should be adopted that includes inter-ministerial and cross-sector activity to reduce the inequalities. The narrowing of health inequalities will help individuals to realize their potential and enable them to pursue full and productive lives; it will foster a sense of fairness and enhance the level of social solidarity; it will yield financial savings, stimulate economic growth, and strengthen the vitality of the society.

Introduction

Gabi Bin Nun

Most developed countries adopt today an approach that views health as a fundamental right of every human being and as an essential resource that contributes to the prosperity of the individual and to the economic development, growth, and stability of the society. In Israel, this view is expressed in the National Health Insurance Law, which is based on “principles of justice, equality, and mutual assistance.” The law aims to ensure equity in the availability, quality, and accessibility of health services. But this is not enough to ensure equality in the health status of the entire populace. The problem of health inequalities is important in light of the changes in Israeli society and in light of the changes in the health system.

The national expenditure on health as a percentage of gross domestic product (GDP) is on the rise in all of the OECD countries due to their aging populations, technological advances that make treatment more costly, and a rising standard of living, together with patterns of consumer behavior that have also been adopted in the health sector.

The trend of higher national expenditure on health also applied to Israel in the past: During the 1960s, the health expenditure as a percentage of GDP stood at about 6%, while in 1995 (when the National Health Insurance Law was in acted) it was 7.7%. Up until 1995, both the level of national expenditure on health and it’s rate of change in Israel were largely in line with the parallel figures in OECD countries.

However, data from the past decade indicates a change in the trend of national health spending in Israel. In most OECD countries, the trend of rising health expenditure as a percentage of GDP has continued, while health expenditure as a percent of GDP has leveled off in Israel, and the disparity in the level of health expenditure between Israel and the other member states of the OECD has grown. The percentage of national expenditure on health in Israel in 2011 was 7.7% (the same level as in 1995), compared to a median percentage in OECD countries of 9.4%.¹ The low level of national expenditure on health in Israel does not change even after accounting for the age distribution of the population, which is characterized by a relatively high percent of young individuals.

An additional difference in the trend of national expenditure on health in Israel is expressed in an analysis of the sources of funding the expenditure. While in most OECD countries public funding remains stable at about 75% of the national expenditure for health, in Israel there has been

* Many thanks to Sigal Sheffer-Benton, from the Israel National Institute for Health Policy Research, for her assistance in preparing this document.

¹ The Central Bureau of Statistics, *National Expenditure on Health for 2011 and Estimate for 2012*, Jerusalem: Central Bureau of Statistics, July 2013; 2011, OECD Health File.

a decline in public funding of the health system from about 70% in 1995 to about 60% during the current decade.¹

The trend of stability in health spending in Israel is thus surprising: It is exceptional in comparison to the trends in OECD countries and also in light of the fact that the main health indicators in Israel, such as life expectancy and infant mortality, have continued to improve. At the beginning of the 1970s, the life expectancy in Israel was 70.1 years for men and 73.4 for women. In 1995, the figures were 75.5 for men and 78.5 for women; and in 2011 – 80 for men and 83.6 for women. The rate of infant mortality at the beginning of the 1970s was 23.5 deaths per 1,000 live births, compared to about 6 deaths per 1,000 live births in 1995 and 3.5 in 2011. Recently (2012), the OECD published the Better Life index in which Israel was ranked a respectable fifth in the level of health services. Only Switzerland, New Zealand, Australia and Canada were ranked higher than Israel on the list.

We can conclude, therefore, that the Israeli health system is one of the most efficient of all of the health systems in OECD countries because the level of expenditure on health in Israel is relatively low, while the system's health accomplishments as expressed in life expectancy and infant mortality are among the best in the world.

Is that truly the case?

A more in-depth analysis suggests that we cannot make such a decisive conclusion about the efficiency of the Israeli health system, due to following reasons:

1. The health system is not the only factor affecting the health of the population. Therefore, attrition in the health system will not necessarily be immediately reflected in a decline in the population's state of health. The contribution of the health system to life expectancy and infant mortality is only partial. These indexes are influenced more by the population's standard of living and education than by the level of expenditure on health.
2. There is a time lag between the level of health spending and the system's achievements. The impact of the erosion of the health system infrastructure cannot be identified immediately, and it is liable to surface later due to the time lag between the expenditure and the outcome. This is similar to what has occurred in the education system – the decline in educational achievements in Israel was not reflected immediately after the budget cutback, but only after a number of years.
3. The indexes of life expectancy and infant mortality are not the end-all and be-all; as noted, the health system has only a partial impact on health outcomes (life expectancy and infant mortality). Nonetheless, the system has a significant effect on the quality of life of individuals in the population who have reached old age and require its services. Indexes of quality of life are not as popular for assessment and citation as health outcomes.

However, in addition to these arguments, a central assertion against the assumption of the Israeli health system's efficiency focuses on the fact that data on health outcomes at the national level

represent average values that conceal substantial inequalities in health between different segments of the population – for example, between poor and wealthy, Jews and Arabs, central Israel and the periphery. Moreover, there is evidence indicating that these inequalities have even widened in recent decades.

Of course, among individuals in the population there are health inequalities that cannot be prevented – for example, the differences between young people and elderly people. However, inequity in health entails preventable inequalities in the health status between individuals or population groups. For this reason, these inequalities are *unfair*.

Inequalities in health exact a price at both the individual and societal levels. In light of the strong associations between social deprivation and poverty, on the one hand, and health, on the other hand, and in light of the mutual impact between the inequalities in socio-economic position and health – ongoing inequalities in socio-economic position and health are liable to create a vicious cycle that prevent weak sections of the society from climbing the social ladder.

Indeed, this is the situation in Israel in the second decade of the 21st century. Israeli society is characterized by significant disparities in income: In 2011, the poverty rate reached nearly 20%, twice the average level in OECD countries. The Gini index (after transfer payments and taxes) placed Israel very high among OECD countries in the level of income inequity. Only Chile, Mexico, Turkey, and the U.S. have higher levels. Moreover, the income inequalities have grown. For example, during the years 1999–2011, the Gini index rose by 5.6%, real income (which rose by about 20% on average during 2002–2012) increased by only 12% in the lowest income quintile, and the percentage of “chronic poor” among the poor rose.² Significant inequalities also characterize the achievements of pupils in the Israeli school system – for example, between poor and rich, between Jews and Arabs, and between pupils whose parents have higher education and those whose parents lack such education. In the international comparison of PISA tests conducted by the OECD, the inequalities in reading achievements of pupils in Israel are among the largest in the world, a third higher than the OECD average. Of 60 countries that participated in the tests, only Qatar, Bulgaria, and Trinidad showed wider inequalities.³ These trends will be the fuel for creating social inequalities in health in the future.

Narrowing health inequalities will help individuals realize their potential and pursue full and productive lives, will enhance the sense of fairness, raise the level of social solidarity, and reinforce the society’s strength. However, beyond this there is the ethical aspect that Israel has recognized and thus, together with many countries, joined the Ottawa Charter of the World Health

² Miri Endweld, Netanela Barkali, Daniel Gottlieb, and Alexander Fruman, *Poverty and Social Gaps: Annual Report*, Jerusalem: Research and Planning Administration, National Insurance Institute, 2011 (Hebrew).

³ The National Authority for Measurement and Evaluation in Education, PISA 2009 Report: Literacy of 15-Year-Olds in Reading, Mathematics and Science, *International Studies*, 2010 (Hebrew).
http://cms.education.gov.il/EducationCMS/Units/Rama/MivchanimBenLeumiyim/MivchanimBein_Pisa_2009.htm

Organization in 1978, which called for “Health for All.” In 2008, the organization published a report on the social determinants of health and declared that *inequities in health kill*.⁴

Inequalities in health do not only exist between those at the two ends of the socio-economic scale (the poorest and the richest) or between ethnic minorities and the majority group in the population, and do not only derive from a lack of material resources or from problems of accessibility or infrastructure of health services. The picture is much more complex, and the challenge of reducing the inequalities is particularly complicated.

The session on health at the 2013 Eli Hurvitz Conference on Economy and Society will try to clarify these issues and will comprehensively address the reduction of health inequalities in Israel. The first part of the document below will present the factual basis for the existence of health inequalities among sections in the population and the main trends in the development of these inequalities over time. This section will also explain the principal causes leading to the inequalities, present principles of policy for narrowing inequalities and review examples of interventions aimed at reducing them. The second part will attempt to assess the economic cost of the widening inequalities at the national level – the direct economic cost, as well as the cost resulting from the loss of GDP growth and decline in productivity. Finally, in the third section, we will present recommendations for change and for narrowing the inequalities, including the creation of a mechanism (“clearing house”) to bridge between those bearing the burden of costs and those benefiting from the yields at the national level.

⁴ Commission on Social Determinants of Health, Final Report, *Closing the Gap in a Generation: Health Equity Through Action on the Social Determinants of Health*, Geneva: World Health Organization, 2008.

Inequalities in Health in Israel: The Current Situation, Explanations, and Ways to Reduce Inequalities

Varda Soskolne, Nihaya Daoud, Emma Averbuch, Asher Elhayany

Introduction

Despite an increase in life expectancy and improvement in health indexes in all groups of the population in Israel, there is consistent evidence of preventable health inequalities that stem from social factors. There are many groups in the population that over the years suffer from poorer states of physical and mental health relative to other groups. The question today is how to broaden our understanding of the determinants of these inequalities, and what can be done to reduce them. This chapter in the document will present the scientific knowledge on the extent of socio-economic disparities in health in Israel and the changes that have occurred over time, and will explain the range of factors that explain the disparities. The chapter will also present examples of intervention and propose principles for policy to narrow disparities.

Evidence of inequalities in health

The inequalities in health are evident in the main indexes that are customarily used to assess the state of health in a population – that is, life expectancy, general mortality rates, infant mortality rates, and disease. In this document, we will primarily focus on inequalities based on socio-economic status (according to education and income), but also by population sector.

Scope of inequalities and changes over time

Life expectancy. In 2011, the life expectancy at birth in Israel was 80 years among men and 83.6 among women. However, while life expectancy rose in all of the population groups, there are inequalities between Jews and Arabs and the scope of these inequalities has not changed. Among men, it has even increased: In 1995, the life expectancy of Jewish men was 2.7 years higher than that of Arab men, and the discrepancy grew to 4.2 years in 2011. The discrepancy between Jewish women and Arab women was 3 years in both 1975 and in 2011.

Diagram 1 Life expectancy by gender and population group, 1975-2011



Source: Emma Averbuch, *Coping with Health Inequalities*, Jerusalem: The Department of Health Economics and Insurance, Ministry of Health, 2012, p. 8. (Hebrew).

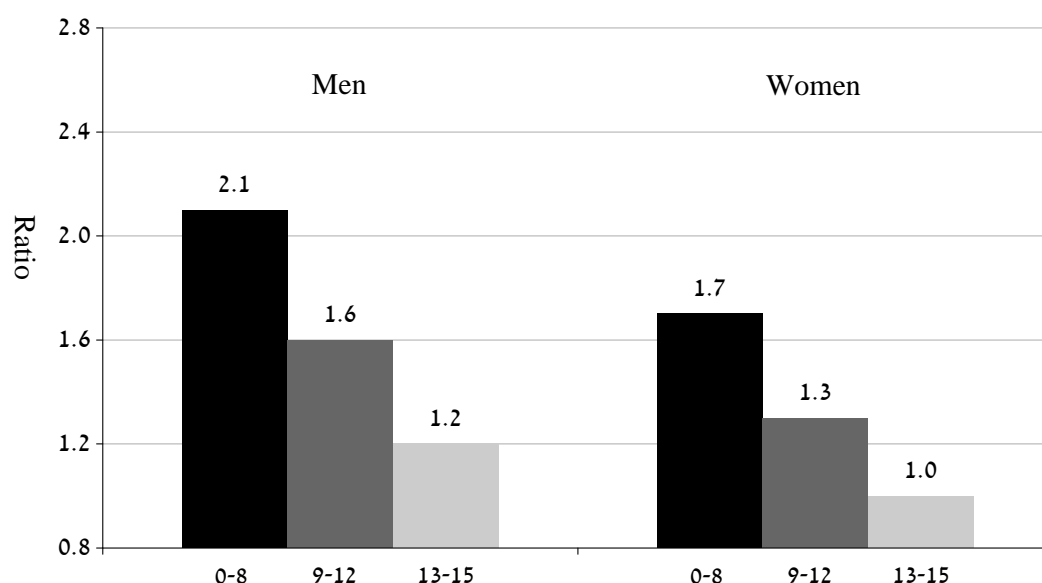
Mortality rates: The salient findings come from mortality studies conducted in Israel among the Jewish population in two waves – in 1992 and in 2004.⁵ Diagram 2 shows the mortality risk ratio between those of various education levels and those with the highest level of education (16 or more years).

We can see that the inequalities are not only between the people at the extreme levels of education. Rather, there is a *social gradient in health*: The state of health declines as we descend the socio-economic ladder. Thus, among men with 13 to 15 years of education, the mortality risk is 1.2 times higher than those with 16 or more years of education; among those with 9 to 12 years of schooling, it is 1.6 times higher; and among those with 0 to 8 years of education, it is 2.1 times higher. Further study revealed a disturbing fact: Not only did the inequalities in mortality rates persist over the years, they even grew wider. Between the two waves of research, the risk ratio between those with lowest levels of education (0 to 8 years of study) and those with higher education levels (13 years and above) rose from 1.7 to 2.3 among men and from 1.4 to 2.2 among women.⁶

⁵ D. H. Jaffe, Y. D. Neumark, Z. Eisenbach, and O. Manor, "Educational Inequalities in Mortality among Israeli Jews: Changes Over Time in a Dynamic Population," *Health and Place* 14(2) (2008): 287–298.

⁶ Ibid.

Diagram 2 **Risk ratio of mortality in comparison to education of 16+ years (adjusted for age and origin)**

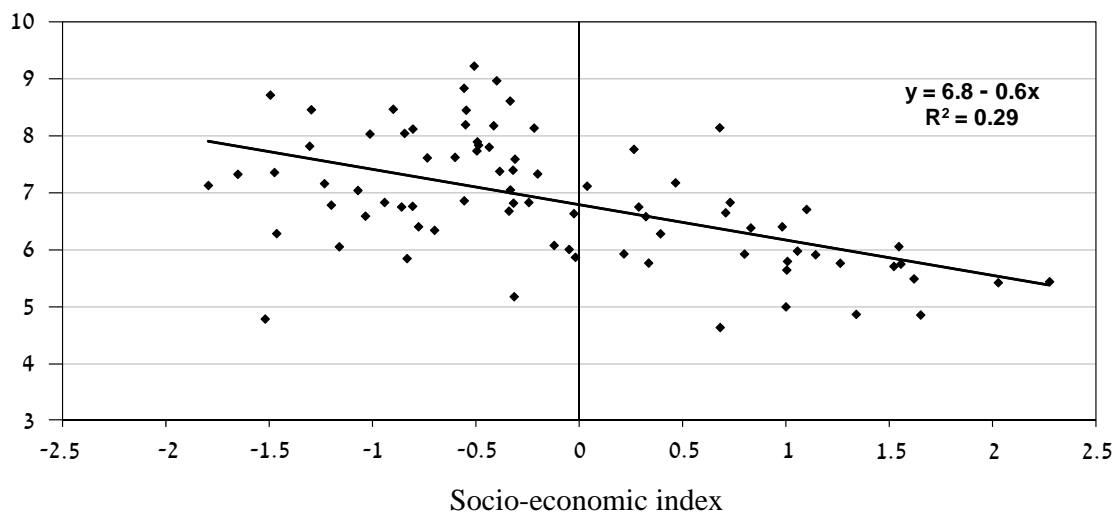


Source: O. Manor, Z. Eisenbach, E. Peritz, and Y. Friedlander, "Mortality Differentials among Israeli Men," *American Journal of Public Health* 89 (1999): 1807–1813; O. Manor, Z. Eisenbach, A. Israeli, and Y. Friedlander, "Mortality Differentials among Israeli Women: The Israel Longitudinal Mortality Study," *Social Sciences & Medicine* 51 (2000): 1175–1188.

In the two waves of research, differences were also found according to country of origin – mortality rates among emigrants from North Africa were higher in comparison to emigrants from Europe-America. However, the differences disappeared after socio-economic status was taken into account.

An examination of mortality rates according to a socio-economic index of the community also reveals a clear social gradient – a decline on the socio-economic index entails an increase in mortality rates (Diagram 3).

Diagram 3 **Adjusted* mortality rates by socio-economic index (communities with 10,000 or more residents), 1998-2002**



* The rates are adjusted by age for 1,000 residents (the Y axis)

Source: Emma Averbuch, Nir Kaidar, and Tuvia Horev, *Coping with Health Inequalities*, Jerusalem: The Department of Health Economics and Insurance, Ministry of Health, 2010, p. 36.

Infant mortality. In this index too, it was found that the lower the education level (of the mother), the higher the infant mortality rate per 1,000 births; and the disparity is widening. In 2000–2002, the risk ratio between mothers with low levels of education and mothers with high levels of education was 4.3. In the mid-1990s, it was “only” 3.5.⁷

Physical illness. The social gradient is also found in indexes of morbidity. For example, according to a self-assessment of health, the percentage of those reporting poor health was 27% among those with monthly income of less than NIS 2,000, 22% among those with monthly income of NIS 2,001–4,000 and 11% among those with monthly income of NIS 4,001 and more.⁸ Data from two separate studies on limiting longstanding illness among the Jewish population and among the Arab population conducted in the mid-2000s show a social gradient (Table 1). In the Arab population, the risk of limiting longstanding illness among those with low levels of education was 2.5 times higher than among those with high levels of education. In the Jewish population, this ratio stood at 1.82.

⁷ E. Averbuch, N. Kaidar, and T. Horev, *Coping with Health Inequalities*, Jerusalem: The Department of Health Economics and Insurance, Ministry of Health, 2010, p. 44. (Hebrew).

⁸ Ibid., p. 60.

Table 1 **Risk ratio (OR) for limiting longstanding illness in the Jewish population and in the Arab population, adjusted for age**

Education	Arabs (total: 902)		Jews (total: 1,328)	
		OR		OR
Low	(0-8 years)	2.50	(0-8 years)	1.82
Medium	(9-11 years)	1.03	(9-12 years)	1.66
Medium-High	(12 years)	0.99	(13-15 years)	0.99
High	(13+ years)	1.00	(16+ years)	1.00
		p<0.001		p<0.01

Source: N. Daoud, V. Soskolne, and O. Manor, "Examining Cultural, Psychosocial, Community and Behavioral Factors in Relationship to Socio-economic Inequalities in Limiting Longstanding Illness Among the Arab Minority in Israel," *Journal of Epidemiology and Community Health* 63 (2009): 351–358; V. Soskolne and O. Manor, "Health Inequalities in Israel: Explanatory Factors of Socio-economic Inequalities in Self-rated Health and Limiting Longstanding Illness," *Health & Place* 16 (2010): 242–251.

Similar data was also found in regard to specific illnesses, such as heart disease and diabetes. For example, among people 65 and older, about 30% of those with 0 to 8 years of education reported having diabetes, compared to 17% of those with 13 to 15 years of education.⁹

Mental illness. The rates of mild mental disorders (depression and anxiety) were two times higher among native-born Israelis with a high level of education (16+ years) than among native-born Israelis with low levels of education. No such disparity was found among those who were born abroad.¹⁰ However, the rates of severe mental illness were 4.4 times higher among those with low income, compared to those with high income.¹¹

Implications of the socio-economic inequalities in health

The social gradient in health inequalities illustrates that even those who are slightly above the poverty line are at risk of declining health. In addition, health expenditures (including tax

⁹ Ibid., p.53.

¹⁰ O. Nakash, I. Levav, and G. Gilad, "Common Mental Disorders in Immigrant and Second-generation Respondents: Results from the Israel Based World Mental Health Survey," *International Journal of Social Psychiatry*, 7 May 2012 (online)

¹¹ C. Hudson and V. Soskolne, "Disparities in the Geography of Serious Mental Illness in Israel," *Health & Place* 18 (2012): 898–910.

payments) of those above the poverty line can push them below the line. This is evident in the rate of those who refrain from taking medication due to its cost: 37% among those with monthly income of up to NIS 4,000, 23.2% at the income level of NIS 4,000-8,000 and 5.6% among those with income above NIS 8,000.¹² Deterioration in health clearly has a negative impact on economic productivity, and health ceases to be a resource. A follow-up study conducted for about five years found, for example, that, as expected, the chance of leaving the workforce was higher among those of ages 50–69 whose physical health has deteriorated. And among this age group, the lower the education level, the higher the chance of leaving the workforce.¹³

The socio-economic inequalities in health and ethnic inequalities

Many studies show that despite the fact that a sense of discrimination and exposure to racism are linked to ethnic inequalities in health, socio-economic inequalities (such as the individual's education and income) are the factors that account for ethnic inequalities in health.¹⁴ In Israel, the inequalities in life expectancy, infant mortality, physical illness and depression to the detriment of the Arab population have not narrowed during the past three decades, and a substantial part of these inequalities derives from socio-economic inequality between the populations or from related factors, such as the use of health services.¹⁵

Explanations for socio-economic inequalities in health and their significance for planning interventions

Here are the main explanations offered for the socio-economic inequalities in health:

1. A lack of material resources: Recent studies show that material deficiency (lack of income) is only a partially contributing factor. Some studies indicate that the level of income relative to other people is more important.¹⁶
2. The psycho-social environment: This includes factors pertaining to the individual (health literacy, exposure to stressful situations, personal resources, employment conditions, discrimination, income relative to others, etc.) and factors pertaining to the community (a low sense of social involvement, low social capital and problems in the neighborhood).¹⁷

¹² Averbuch, Kaidar, and Horev (above, n. 7), p. 102.

¹³ A. Tur-Sinai and L. Ahdut, personal source.

¹⁴ J. Y. Nazroo, "The Structuring of Ethnic Inequalities in Health: Economic Position, Racial Discrimination, and Racism," *American Journal of Public Health* 93 (2003): 277–284.

¹⁵ N. Khattab and S. Kagya, *Health Inequality of Arabs and Jews in Israel*, Jerusalem: Israel Democracy Institute, 2011. (Hebrew).

¹⁶ R. G. Wilkinson and K. E. Pickett, "Income Inequality and Social Dysfunction," *Annual Review of Sociology* 35 (4) (2009): 93–511.

¹⁷ M. G. Marmot and R.G. Wilkinson, "Psychosocial and Material Pathways in the Relation Between Income and Health: A Response to Lynch et al.," *British Medical Journal* 322 (7296) (2001): 1233–1236.

3. Life course factors: There is considerable evidence that the socio-economic situation during early childhood (and even as a fetus) is linked to morbidity and mortality in adulthood, in addition to deprivation that is experienced during the course of life.¹⁸
4. “Upstream” factors, at the macro level, also have an effect on the creation of inequalities. The reference here is to structural factors at the community level (for example – living conditions, infrastructure, supply of services in the community/neighborhood), as well as the economic and social resources (opportunities for acquiring education, employment), the political structure and the social policies – which all combine to shape the socio-economic status of the individual.¹⁹

There is consensus today among researchers that the factors cited above work in conjunction and affect health directly or via health behaviors (of lifestyle, such as smoking, nutrition and physical activity), exposure to pathogenic factors and use of health services. Health behaviors are the factors at the individual level that are most immediate in their impact on health, and are also “downstream” factors in affecting health. Here too, inequality is clearly evident. For example, smoking rates in Israel increase as the education level declines. Thus, the percentage of smokers among those with a low level of education is double the percentage of smokers among the academically educated, and the percentage of those engaging in physical activity decreases with the decline in income;²⁰ socio-economic inequalities in lifestyle are expressed in obesity, which constitutes a risk factor for illness; the lower the socio-economic status of the area of residence, the higher the percentage of overweight people. For example, the percentage of people suffering from obesity in low socio-economic communities is 16%, compared to 10.8% in high socio-economic communities.²¹ It is important to emphasize that the inequalities in weight begin already in childhood, even at age two.²² This underscores the importance of investing in intervention during early childhood.

Nonetheless, it is important to remember that in addition to the risk factors that explain the inequalities in health, certain characteristics of people and communities were found to be factors that protect health (salutogenic), such as the individual’s resilience, social involvement, solidarity and social support. All of these contribute to the good health of individuals and communities at a

¹⁸ N. E. Adler and J. Stewart, “Health Disparities Across the Lifespan: Meaning, Methods, and Mechanisms,” *Annals of the New York Academy of Sciences* 1186 (2010): 5–23.

¹⁹ P. Braveman, S. Egerter, and D. R. Williams, “The Social Determinants of Health: Coming of Age,” *Annual Reviews of Public Health* 32 (2011): 381–398.

²⁰ *Society in Israel*, Jerusalem: Central Bureau of Statistics, 2012, Chapter 5: Health. (Hebrew).

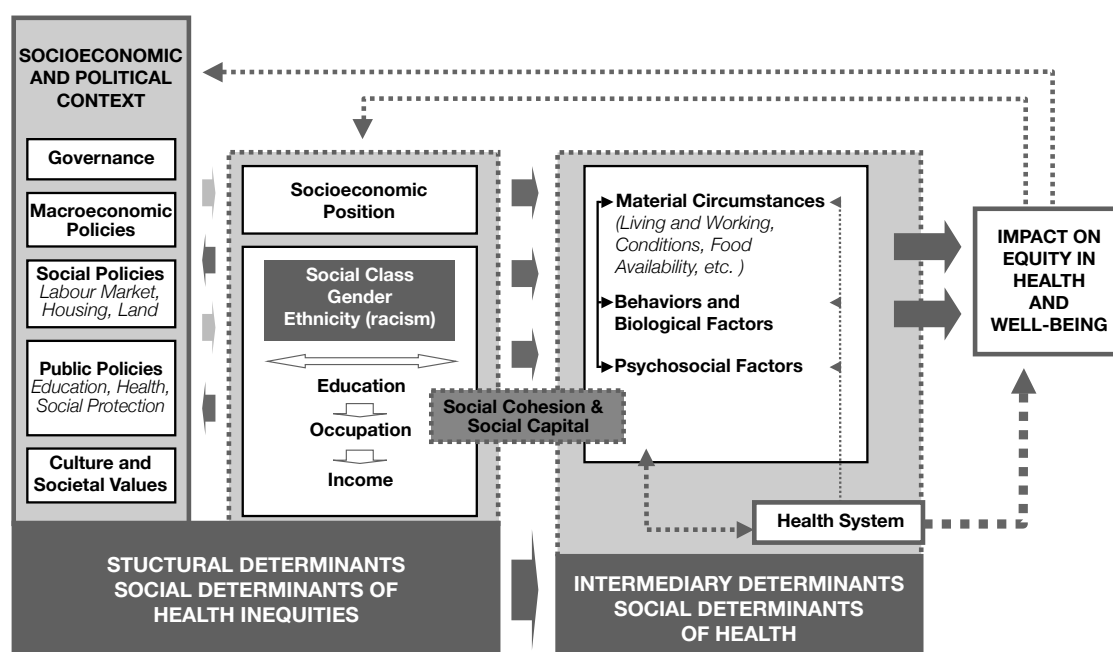
²¹ Ibid.

²² L. M. Rossen and K. C. Schoendorf, “Measuring Health Disparities: Trends in Racial-ethnic and Socioeconomic Disparities in Obesity Among 2 to 18 year-old Youth in the United States, 2001-2010,” *Annals of Epidemiology* 22 (10) (2012): 698–704.

low socio-economic status.²³ It is important to strengthen these protective factors in addition to reducing risk factors when designing the foci in plans to reduce health inequalities.

In summary, inequalities in health are caused by a combination of factors. Therefore, solutions based solely on boosting income, changing lifestyles or improving the provision of health services are not enough. Interventions aimed at reducing the inequalities should focus on a combination of factors, at various levels (see below "interventions"). This understanding is what led the World Health Organization to draft their model (Diagram 4) as a basis for intervention planning.

Diagram 4 **The impact of social factors on inequity in health: conceptual framework**



Source: O. Solar and A. Irwin, *A Conceptual Framework for Action on the Social Determinants of Health*, Social Determinants of Health Discussion Paper 2 (Policy and Practice), Geneva: World Health Organization, 2010, www.who.int/social_determinants/corner/SDHDP2.pdf

²³ E. Chen, "Protective Factors for Health Among Low-socioeconomic-status Individuals," *Current Directions in Psychological Science* 21 (3) (2012): 189–193.

Intervention to reduce health inequalities

In a World Health Organization document,²⁴ four principles were proposed for reducing inequalities in health:

1. Tackling the inequalities in the social distribution power, status, income and wealth.
2. Reducing exposure to health risk factors that plague those of low social standing.
3. Follow-up and monitoring of exposure to conditions detrimental to health among those of low social standing.
4. Developing interventions via the health sector in order to reduce the impact on morbidity and prevent additional deterioration in the weak strata of the population.

These principles emphasize that actions aimed at reducing inequalities in health cannot be implemented solely by the health system. Rather, they require a government commitment and multi-system activity, including inter-ministerial and cross-sector collaboration.

When setting goals and selecting ways to achieve them, it is customary to distinguish between three main approaches to reducing inequalities:

- A. **“Upstream” intervention at the macro level.** Places emphasis on addressing the socio-economic factors that contribute to the creation of inequalities. For example, narrowing inequalities in education, employment and income. This activity is not the role of the health system; it is the responsibility of all of the social systems and characterizes the Scandinavian countries, which focus their activity for reducing inequalities on investing in the social welfare system, in revising the system of taxation, and so on.
- B. **“Midstream” intervention.** Is conducted via the health system to enhance the accessibility of services or to strengthen weak communities.
- C. **“Downstream” intervention.** Its objective is to address factors at the individual level. For example: health promotion programs aimed at changing health behavior.

Examples in the world of “upstream” policies

Sweden. Reducing segregation in housing and in social isolation, and increasing participation in physical activity; transferring resources to needy schools; lowering unemployment among immigrants.

Canada. One of the first countries to address socio-economic factors in promoting health in the population. The first document emphasizing these factors was presented by the minister of health

²⁴ World Health Organization, *Closing the Health Equity Gap, Policy Options and Opportunities for Action*, Geneva: World Health Organization, 2013.

(in 1974), Marc Lalonde, who argued that the promotion of health in the population depends not only on the health system, but also on other social systems. Starting in the 1990s, the policy included activity related to all the diverse socio-economic factors that affect health, and in 1998 it was decided to focus on reducing inequalities in income, social support, education, employment, working conditions, the growth and development of children, and health services.

England. In 1997, the Blair government announced a national program to improve health services and the population's state of health, including reducing inequalities in the field of health. The program included, for example, multidisciplinary strategies such as Health Action Zones and the establishment of centers for medical and social treatment in early childhood (Sure Start Centers). A study evaluating the situation until 2010 showed a significant general improvement in health indexes ; but the goals of reducing health inequalities (life expectancy, smoking, etc.) were not achieved, with the exception of some reduction in infant mortality, which appeared only toward the end of the Labour government's term of office— a decrease of 25% in the risk ratio between those of low social standing and the overall population.²⁵ Perhaps a longer period of time is required for reducing health inequalities, compared to the time required for improving health indexes in general.

Examples from Israel: The Ministry of Health and HMOs

The Ministry of Health defined the reduction of inequalities in health as one of the central strategic goals in its work plan for the coming years. In light of its limited control in influencing the factors at the “upstream” level, the ministry focused its main efforts on addressing inequalities at the level of the health system and offered incentives to the health organizations to conduct intervention on the individual level. The interventions by the Ministry of Health and HMOs to reduce inequalities are aimed at improving the state of health of the entire social gradient, as well as defined weak populations.

Levers of change via inter-ministerial and cross-sector collaboration by the Ministry of Health

The activity was directed mainly at two target populations – residents of outlying areas (“the geographic periphery”) and people of low socio-economic status (“the social periphery”). It was also decided to enhance the service provided to populations characterized by cultural and linguistic diversity.

Below are the operative goals the Ministry of Health defined for itself in the framework of reducing inequality, as part of the ministry's objectives for the years 2011–2014. Examples of activities the ministry conducted in pursuit of these goals are also provided.

²⁵ P. Vizard and P. Obolenskaya, *Labour's Record on Health (1997–2010)*, London: The Center for Analysis on Social Exclusion, London School of Economics and Political Science, 2013.

1. **Reducing the inequalities in economic accessibility to health services.** Expanding the system of discounts and exemptions for the weak groups. For example: canceling the fee for well-baby clinics; lowering the co-payment for generic medication; dental treatment for children up to the age of 12 as part of the health system's "basket" of services; reducing co-payment for elderly Holocaust survivors.
2. **Reducing the impact of cultural differences on the use of health services or on the quality of these services.** Standards of service were defined to promote linguistic and cultural adaptation of health services for the various populations, and long-term, systemic responses were developed to achieve this objective.

For example: publication of a directive from the director-general of the Ministry of Health on this subject in 2011; training for officials responsible for improving cultural accessibility in health organizations; establishing a multilingual telephone center for medical translation; translating the ministry's Internet site to additional languages.
3. **Placing high-quality and professional medical personnel in the periphery in sufficient numbers and improving the physical infrastructure in peripheral areas.**

This entails systemic changes that should improve the balance of deployment of medical personnel and technology between central Israel and the periphery. For example: adding job positions, hospital beds and professional units to hospitals in the periphery; establishing a (fifth) school of medicine in Safed; establishing emergency medical centers in localities in the periphery.
4. **Offering incentives for the HMOs to conduct activity aimed at reducing inequity.**

Incentives were developed for health organizations to invest in reducing the inequalities in weak populations. For example: support tests for HMOs that provide refunds for activities that are likely to improve infrastructure in the periphery; intervention programs in weak populations.
5. **Building a database on morbidity, accessibility and availability of services, and effective interventions for reducing health inequities.**

In addition to all of the above, there is collaborative activity of government ministries, local authorities and the third sector that is aimed at reducing inequalities. The salient example is the national program for promoting an active and healthy lifestyle, which was launched in 2011 and whose aims include reducing obesity in the population through boosting physical activity, lowering the daily consumption of salt, reducing the number of hours of television viewing by children, and more. The program set differential objectives for the Jewish and Arab populations, with the goal of achieving a real reduction of obesity in the Arab population, where this problem is more prevalent. The program is operating in 15 localities, with three strategies: enriching knowledge, creating an environment that promotes health, and providing incentives to organizations and authorities to be involved in promoting health. Some of the operating principles of the program – such as joint planning, combining fields of policy and shared funding – mirror the World Health Organization's HiAP (Health in All Policies) approach for promoting equity in

health.²⁶ Another example of inter-ministerial and cross-sector collaboration (the government, the Union of Local Authorities and JDC Israel) is the national program for treating children and teenagers at risk/in distress from low socio-economic backgrounds, and in populations that have a unique social and cultural character (immigrants, Arabs and ultra-Orthodox Jews). The program provides professional responses for promoting physical and developmental health, learning, mental well-being, social systems, and more.

Examples of intervention programs by the HMOs

In recent years, there were a number of independent programs initiated by the various HMOs that succeeded in reducing inequalities in health by lowering co-payments, cultural adaptation, focusing on at-risk populations and adapting intervention measures to language, culture, literacy and comprehension levels. Below are several examples demonstrating that it is possible – relatively quickly and with a modest investment – to significantly reduce the inequalities that exist today in the health indexes:

The Lotus project: Lowering co-payments leads to higher response to treatment in chronic diseases and to rapid clinical improvement in stabilizing the illnesses. In the central district of the Clalit HMO, in the cities of Ramla and Lod, there is a population of low socio-economic standing with a high incidence of chronic illness and low adherence to treatment (which is one of the factors for lack of stability and control in chronic morbidity).

A donor agreed to cover the cost of co-payments for patients of low socio-economic status who do not purchase the medication for themselves. Patients with chronic illnesses (hyperlipidemia, high blood pressure, diabetes) were identified. In these conditions, adherence and disease control could be measured. Of these, 235 people from a low socio-economic status were selected who do not purchase their prescribed medications on a regular basis. They received a “credit card” and used it to pay for the medications. Already after six months, a very high adherence to treatment was found (92%), and a significant improvement was achieved in controlling diabetes, high blood pressure and blood lipids. Both the adherence and the improvement in control were maintained for a period of one to two years. The project was expanded to additional areas, and included about 1,300 complex chronic patients. The investment by the donor was about NIS one million per year.

The conclusion: Lowering the co-payment in purchasing medication boosts adherence to treatment and improves the control measures of chronic patients of low socio-economic status.

Use of parlor meetings for Arab women to improve their response to treatment for chronic illnesses. In the northern district of the Meuhedet HMO, parlor meetings for women (a means of influence that is familiar from election campaigns) were used, adapting them culturally

²⁶ Y. Kranzler, N. Davidovich, Y. Fleischman, I. Grotto, D. S. Moran, and R. Weinstein, “A Health in All Policies Approach to Promote Active, Healthy Lifestyle in Israel,” *Israel Journal of Health Policy Research* 2 (1) (2013): 1–16.

to encourage women to respond to medical examinations and to improve control and treatment of chronic illness. In 2011, women with a strong social standing in the community hosted parlor meetings in their homes. The meetings combined a social get-together with professional guidance from Arabic-speaking nurses on how to improve the women's health. A total of about 5,500 women participated in the meetings. There was an improvement in testing among diabetes patients (the number of exams increased by tens of percentage points and, consequently, control of diabetes improved by 20%).

Improvement in indexes of clinical quality by adapting means of intervention to language, culture and the unique ways of influencing a weak target population. Such activity was conducted at the Jaffa clinic of the Maccabi HMO. (Most of the members of the HMO in Jaffa are Arabs from a low socio-economic status.) The results of the intervention indicated that during a relatively short time (nine months), a disparity of nearly 30% in control of diabetes between the clinic's population versus the average level of all Maccabi members was closed.

In both of the latter projects, the investments were negligible and were made simultaneously with the ongoing work.

In summary

During the past decade, awareness of socio-economic inequalities in health has grown. Consequently, dedicated activities were initiated to reduce the health inequalities in Israel. These activities are still limited in scope, but there is initial evidence of intervention results that are focused on weak populations within the health system. Based on the evidence that a combination of factors at various levels and at all stages of life are the determinants of socio-economic inequalities in health, we believe that more extensive – cross-system – activity is required for reducing inequalities.

We recommend formulating a comprehensive government policy for reducing health inequalities, while developing strategies adapted to Israel's socio-economic context. The optimal timing of intervention for reducing inequalities, though not the only one, can be in early childhood; this is an investment in prevention that will yield long-term benefits.

The Economic Burden Caused by Inequalities in Health

Amir Shmueli, Eran Politzer, Nir Kaidar, Gur Ofer

Background

During the past decade, there has been growing interest in the potential economic benefit from improving the population's state of health. In 2001, the World Health Organization (WHO) published a report by the Commission on Macroeconomics and Health indicating that an improvement in the state of health is the principal way to boost the pace of economic growth, raise the standard of living and reduce poverty in countries with low and medium income per capita.²⁷ Two reports by the European Union from 2005 and 2008 expanded the range of discussion to countries with high per capita income.²⁸ The main message is that there are substantial economic benefits to investing in health and that if the European Union is interested in improving its standing in the competitive global environment, it must invest in human capital, including the health of its citizenry. The economic benefit derives from a view of health as a capital good that improves productivity and growth, as well as a consumer good that yields benefit in itself (good health) as an important component in the well-being of the population.

These connections usually measure and focus on the *average* health of the population. But wherever this subject was examined, large health inequalities were found between population groups of different socio-economic backgrounds. The typical finding is that groups of low socio-economic status in terms of education, employment and income suffer an inferior state of health, higher mortality and higher levels of disability. Improving the state of health of weak groups is one of the surest ways to raise the average level of health in the populace.

One of the important pieces of data in improving the state of health of weak socio-economic groups is an assessment of the economic burden of inequity in health – and consequently, an estimate of the economic benefit to be derived from reducing this burden. Two studies – one in England and the other in the European Union – recently focused on assessing this burden.

²⁷ World Health Organization, *Commission on Macroeconomics and Health: Working Group 5: Improving Health Outcomes of the Poor*, Geneva: World Health Organization, 2001.

²⁸ M. Suhrcke et al., *The Contribution of Health to the Economy on the European Union*, Brussels: European Commission, 2005; M. Suhrcke et al., *The Economic Costs of Ill Health in the European Region*, Copenhagen: World Health Organization, Europe, 2008.

As part of the work of the committee assigned to propose ways to reduce health inequalities in England after 2010 (*The Marmot Review*), the costs of inequity in health were calculated.²⁹ The goal was to focus on the main components of this burden and to arrive at an estimate of its approximate magnitude. In accordance with the findings of earlier studies on health inequity, the work focused on three primary groups of costs resulting from inequalities in health:

- **Early death and disabilities.** There is significant disparity in life expectancy and life expectancy without disability between localities and neighborhoods of different socio-economic standing. By using the social value of a year of life and a year of life without disability, it is possible to estimate the economic burden of loss of years of life and years of life with disability that result from socio-economic inequity.
- **Loss of work days.** Morbidity and disability in the working-age population causes a decline in productivity and in the contribution to GDP. The loss of work days due to morbidity and death also leads to a decline in tax revenues and an increase in transfer and support payments. (The government bears this cost. From the economy's perspective, these are transfers between the players.)
- **Costs of additional medical treatment due to inferior health among the weak socio-economic groups.**

The work focused on income-related inequality and defined the reduction of this inequity by means of two scenarios (counterfactuals). In scenario 1, the reduction of health inequity is expressed in an increase in life expectancy and life expectancy without disability to the average level of the upper decile of the neighborhoods, ordered by level of income. In scenario 2, all of the neighborhoods become equal to the average state of health in the upper half of the neighborhoods.

Based on income data, disability, life expectancy and mortality by age in the various neighborhoods, the committee reached the following conclusions for those born in 2010, who will enjoy the fruits of the investment in reducing health inequity according to scenario 2 (the burden can also be calculated for the entire population according to its age structure in the present):

- The total number of years lost due to inequality is 800,000 – that is, 1.3 years per person. The **total** number of years without disability that are lost due to inequality in patterns of disability between the groups is 1.7–2.5 million, or 2.5–3.8 years per person. According to a valuation of human life of 58,000 British pounds (the value used by the England's Ministry of Transportation in calculating the benefits of investment in transportation infrastructure) and a discount rate of 3.5%, the capitalization rate of the lost years of life totals 2.2 million British pounds.

²⁹ Frontiers Economics, *Estimating the Costs of Health Inequalities*, A report prepared for the *Marmot Review*, London: Frontiers Economics, 2010, www.cawt.com/Site/11/Documents/Publications/Population%20Health/Economics%20of%20Health%20Improvement/Estimating%20the%20costs%20of%20health%20inequalities.pdf

- The total value of lost production through age 65 due to inequality in morbidity (according to scenario 1, this does not include death before age 65, which also creates a loss of production) is 31 million British pounds. The cost to the government in unemployment allowances and lost tax revenues is a similar sum.
- The cost of additional medical treatment due to inequality comprises about 15% of the cost of medical treatment, or about 5.5 million British pounds. (This estimate is low due to the omission of services.) Thus, the total economic burden of income-related health inequity in England stands at about 39 million British pounds per year. This sum is equivalent to about 16% of the national expenditure on health and about 2% of GDP.

The index of socio-economic status used for estimating the economic burden of health inequity in the European Union in 2004 was level of education.³⁰ The scenario of equality says that the state of health of half of the population with low education levels will be equal to the average health of half of the population with high education levels. The state of health is measured by mortality and self-assessment of health. (The rate of mortality adjusted to age among 50% of those with low education levels is 36% higher than among half of the population with high levels of education. The age-adjusted rate of those assessing their health as “less than good” among those lacking education is 45% higher than among those with high levels of education.)

The following components were included in calculating the economic burden of inequality in health:

- A. Years of life lost due to a higher mortality rate among the uneducated, assessed at 58,000 euros per year.
- B. A longer life expectancy in a state of health defined as “less than good” among the uneducated.
- C. Greater loss of GDP due to poor health among the uneducated (measured by wage differentials).
- D. The additional cost of medical treatment among the uneducated, as anticipated according to the reported state of health.

The results for 25 countries in the European Union show that inequality in health leads to 707,000 incidents of death. Each of them entails a loss of 16 years of life. The total number of years lost due to inequality is 11.4 million. The monetary value of these lost years of life is about 700 billion euro, which is equivalent to about 7% of the European Union's GDP. Another 4.3 million years of life in a “good” state of health are lost due to the inequalities in health. The monetary value of these years is 280 billion euros or 2.7% of GDP. The total loss in GDP (revenues) attributable to inequality is 141

³⁰ J. P. Mackenback, W. J. Meerdink, and A.E. Kunst, “Economic Costs of Health Inequalities in the European Union,” *Journal of Epidemiology and Community* 65 (5) (May 2011): 412–419.

billion euro, or 1.35% of GDP. The total cost of additional medical care due to health inequity is 177 billion euro, or 1.7% of GDP and about 20% of the total national expenditure on health.

The economic burden caused by inequalities in health – an initial estimate

Data

- The economic unit in the analysis is the locality
- Health is measured by life expectancy at birth or by death rates adjusted for age
- Socio-economic status is measured by income or by socio-economic score
- The source of data is the Central Bureau of Statistics and the Ministry of Health³¹

Components of the economic burden

- The social value of lost years of life (the value of life from the perspective of welfare economics)
- The loss of GDP due to working-age early mortality (the value of life from the perspective of human capital)
- The additional cost of medical treatment due to a poor state of health

The scenario of equality

- The localities participating in the analysis (a different series in each component, according to the availability of data) were ordered by average income per standard adult or by socio-economic score.
- The weighted average (by population size) of the state of health was calculated at the high socio-economic level (the “wealthy”). This is the “equality target.”
- The equality scenario describes a state in which "poor" 50% of the localities enjoy an equality target that is equal to the average cited above. The total deviation from the adjusted average in "wealthy" 50% of the localities is 0; thus, the differences among the "wealthy" localities are not included when calculating the burden.
- Nonetheless, since socio-economic status or income does not fully explain the inequalities in health, and since the marginal effect of income / SES on the state of health is not always significant (that is, the trend line is not sufficiently steep), there are "poor" localities that

³¹ Pnina Zadka and Ari Paltiel, *Health and Social Profile of the Localities in Israel, 1998-2002*, Jerusalem: Central Bureau of Statistics and the Department of Health Economics and Insurance, Ministry of Health, 2006 (Hebrew).

achieve health results that exceed the target of equality. These localities were removed from the calculation of the burden.

The social value of lost years of life

The state of health is measured here by life expectancy at birth. We have data on life expectancy according to locality only for 27 localities with populations of at least 50,000. (The total population in these localities is 4.3 million residents, the Israeli population is 7.1 million) The data is for the years 2005–2009. The calculation of the burden refers to the discounted value (from the date of death according to life expectancy at birth) of the years of life lost in each and every locality in light of its socio-economic situation.

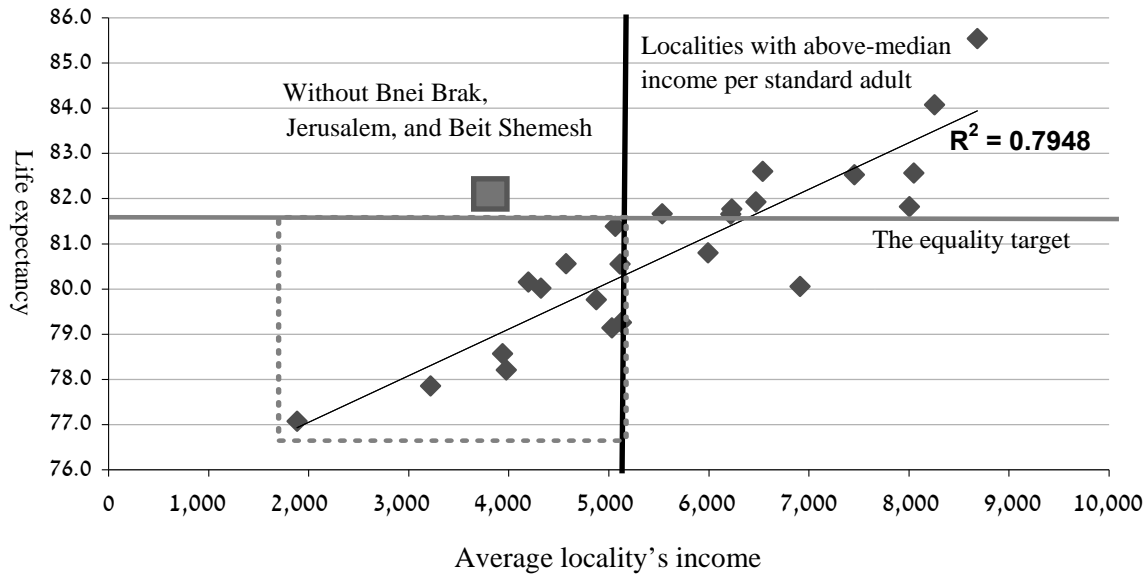
The socio-economic situation is measured by the average income per standard adult in the locality. The data is from 2008. Diagram 1 describes the relationship between life expectancy and income per standard adult in 24 localities. The three localities in which the religious and ultra-Orthodox population is relatively large (Bnei Brak, Jerusalem, and Beit Shemesh) are characterized by a relatively low average income and a relatively high life expectancy (about 82 years). Therefore, in these three cities the low average income is not linked to life expectancy. When these three localities are removed from the calculation, we see a good linear relationship (squared correlation coefficient of 0.8), indicating that as average income in a locality increases, there is a commensurate increase in life expectancy.

The equality target is life expectancy of 81.54 years, which is the weighted average of the life expectancy in the 13 localities with the highest levels of average income (an average income per standard adult of NIS 5,100 divides the localities into two groups of equal size).

The poor localities, where life expectancy is lower than the equality target – and where the loss of years is concentrated – are grouped in Diagram 1 in the box in the lower-left quadrant. If the equality target were achieved in these localities, 2,087,469 years of life would be saved, or an average of 0.92 years per resident, in the poor localities. Since the additional years are added to the end of the current life expectancy, the value of the added years of life (or the years lost due to inequality in life expectancy) should be discounted. We used a discount rate of 3.5%.

The WHO organization recommends assessing a year of life from a social perspective at about three times the per capita GDP. In 2012 prices, this value is NIS 352,701. Thus, the social valuation of years of life lost due to income-linked inequalities in life expectancy totals **NIS 48,550 million annually**. If we adopt the Ministry of Transportation's valuation in its protocol for transportation projects, we receive a value of about NIS 150,000 for a year of life. (The life value of NIS 6 million for someone killed in a traffic accident means a loss of 40 years of life.) Therefore, the estimated loss is about **NIS 20,648 million**. Assuming that these patterns also exist in the other localities, extending the valuations to the entire population (7.1 million people) leads to estimates of burden of **NIS 80,164 million and NIS 34,093 million per year, respectively**.

Diagram 1 **Life expectancy at birth in localities expectancy**



Source: Calculations by the team

Loss of GDP due to early death of working age persons

In the human capital approach, the value of the life of a person who dies before retirement age (65) is the discounted value of the person's income flow in the labor market at the time of death. Early death means an early exit from the labor force and, consequently, a loss of GDP in the amount of the current value of the deceased's future income had he remained alive until retirement age.

Diagram 2B displays the distribution of death rates per 1,000 people according to age in localities with over 10,000 residents by their socio-economic score. The diagram focuses on ages 45–54 and 55–64. Similar diagrams for the younger and older ages are presented in the Appendix in diagrams 2A and 2C, respectively. The total population represented in diagrams 2A and 2C is 5.9 million residents. In all of the age groups, there is a negative correlation between death rates in a locality and its socio-economic score. However, the strength of this correlation varies by age. In ages 0–4 and 55–64, the (squared) correlation is the strongest (0.5); in ages 65–74, the coefficient is 0.42; in ages 45–54, the Coefficient is 0.2; in ages 5–24 and 75+, the explanatory coefficient is 0.1. The weakest correlation was found in ages 25–44 (0.05).

A socio-economic score of 0.12 divides the localities into two equal groups. The equality targets of death rates per 1,000 people are: ages 0 to 4 – 0.98; ages 5 to 24 – 0.29; ages 25 to 44 – 0.94; ages 45 to 54 – 2.88; ages 55 to 64 – 7.25; ages 65 to 74 – 20.52; ages 75+ – 79.30. These equality targets appear in the diagrams for the various age groups, with the exception of ages 25–44. Here too there

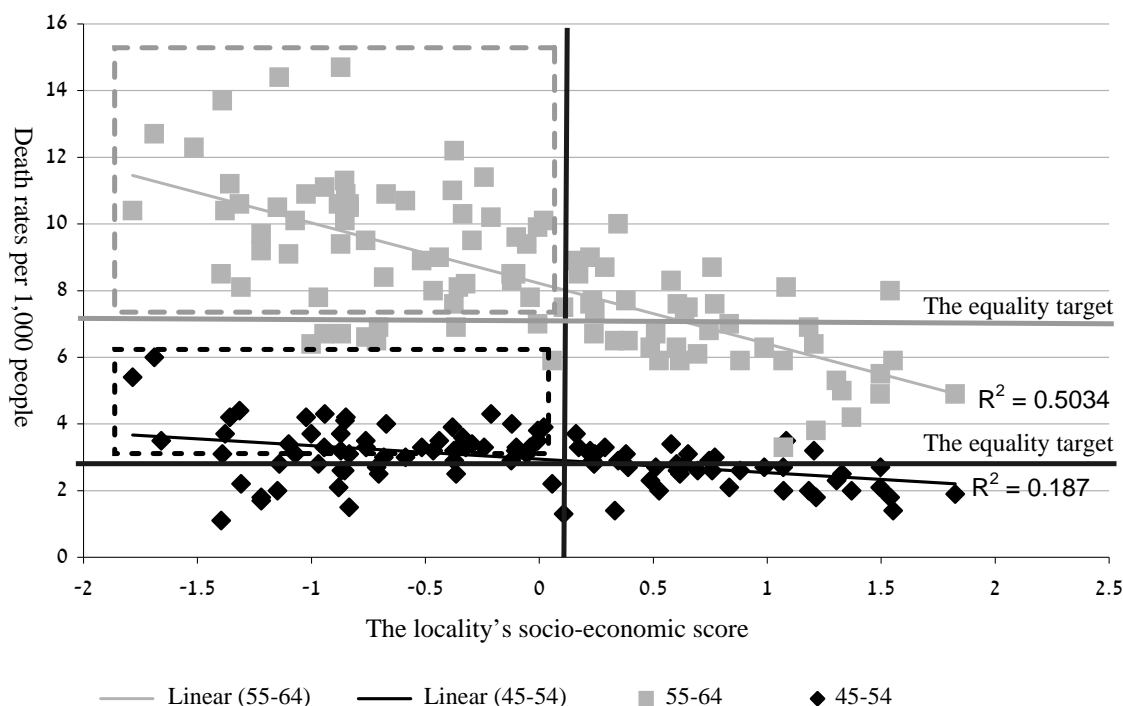
are poor localities whose death rates are lower than the equality target. This list of localities and its size vary from one age group to another: In ages 45–74, there are no such localities, while the list includes 10 to 15 localities in the other age groups. The largest number of localities in the list is at ages 75+. The list includes the localities with a relatively large religious population (for example, Jerusalem, Beit Shemesh, and Bnei Brak), as well as several Arab localities (for example, Arara and Kafr Qassem). These localities were not included in the calculation of the burden of early death in terms of GDP.

The assumptions used in calculating the loss of GDP due to death before the age of 65 include:

- Discount rate – 3.5%
- Employment rate – a uniform 74% for all
- A worker's year was assessed at NIS 343,385, which was the GDP per worker in 2012.
- Age when starting to work – 25
- Retirement age – 65
- If a person died after age 25, the flow of income was discounted from the age of death through age 65
- If a person died before age 25, the flow of income was discounted for the 40 potential years of work for the age at the time of death.

The calculations show that the total number of working years lost is 76,270. About 46,000 of them were caused by inequalities in mortality of children ages 0–4. Another 13,000 stemmed from inequalities in death rates at ages 55–64. The value of lost GDP resulting from inequalities in death rates and loss of working years amounts to **NIS 11,592 million annually**. This sum is mainly attributable inequalities to inequalities in the mortality of children ages 0–4 (NIS 3,814 million) and in the mortality of adults ages 55–64 (NIS 4,125 million). The discounted value of a working life year averages NIS 151,981. Assuming that these patterns also exist in the other localities in Israel, the value of lost GDP in the entire population (7.1 million residents) totals **NIS 13,950 million per year**.

Diagram 2B **Death rates per 1,000 people**



Source: Calculations by the team

The cost of additional medical treatment due to a poor state of health

Diagram 3 plots 243 urban localities (more than 2,000 residents) and regional councils – total population: 7.133 million. The diagram displays the relationship between the socio-economic score of these localities and the hospitalization rate per 1,000 people, adjusted for age (that is, the differences in the rates of hospitalization are not attributable to a different age distribution), during the years 1998–2002. The diagrams (the cloud of observations and the trend line) show a clear negative correlation between the locality's socio-economic level and the rate of hospitalization. The assumption is that the hospitalization rate is an indicator of the state of health (two reservations are raised below).

The equality target is 135.7 hospitalizations per 1,000 people, adjusted for age. This is the weighted average of the rate of hospitalization in 121 wealthy localities (the median socio-economic score is 0.12).

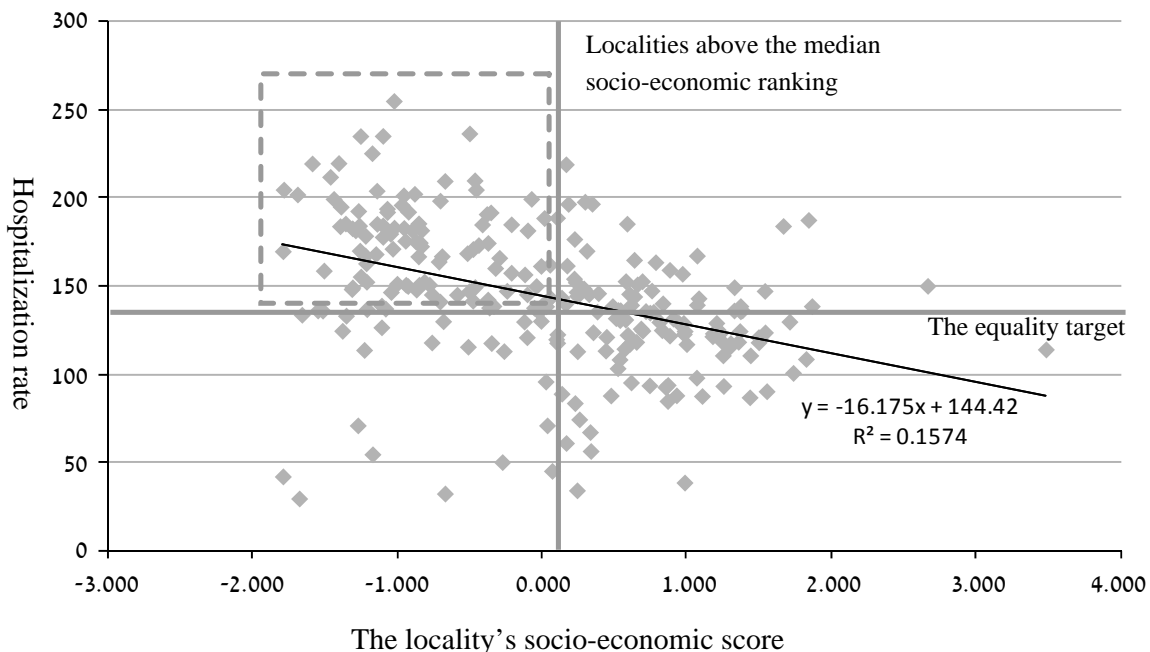
The diagram clearly shows that in many relatively poor localities the rates of hospitalization are low, and even lower than the equality target. These localities are concentrated in Diagram 3 in the lower-left quadrant. There appear to be two types of localities: (1) religious/ultra-Orthodox localities such as Modi'in Ilit, Emmanuel, Kiryat Ya'arim, and Gush Etzion. In these localities, the measured socio-economic level does not correctly represent the socio-economic factors that determine the state of

health and patterns of hospitalization. (2) Localities characterized by a low socio-economic level that suffer from low accessibility to hospitalization services, and therefore the hospitalization rates are low – despite a poor state of health. These localities include, for example, Al-Batuf, Zarzir, and Bustan al-Marj. These localities are not included in the calculation of additional hospitalizations. Therefore, the additional hospitalizations are from the poor localities where the hospitalization rates are higher than the equality target. They are concentrated in the diagram in the upper-left quadrant.

All in all, there were 1,030,362 hospitalizations in the entire population during this period. If all of the poor localities had reached the equality target, there would have been 73,861 fewer hospitalizations, about 7% of the total number of hospitalizations. The average cost of hospitalization is NIS 10,400 (in 2012 prices). Therefore, the economic burden of the additional hospitalizations attributable to inequality in health totals **NIS 768 million annually**.

The expenditure on hospitalization accounts for about 40% of the total expenditure on health services. Assuming that the patterns are similar in the other health services, we arrive at an initial estimate of the additional cost of health services due to health inequality of **NIS 1,920 million**. It is important to note that extrapolating the cost of additional hospitalization to all medical treatment is imprecise due to possible substitution between ambulatory medical treatment, which is relatively inexpensive, and hospitalizations that are considered relatively expensive medical treatment.

Diagram 3 **Rate of hospitalization per 1,000 people, adjusted for age**



Source: Calculations by the team

Summary: Total economic burden attributable to health inequalities in Israel (an initial and rough estimate)

The main component in the burden is the value of lost years of life due to inequalities in life expectancy among the localities (NIS 34–80 billion). The second in magnitude is the loss of GDP due to early death and early departure from the labor market (NIS 14 billion). The extra cost of medical treatment due to inequalities in health is relatively small (NIS 2 billion.)

If we adopt the valuation of the WHO for a year of lost life, then the total burden is **about NIS 96 billion**. This sum is equivalent to 13% of GDP and is approximately 1.5 times higher than the national expenditure on health in Israel in recent years. If we adopt the Ministry of Transportation's valuation of life, the burden totals about **NIS 50 billion**, or some 7% of GDP, which is slightly lower than the national expenditure on health in Israel. These percentages are higher than those in England (2%), but are close to those found in the European Union (10%).

In conclusion – two notes: First, in combining the two components of the burden – the cost of lost years of life according to the WHO's valuation of a year of life, and the cost of lost years of work – the years of lost work are counted twice. The use of the valuation of years of life as recommended by the Ministry of Transportation reduces the problem because this value represents, according to the prevailing economic theory, the value of the utility of these years, while the value of the lost work year according to an estimate of output represents the productive value of the year.

Secondly, the value of additional medical treatment due to inequalities in health reflects actual operational expenditures. The value of lost years of work also reflects the actual loss in GDP. However, the value of lost years of life reflects the cost of the loss of social welfare.

Ways to Achieve an Ongoing Reduction of Disparities in Health

Ran Balicer, Joseph Rosenblum

Inequalities in health are first and foremost a byproduct of social inequalities and of government policy. The widening gaps in the economic position, education, nutrition and infrastructure also create significant inequalities in health between the population groups. This unwarranted inequity does not necessarily stem from the activities or in activities of the health system.. This chapter will present new approaches to reducing inequalities in health, with an emphasis on models that will be economically sustainable from a national perspective.

Already today, entities within the health system (the Ministry of Health and the HMOs) are making efforts aimed at narrowing the inequalities in health (discussed in the first chapter above). Although these efforts show initial and encouraging signs of achievements, these achievements are still narrow in scope and do not provide a response for the broad problem of disparities in health. Our basic assumption is that the support budgets of the Ministry of Health and internal resources allocated from time to time within the health system contribute to reducing the disparities, but are insufficient for achieving a real reduction of the inequalities in health over time.

No one disputes the fact that a significant reduction of the inequalities in health in Israel can be achieved by narrowing the social gaps (primarily the inequalities in salary and education). However, this deep-rooted problem cannot be tackled solely through activity in the field of health. (We will not focus on this here.)

Instead, we wish to propose solutions based on another paradigm. We contend that by combining the forces of the health system and other support systems (social welfare, education and more), and in collaboration with the business sector and the third sector, it is possible to make an impact on and reduce inequalities in health in an effective way. We also believe that the central entities interested in and capable of effecting a real reduction in health inequalities via targeted and focused activity can be found in the market, and that there is economic logic in having the state utilize them. The main question the team will address is the market failure that today prevents the implementation of such initiatives, which ostensibly bring benefit to all of the parties involved.

The market failure we address derives from the fact that while the inequalities in health indeed create heavy economic costs for the state (as discussed in the second chapter), most of them are not directly imposed on the health system. Most of the economic burden caused by the inequalities – that is, from the deficient health of the weak population – stems from the decline in work productivity and an increase in the costs of support, welfare and assistance for the patient, directly, and also for his nuclear family and principal caretakers. We estimate that in some fields the overall economic

cost caused by the health inequalities is much higher than the cost of the intervention required for reducing them. Therefore, it seems, on the face of it, that the state has an economic interest (regardless of social views) to invest in targeted interventions as instruments for narrowing inequalities in health in well-defined fields in which this assumption applies.

An example of this market failure is acutely affecting the HMOs: The structure of the health market today does not encourage HMOs to engage in this type of activity of reducing inequalities and preventing morbidity, particularly in weak populations. The marginal economic benefit to the HMO in preventing one case of this type of morbidity is very limited because of buffer mechanisms that moderate and offset the economic value from the HMO's perspective. These mechanisms include the hard "floor" for hospital expenditures, the waiting lists and the high occupancy in hospitals most days of the year. Because of these three mechanisms, the prevention of a small number of potential hospitalizations will immediately enable the next patient waiting in line to reach the hospital bed, surgery or imaging station – but will not reduce the overall use of these hospital facilities. Therefore, in many cases the HMO cannot anticipate an economic return on investment, while the social welfare systems expect to see an immediate and clear return – for example, in preventing disability or unemployment allowances, where each decrease in the number of ill or disabled persons translates into real savings.

The burden of proof for the existence of the market failure and the worthwhileness of the investment requires the collection of additional data, and we are now working on this vis-à-vis various entities. However, viewing the market failure as a guideline for developing intervention programs for reducing inequalities can serve as a framework and initial step in planning. It will be relatively easy to demonstrate the market failure and intervene in the clinical fields that meet the following criteria:

1. Illnesses which are more prevalent in weak populations and which lead to chronic disruption of functioning at working age.
2. Illnesses for which there is effective intervention for prevention or for preventing the deterioration in functioning that is associated with the illness.
3. Illnesses for which the intervention aimed at prevention focuses on instruction, monitoring, promotion of health – and not only on prescribing medicinal treatment.

For example, the fields that meet these criteria, in our assessment, include:

1. Identifying and intervening in pre-diabetic situations – to prevent/delay a future onset of diabetes, particularly in the Arab sector.
2. Identifying and intervening in an initial difficulty in kidney function – to prevent/delay a future onset of kidney failure and dialysis, particularly among populations of low socio-economic standing.

3. Identifying and intervening in situations of cardio-vascular risk – to prevent/delay a future onset of ischemic heart disease and congestive heart failure, particularly among populations of low socio-economic position.
4. Preventing smoking and quitting smoking (among men) and maintaining proper weight (among women) in the Arab society – as a way to prevent/delay future onset of chronic heart and lung disease.
5. Genetic counseling in Arab villages that have a high rate of birth defects.

Even if the economic assumption of this market failure is proven, each separate sector and entity will still lack the economic interest (for example, the HMOs) or the practical ability (for example, the National Insurance Institute) to adopt the measures required for reducing inequalities in health. Therefore, it is necessary to develop instruments through which the general benefit to the state from reducing disparities will be translated into cost-saving investment in interventions. These interventions could be conducted by the third sector, with state funding, or could be conducted by national entities (HMOs, local authorities), which could achieve effective results with a given monetary investment. At the same time, economic and administrative tools must be developed to help the entities whose decisions exacerbate the inequalities internalize the full implications of their decisions.

There are several directions of action and policy that are worth examining in an effort to mobilize all of the entities that suffer from the economic repercussions of these inequalities (the ministries of Social Welfare, Economics, Labor, Finance, Interior, local authorities and employers), as well as all of the entities that could contribute in their activity to reducing the health inequalities (government ministries and their agencies in the local authorities, the HMOs, religious entities and the third sector), to participate in activity and funding of steps to reduce health inequalities – all this while relying on ongoing budgets (and not specially-targeted sporadic allocations) aimed at reducing disparities in health.

These directions of action and policy include the following:

1. **Creating an agreed-upon mechanism for funding initiatives for reducing disparities in exchange for the benefit they bring at the national level.** Creating a solution for the market failure via an agreed-upon calculation of the national benefit from success in intervention to promote health; and creating a mechanism of transfer and funding of entities engaged in conducting this intervention, commensurate with defined indexes of success, which can be directly translated into “real” cost-savings for the public entities that invest in this process.

Theoretically, this process could be funded and conducted by a single governmental or national entity, which would derive economic benefit from measures aimed at preventing the health damages stemming from health inequalities. However, in practice, the entity that develops the intervention array will need to show initiative, energetically engage in coordination

and supervision, and make a large initial investment. It is hard to assume that such a combination will exist without support and direction from above.

One of the most interesting mechanisms worth examining in this context is **social bonds**, which brings the third sector into this process. In many countries today, these bonds are already enabling the translation of social benefit (and in our case, health benefit) to economic value priced for the market by collecting the value from government entities that recognize the real benefit (for example, the National Insurance Institute, which will not need to pay an allowance to each patient whose illness is prevented or delayed to later in life) and transferring it to the entities that are successful in making achievements in the field of health. For example, in Britain it is customary to fund social interventions in rehabilitating prisoners in order to prevent their return to crime. The state invests the money and the return on investment is reflected in preventing the return to prison. In the same way, it is possible to fund intervention to prevent illness in weak populations. In this case, the return on investment for the state is expressed in a decrease in the allowances paid to this population. The process is funded by issuing social bonds that enable the government to share the risk and economic expectancy with business entities that purchase these bonds. These business entities enjoy monetary gain while also contributing to the society. In our assessment, the state has a real interest in supporting and promoting this type of mechanism in reducing disparities in health, and we know that the subject is now being studied at several government ministries.

2. **Establish an incubator for social entrepreneurship in the field of health inequalities.** In order to collect information on interventions that successfully reduce inequalities in health and can be funded in the types of governmental/business frameworks cited above, grants should be awarded for modest projects of feasibility studies under the auspices of “an incubator for social entrepreneurship in the field of health inequalities.” Possible monetary sources for funding this activity, in addition to government investment (full funding or matching grants), include philanthropic foundations and business entities (as part of their contribution to the community). In order to demonstrate potential return on investment by the public funding entity, the assessment and presentation of the quantifiable benefit should be also defined in each project as a central objective.
3. **Health (disparities) in all policies.** The aging of the population, the continual rise in the rates of chronic illness, pension pressures and the cultural change that emphasizes individual rights and the basic right to health – justify a revision in the executive branch’s position vis-à-vis the implications of its policies on the population’s state of health and on the widening of gaps in this area. Just as we have witnessed in recent years how the standard of environmental protection has increasingly affected the planning processes in various fields, the same should apply in regard to the field of health. Adapting a mandatory standard for examining the health repercussions (and repercussions on the widening of health inequalities) of key decisions in the work of all

government ministries could greatly contribute to long-term savings on health expenditures. In particular, it is possible to see two main paths of desired change in this context:

- **At the level of all government ministries:** There is a need to present decision-makers with detailed information on the health implications (with an emphasis on widening gaps in health) of each major decision that is liable to exacerbate existing inequalities in education, economics and employment. Rules should be defined for a health impact assessment in decisions that are expected to widen the inequalities in health.
 - **At the level of the Ministry of Health:** The ministry should maintain a regular and continuous array of monitoring the key decisions made at other government ministries and the impact of these decisions on health – particularly their potential for widening the gaps in health. The ministry should consider creating a dedicated department whose main assignment would be to conduct and publish complex assessments of this type.
4. **Activity aimed at narrowing health inequalities at the local level.** In general, we can say that the health system in Israel “skips over” the local authorities as an influential, involved and responsible factor in the health of the population. The Healthy Cities Network is an important and significant step in the right direction. However, joining the network today is by choice, and only 28 of the 225 localities are part of the network. With the exception of local **initiatives**, one city hospital and a number of well-baby clinics (in which the municipalities are involved), the localities have no defined, budgeted and assessed activity in the fields of health. The residents’ well-being, hygiene and sanitation are viewed (and budgeted) as part of the municipality’s direct responsibility, and health should also be added as an important component. Indeed, addressing the welfare and distress of weak populations and contending with the broad health damages in the second and third circles comprise an integral part of the work of the local authority.

A comprehensive health outlook – as an essential component in serving the citizen – requires a change in attitude at the municipal level and the addition of health promotion and disease prevention to the umbrella of services provided to the local resident. Accordingly, it is possible to consider the allocation of a dedicated and defined budget for developing and promoting health programs in the intermediate stage of instituting the responsibility in the local authorities, with a collaborative approach of the ministries of Health and Interior. In the first stage, the 20 (medium-sized to large) localities with the most problematic health profiles can be selected and targeted with integrated remedial efforts, while compensating the local authority in accordance with its investment and in accordance with how well it meets measurable objectives. In this first stage, a public obligation should be imposed on the mayors to build a health profile for their locality according to criteria and a defined model, and with the assistance of the Ministry of Health, in order to identify the main factors underlying the health inequalities among the local populations and between the locality’s population and relevant comparison populations.

5. **Activity by large employers in weak populations.** One of the principal stakeholders in promoting and maintaining health is the echelon of large employers. Tax benefits are offered today to develop a business in regions of low socio-economic standing and in weak population groups. Some of the tax advantages and benefits can be channeled in a way that helps both the employer and the local population. In the long-run, promoting health and preventing disease of employees (background morbidity that is not at all related to the hygiene and safety of the workplace) helps the employers, at least in sectors where the workers are employed for the medium-term or long-term. It has been demonstrated that a worker with an optimal health profile over the years is more efficient and inexpensive in the long run. One of the models that examined this subject found that an improvement of 0.1% in the survival rate of adults raises productivity at work by 8%.³² Since one of the leading inequalities in health is found in life expectancy, there is a clear correlation between narrowing health inequalities and increasing productivity at work. At the same time, it is important to remember that employers have clear capabilities of influence and persuasion, together with maximal availability and accessibility, and the perception of their responsibility for the employee can be expanded to include components of promoting and maintaining the employee's health. A connection between the workplace and lifestyles that promote and maintain health is today being made in large industries and high-tech firms. Providing economic incentives to employers is likely to promote such programs and enjoy the broad cooperation of the employees.
6. **Expanding the activity of community leaders (including religious leaders) to engage in the field of health.** Investment in initial prevention is the most effective (economically too) in preventing morbidity and, consequently, in narrowing health inequalities. Most of the prevention programs directly engage in modifying lifestyles in various areas. Weak populations tend to smoke more than strong populations, are less physically active, suffer more from obesity and consume less healthy and less balanced food. For example, the rate of smokers among Arab men in Israel is 43.8%, compared to 23.7% among Jewish men. According to the Central Bureau of Statistics, 70% of the Muslims in Israel define themselves as religious or very religious. The Ministry of Interior funds religious services for the various religious denominations. Encouraging leaders in these communities to use their influence in the health context could be a direct and effective way to make an impact. It should be added here that both Islam and Judaism view the protection and care of the body as an explicit commandment. Furthermore, projects conducted in the past by the HMOs in conjunction with these leaders have been successful in promoting the population's health.

³² D. E. Bloom and D. Canning, *Health and Economic Growth: Reconciling the Micro and Macro Evidence*, CDDRL Working Papers no. 42 (February 2005).

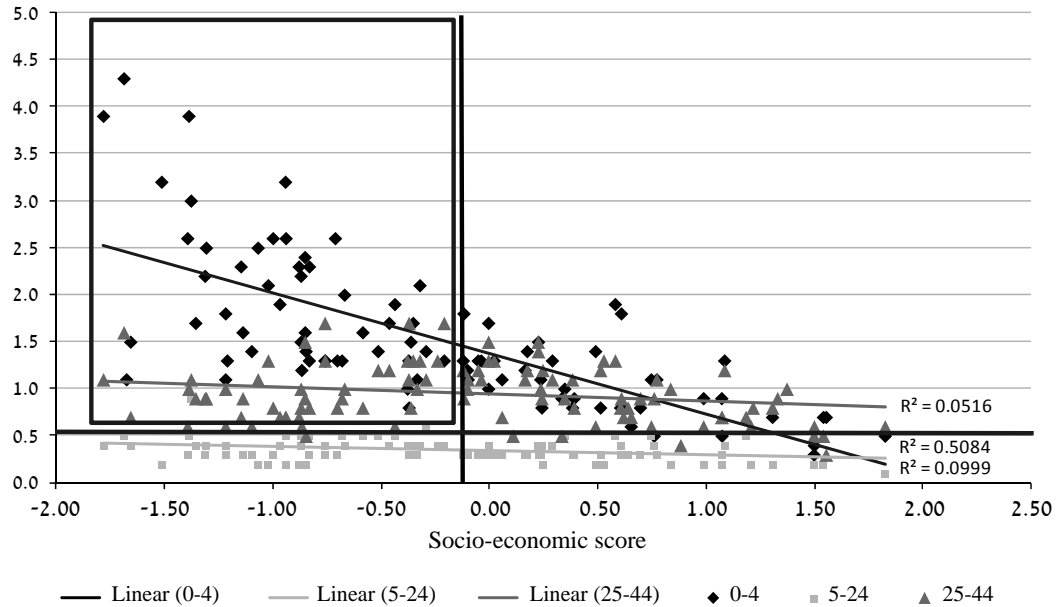
7. **Developing tracks of the National Service dedicated to promoting health and including additional sectors in National Service.** It is expected that in the near future The National Service will account for a growing share of young people of conscription age. The trends of legislation for equality in the burden make the National Service an alternative to the Israel Defense Forces and sectors that have a problem enlisting (Arabs and ultra-Orthodox Jews) will find it a suitable path for exercising their rights. Today, young women in the National Service are already very successfully deployed in hospitals. In the same way, it is possible to utilize this resource of in specific projects, particularly in weak populations. The placement of young people to teach and instill health habits in schools and in their immediate community (including the family) could be an additional path – one that is viewed as social-oriented and brings the community closer together. Moreover, those serving in the National Service are considered a significant reserve of personnel for the civilian branches of enforcement and supervision. Laws prohibiting smoking, the restricted sale of materials that are harmful to the health, etc. are failing due to a deficient array of enforcement.
8. **Removing regulatory barriers to virtual medical services in order to reduce geographic inequalities in accessibility.** Geographic inequalities and remoteness from the center are nearly inelastic constraints that exist in every country, particularly in conditions of insufficient resources and personnel. Today it is possible to develop increased accessibility of services based on technologies of telemedicine, virtual visits and the use of technological accessories. It is less expensive and more feasible to create a virtual service whose provider (call center, physician, caregiver, etc.) is located in a geographic location in accordance with the preferences of the service provider instead of transporting the service providers to the far corners of the periphery.

The Ministry of Health has yet to adopt telemedicine and the virtual visit as legitimate and sometimes preferable technology, and ministry regulations impose conditions and impediments on this. Openness toward removing the impediments and regulatory restrictions, and encouragement of service providers to enter this field are likely to be an additional tool for reducing health disparities between the geographic periphery and the center. Indeed, there are still disparities in access to digital services in the weak populations and, therefore, promoting virtual services in weak populations requires overcoming an additional obstacle – the technological feasibility. However, the myth of computer illiteracy in the older and weak populations is collapsing in a world of massive penetration of cellular telephony. The cost component of the technology is more significant, but today there are inexpensive and accessible computer technologies, and projects such as One Laptop Per Child (OLPC) have demonstrated that a massive distribution of computers at reasonable cost is possible.

In light of the heavy social and economic costs of the inequalities in health, the directions proposed above, as well as additional directions, should be examined in depth in order to achieve an effective and sustainable reduction in these inequalities.

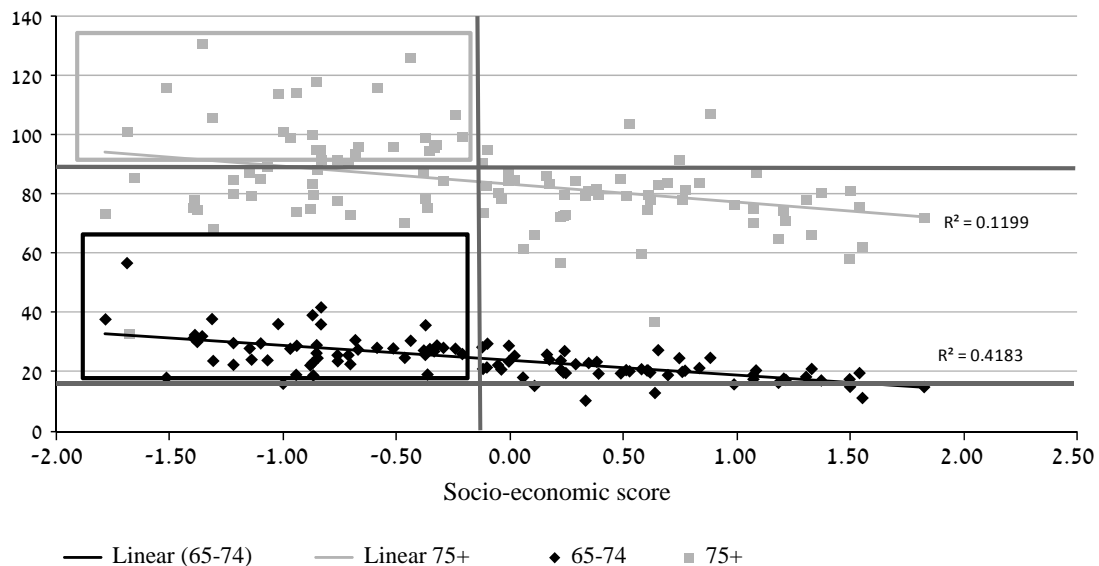
Appendix

Diagram 2A **Death rates per 1,000 people**



Source: Calculations by the team

Diagram 2C **Death rates per 1,000 people**



Source: Calculations by the team

Caesarea
Forum
Since 1992

The Eli Hurvitz Conference on Economy and Society



When the Start-Up Nation Matures

When the Start-Up
Nation Matures

November 6–7, 2013 Hilton Eilat Queen of Sheba Hotel, Eilat

Working Group

Head	Dr. Leonid Bakman , Founder and Executive Director, Israel Innovation Institute
Members	<p>Ms. Zika Abzuk Business Development Manager, Cisco</p> <p>Mr. Yarom Ariav, Chairman, Lavi Capital; Former Director General, Ministry of Finance</p> <p>Major Gen. (Res.) Prof. Isaac Ben-Israel, Chairman, Israel National Council for R&D; Head of Security Studies Program, Tel Aviv University</p> <p>Prof. Arnon Bentur, Vice President and Director General, Technion; Head of Technion International School</p> <p>Dr. Orna Berry, Corporate Vice President and General Manager, EMC Center of Excellence, Israel</p> <p>Prof. Haim Bitterman, Chief Physician Officer, Clalit Health Services</p> <p>Prof. Gili Drori, Department of Sociology, Hebrew University of Jerusalem; Israel Innovation Institute</p> <p>Prof. Zvi Eckstein, Dean, The School of Economics, The Interdisciplinary Center Herzliya – IDC</p> <p>Mr. Sami Friedrich, Managing Director, Shaldor</p> <p>Prof. Ehud Gazit, Chief Scientist, Ministry of Science, Technology & Space</p> <p>Dr. Daniel Gottlieb, Head of Research and Planning, National Insurance Institute of Israel</p> <p>Prof. Eugene Kandel, Head of the National Economic Council, Prime Minister's Office</p> <p>Mr. Kalman Kaufman, Chairman, Israel Innovation Institute</p> <p>Mr. Alex Kornhauser, Israel Innovation Institute; former CEO, Intel, Israel</p> <p>Prof. Zvi Livneh, Dean, Faculty of Biochemistry, Weizmann Institute of Science</p> <p>Mr. Boaz Mamo, Projects Director, Israel Innovation Institute</p> <p>Mr. Dan Marom, Researcher, lecturer, and consultant; Israel Innovation Institute</p> <p>Prof. Hagit Messer-Yaron, Vice-chair, Council for Higher Education</p> <p>Ms. Evgeniya Mogilevskaya, Research Director, Israel Innovation Institute</p> <p>Prof. Shlomo Mor-Yosef, Director General, National Insurance Institute of Israel</p>

Ms. Rinat Moshe, Analyst, Israel Innovation Institute

Mr. Amir Naiberg, CEO, Yeda, Weizmann Institute of Science

Mr. Yaron Neudorfer, CEO, Social Finance Israel

Mr. Netanel Oded, Economist, National Economic Council, Prime Minister's Office

Prof. Amalya Oliver, Department of Sociology, Hebrew University of Jerusalem; Israel Innovation Institute

Dr. Shlomi Parizat, Economic Consultant, Israel Innovation Institute

Mr. Micha Perlman, Manager of Higher Education and R&D Sector, Budget Division, Ministry of Finance

Mr. David Perlmutter, Executive Vice President, Chief Product Officer, Intel

Mr. Haim Rousso, Executive Vice President for Engineering and Technology Excellence, Elbit Systems

Prof. Uri Shani, SVP, Novel Technologies in Agriculture, Makhteshim Agan

Mr. Yoav Shlush, Co-chairman, IATI-Israel Advanced Technology Industries; Managing Partner, Aviv Ventures

Mr. Shoel Silver, CEO, The Metrontario Group, Toronto, Canada

Erez Vigodman, President and CEO, Makhteshim Agan Group

Mr. Dan Vilenski, Entrepreneur, Owner of Dan Vilenski Entrepreneurship

Mr. Avner Warner, Director of Economic Development, Tel Aviv Global & Tourism, Tel Aviv-Yafo Municipality

Prof. Shimon Yankelevitch, School of Physics and Astronomy, Tel Aviv University

Prof. Arie Zaban, Chemistry Department, Bar-Ilan University

Mr. Roni Zehavi, Serial Entrepreneur, Israel Innovation Institute

Abstract

The Vision: Positioning Israel as a Leading Global Center of Innovation

The knowledge revolution, as it builds and gains strength, has begun to penetrate into all economic sectors is bringing dramatic changes in fields such as health, agriculture, education, and transportation. These developments portend great promise for economic and social advancement, but this trend also poses a double challenge for Israel:

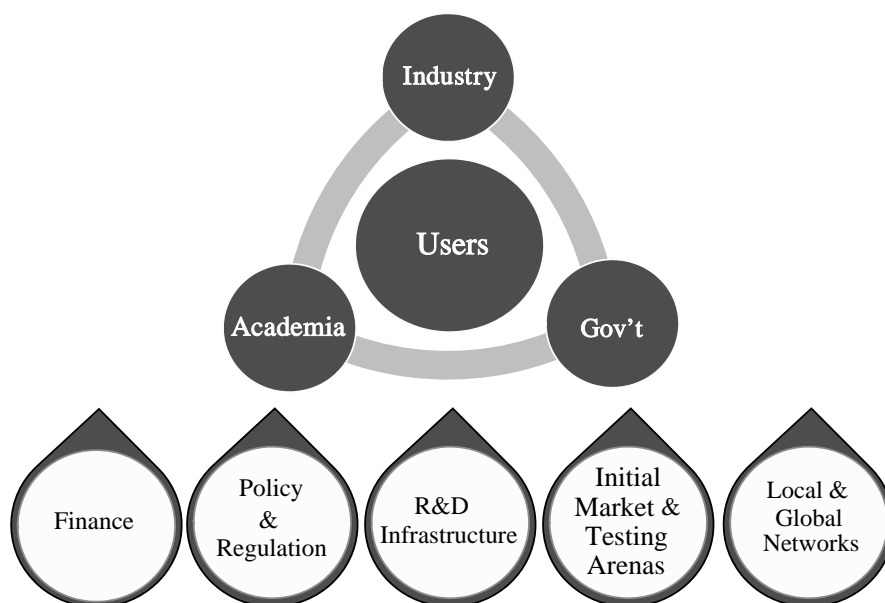
- Maintaining the state's competitiveness in the developing knowledge economy.
- Expanding the pervasiveness of innovation throughout the economy and ensuring inclusive growth and sustainable development.

To address these challenges, Israel must leverage its unique attributes, such as its being a small economy, Israeli cultural affinity to innovation, and the current status of the national system of innovation. Combined, these offer a solid foundation to position Israel as a leading center of global innovation. When global players (countries, companies, researchers, investors, and NGOs) seek a location to develop and test innovative solutions, Israel should be a competitive choice. The innovation supportive environment Israel can create will have both national and global significance. It will at once serve to ensure economic growth and sustainable development, contribute to Israel's global competitiveness, and hence, its geopolitical impact.

An Innovation Supportive Environment as the Foundation of Economic Growth and Improved Quality of Life

An innovation environment does not simply develop spontaneously or independently. Breakthroughs in fields such as health, education, transportation, energy, environment, and agriculture rely on the development of a proactive environment that encourages innovation. The elements involved in this ecosystem include policies and regulations, availability of infrastructure and R&D funding, trial markets, and the effective integration of consumers, researchers, developers and government officials; with continuous assessment, updating, and adjustment.

Figure 1 **Essential Components for an Effective Innovation Environment**



Formulate Objectives and Define the Innovation Process: Operational Recommendations

To be competitive in the global market, Israel must act on three primary levels:

1. **Adopt a unified vision for a national system of innovation.** Advancing this vision will enable Israel to position itself as a leading global innovation center based on core capacity as part of the global value chain in fields such as health, education, transportation, and the environment. This positioning will serve to ensure comprehensive and sustainable progress, contributing to global competitiveness and promoting Israel in the geopolitical arena.
2. **Revise the perception of policy and development of innovation support systems.** An innovation environment does not emerge on its own. The capacity for breakthroughs requires the development of a proactive network to support innovation that includes policy and regulation, availability of infrastructure and R&D funding, initial trial market, and effective integration between users, researchers, developers, government officials and NGOs. Historically, Israel has extended R&D support to academia, industry, and defense. There is no source for the promotion of an innovation environment for all sectors with enhanced infrastructure. For Israel to introduce the next generation to the field of international cooperation and realize this process, an action committee is needed to recommend mechanisms and institutions to support development of innovation networks. This might include the appointment of a senior management-level team close to innovation networks that will oversee development activities, the establishment of a

training program for managers, goal setting, promotion of an office of innovation, and organizational innovation. The process must be based on the integration of international research in support of the learning process from several test cases (see Recommendation 3).

3. **Promotion of test cases.** In the short term, there is leverage in existing processes and in developing innovation networks in areas of national need while undergoing a paradigm shift on the global level. These fields include health, education, agriculture, and innovation in the urban space. However, due to the lack of a systematic government strategy and process, it is not the intention of this document to recommend specific areas of development. The purpose of test cases mentioned here is to support the expanding concept of policy and to advance the vision of Israel as a leading center for global innovation.

Caesarea
Forum
Since 1992

The Eli Hurvitz Conference on Economy and Society



Charting a New Course for Israel's Civil Service

Charting a New Course
for Israel's Civil Service

November 6–7, 2013 Hilton Eilat Queen of Sheba Hotel, Eilat

Democratic Governance

The Working Group

Head

Dr. Gayil Talshir, Head, Top Civil Servants MA Program in Public Policy, School of Public Policy, Department of Political Science, The Hebrew University of Jerusalem

Mr. Ron Tzur, Chief of Staff, Reform Implementation Project, Israel Civil-Service

Members

Dr. Leonid Bakman, Founder and Executive Director, Israel Innovation Institute

Mr. Doron H. Cohen, C.P.A., Former Director General, Ministry of Finance

Mr. Benny Daon, Co-founder, The Public Knowledge Workshop

Prof. Momi Dahan, Senior Fellow, The Israel Democracy Institute; Head of the Federmann School of Public Policy and Government, The Hebrew University of Jerusalem

Prof. Shlomo Hasson, Head of the Shasha Center for Strategic Studies, The Hebrew University Jerusalem

Ms. Tzofit Hay, Head of Government Service Improvement Service

Dr. Israel Katz, Senior Lecturer and Head of Organizational Studies, Department of Sociology, The Hebrew University of Jerusalem; CEO, Zofnat Institute for Research, Development and Consulting

Dr. David Levi-Faur, Associate Professor, School of Public Policy and Department of Political Science, The Hebrew University of Jerusalem

Dr. Iris Nehemia, Director, Management Doctrine & Knowledge Management, Civil Service Commission HR Reform Implementation Project, Prime Minister's Office

Mr. Zion Regev, Social Responsibility Manager, Gazit-Globe

Mr. Yekoutiel (Couty) Sabah, Director, Research, Planning and Training Division, Israel Ministry of Social Affairs and Services

Mr. Ronen Shapira, Senior Director of Human Resources Strategic Planning & Policy Department, Civil Service Commission HR Reform Implementation Project, Prime Minister's Office

Dr. Varda Shiffer, Research Fellow, Education Department, Privatization and Regulation Department, The Van Leer Jerusalem Institute

Dr. Tehilla Shwartz-Altshuler, Senior Researcher, The Israel Democracy Institute

Abstract

Two seminal crises challenge the developed democracies today—the crisis of legitimacy of representative democracy and the economic crisis of the era of globalization. Both have contributed to real erosion in the status of public service in general and of civil service in particular. The crisis of legitimacy stems in part from the weakening of reciprocal relations between the elected and professional echelon, on the one hand, and the citizenry, on the other hand. This generates increasing distrust among the citizens in regard to politics and the mechanisms of civil service. Neo-liberalism, the dominant ideology of the past generation, contends that the civil service is not efficient, is mediocre in quality, and is incompetent. Thus, it promoted privatization and outsourcing of large parts of what has traditionally been regarded as roles of the civil service. The economic crises of the past decade are integrally connected to neo-liberalism and its international legitimacy. Thus, to counter the image of bureaucracy as the mother of all sins, a fundamental rehabilitation of the self-image and public image of the civil service is needed, and its role in both the political arena and the economic arena must be redefined.

This document charts the outline of a new paradigm for democratic governance in the civil service, based on three components:

- The citizenry in an advanced democracy
- The state in the era of a knowledge society
- The roles of the civil service

The concept of **democratic governance** stands at the center of the proposed paradigm. Governance represents all of the processes related to governing, decision making, balances of power and policy leadership—by the government, the market, policy networks, enterprises, informal organizations, international corporations, and other entities.¹ Contrary to the view that identifies governing exclusively with the government and governmental bodies, this view of governance speaks about the interaction between the entities involved in shaping policy.

The document proposes an inclusive view of the citizenry that would facilitate a rebuilding of trust and dialogue, and forge essential understandings for democratic legitimacy. The paper focuses on a different structure for the civil service, one that is citizen-oriented and whose key role—in addition to providing sound and professional service to the citizens—is to create long-term strategic planning. This, in turn, would spawn policy networks that call upon the relevant players—including the research community, civil society, stakeholders, the private market, and the public—to formulate, develop, and implement policy. The public service would function as a professional hub,

¹ Mark Bevir, *What is Governance: A Very Short Introduction*, Oxford University Press, UK, 2012

with a service mentality and constitutive ethos, creating policy and facilitating democratic governance. It would serve as an important axis for restructuring the roles of the state and rehabilitating democratic legitimacy.

Recommendations

The operative recommendations of the paper focus, on the one hand, on changing the organizational culture in the civil service in this spirit, and on the other hand, on conducting pilot studies—such as building a broad infrastructure based on collaboration and establishing research centers associated with the National Economic Council, with the aim of developing long-term strategic thinking.

- **At the level of changing the organizational culture:** This change would entail creating a framework in which the civil service concentrates on the connection between the citizen and the state, and generates a culture of trust, professionalism, and service orientation that enables partnership and reinforces the democratic legitimacy of the institutionalized system. The civil service would become an entity that coordinates, integrates, and facilitates the creation of relevant policy networks for the various policy areas. The civil service's unique knowledge is based on aggregating processes of initiating, designing, leading, and implementing policy. The culture of the civil service would become one that facilitates collaboration, builds trust within and between government ministries, and between the national and local governments, as well as cross-sector trust between the political system, civil society and the private market, and between stakeholders and the government. The civil service would also enable and promote significant public involvement as part of the policy networks.
- **At the level of strategic thinking:** These principles are applied in organizations that engage in writing annual situation assessments and in the National Economic Council, as an integrator. We recommend initiating collaboration with research bodies, think tanks, and professional entities in the civil society that could provide information, contribute to the assessment, create a reliable picture of future needs and propose ways for the state to respond to them. The more concrete recommendation is to establish think tanks that would work alongside the council and conduct a “top down” change in the civil service as an integrating and coordinating body.

Management and Labor Relations in the Civil Service

The Working Group

Head **Mr. Ilan Levin**, Economic Consultant; Head of Labor and Human Resources Division, Manufactures Association of Israel; Former Head of Wages, Ministry of Finance

Members

Mr. Moshe Behar, Ministry of Finance

Ms. Ester Dominissini, Chair, Hadassah Medical Organization Board of Directors

Prof. Abraham (Rami) Friedman, Dean, Sarnat School of Management

Ms. Alex Kaganov, Referent of Macroeconomics and HR Policies, Budget Department, Ministry of Finance

Ms. Dorit Perchik, Adv., Tene-Perchik Consulting Ltd.

Mr. Yuval Rachlevsky, Chair, Executive Committee, Jezreel Valley College

Mr. Udi Remer, Manager of Macroeconomics and HR Policies, Budget Department, Ministry of Finance

Shlomo Shani, Chairman, Technological and Engineering Education Center

Prof. Eran Vigoda-Gadot, Chair, School of Political Science, University of Haifa

Mr. Mazar Yuval, Economist, Research Division, Bank of Israel

Abstract

In recent years, public sentiment has grown stronger about the need for a substantive improvement in the operative capabilities of the civil service – inter alia, by modifying the mechanisms of labor relations and management. The question of work relations and management in the civil service has been the focus of numerous committees that were formed to examine alternatives to the structure of civil service and administration, and to define an agenda for implementing reforms. Ideas proposed for structural reforms in the civil service via academic research and the activity of these and other committees have attracted attention and interest for over a decade. This is beneficial in keeping the subject of change and reform on Israel's public agenda and offering up-to-date and creative ideas for enhancing administration.² However, upon close examination, we see that these proposals focus on the organizational, structural, and monetary array of the branches of government. None of them include an approach that says: Through cooperation and building trust between all of the parties involved (the public, the government, and the sides in labor relations), it is possible to arrive at reforms and achievements. Civil service reform is now being discussed in negotiations between the government teams that worked to formulate this reform and the Histadrut labor federation. In our view, this reform also misses a key aspect: trust between the public, the government, unions and all of the parties involved in the labor relations. This trust is the key to the implementation and success of any reform.

The goal of this document is to propose a general policy outline and recommendations for action in order to improve the efficiency of the civil service in Israel and in order to enhance the level of service for the citizen. The outlines of the proposed reform are based, first and foremost, on discussion and relations of trust between all of the parties cited above. Indeed, without this, joint action is impossible and there is no pooling of forces and resources for creating real change in any social area that could be called a “dramatic change in policy.” It is difficult for unilateral reforms to succeed, even when they reflect, objectively, the right thing to do. This document represents the approach that says: Only with cooperation and increased trust between all of the parties involved—the public, the workers, the employers, and the government—is it possible to reach reforms and achievements.

This document discusses the two sides of the relations of trust that any reform must focus upon—between the civil service and the civil society it comes to serve;³ and, primarily within the

² For example, see D. Nachmias, M. Danon-Karmazin and A. Yar'oni, *Toward Structural Change in the Public Sector in Israel*, Policy Research 5, Jerusalem: Israel Democracy Institute, 1997 [Hebrew]; A. Ben-Bassat, *Report of the Public Committee for Income Tax Reform*, Ministry of Finance, 2000 [Hebrew].

³ For more on this subject, see the document **Democratic Governance: Integration and Inclusion in the Civil Service**, which was also written for the 2013 Eli Hurvitz Conference on Economy and Society [Hebrew], and the English abstract.

civil service, between the sides involved in labor relations. The generally negative image of government and public administration in the eyes of the citizenry, and the relatively low level of trust in them are often explained as if they were a direct result of the civil service's performance, of convoluted processes associated with it, of its lack of flexibility and sensitivity to the needs of the public, and of the "bureaucratic sluggishness" it represents in providing suitable solutions for urgent problems. One of the important steps in boosting trust between the public and the government is to restore trust between the parties involved in labor relations in the economy and to encourage cooperation between them in order to better utilize the society's public and collective resources and in order to provide improved service for the citizenry. Cooperation between the sides is what is needed in order to introduce reforms and modernization in the civil service in Israel.

In this document, several reasons are suggested for the loss of trust between the sides in the system and for the decline in the quality of the services provided:

- Commitments in agreements whose feasibility was not sufficiently checked by the parties to the agreement.
- A mutual failure to comply with signed agreements—by both the employers and the unions.
- Lack of desire by the Histadrut to enforce the local union's compliance with agreements.
- Abuse of the mechanism of tenure for workers and lack of incentive for excellence.
- Outdated work agreements that harm productivity and the ability to manage, create a wage structure that lacks incentive, and hamper the organization's ability to manage and innovate in a changing environment.
- Technological innovation that has not been absorbed in the civil service (unsuitability of the public service for the modern economy).

That is, in order to get the Histadrut to accept changes in the wage structure (a critical condition for implementing any change), we must build a model in which the Histadrut has an incentive to cooperate.

Recommendations

The team's conclusion—based on many studies emphasizing the centrality of trust as an essential tool in processes of reform and the significant leverage it creates for the success of the processes of change—is that cooperation between the parties involved in labor relations must focus on eight activities:

1. Changing the old and cumbersome wage structure.

2. Creating a connection between the individual's performance and advancement, salary, and continued employment in the public service, as well as strengthening the connection between compensation for the group as a whole and its performance, as measured in structured methodology.
3. Improving mechanisms of selection, recruitment and termination of employment.
4. Improving managerial abilities in the civil service.
5. Improving the mechanisms for termination of work, voluntarily or at the employer's initiative—for retirement, prior to retirement age or for severance pay—without payment of an allowance prior to the age of pension entitlement.
6. Decentralizing the regulatory mechanisms.
7. Shifting power from the leaders of the Histadrut to the local organizations in regard to the authority to reach agreements and manage the labor relations.
8. Privatization and structural changes.

Caesarea
Forum
Since 1992

The Eli Hurvitz Conference on Economy and Society



From Encouraging Employment to Boosting Productivity

From Encouraging Employment
to Boosting Productivity

November 6–7, 2013 Hilton Eilat Queen of Sheba Hotel, Eilat

Working Group

Head	Prof. Michel Strawczynski , Professor of Economics and Public Policy, Hebrew University of Jerusalem; Head, Economics and Society Program, Van Leer Jerusalem Institute
Members	<p>Dr. Eyal Argov, Head of the Real-Macro Unit, Research Department, Bank of Israel</p> <p>Ms. Daphna Aviram-Nitzan, Head of Economics Research Department, Manufacturers Association of Israel</p> <p>Mr. Adi Brender, Director of Macroeconomics and Policy, Research Department, Bank of Israel</p> <p>Mr. Alon Etkin, Senior Economist and Advisor to Director of Budget Department, Ministry of Finance</p> <p>Mr. Assaf Geva, Senior Economist, Economics and Research Division, Ministry of Finance</p> <p>Ms. Israela Many, Deputy Managing Director for Economics and Taxes, Federation of Israeli Chambers of Commerce</p> <p>Ms. Ayelet Nir, Chief Economist and Strategist, Psagot Investment House</p> <p>Dr. Michael Sarel, Director of Economics and State Revenues, Ministry of Finance</p> <p>Ms. Nira Shamir, Chief Economist, Israel Discount Bank</p>
Research assistant	Ms. Michal Gordon , School of Public Policy, Hebrew University of Jerusalem

Abstract

According to demographic projections by the Central Bureau of Statistics, the proportion of Arabs and Haredim (ultra-Orthodox Jews) in the population will increase from 30% in 2009 to 50% in 2059. The two populations are characterized by a low level of participation in the labor market, a low number of hours per employee, and low productivity. The demographic changes imply a substantial structural change in the Israeli economy in light of the lower participation patterns of these sectors in employment and education. The numbers cited above mean that **the growth rate of the non-Haredi Jewish population of prime working age is expected to drop from 1.8% per year during the past decade to 0.4% during the next two decades**. Starting in 2003, the government implemented a series of measures based on the approach known as “from welfare to work,” combining cutbacks in child allowances and increased support for daycare facilities. Subsequently, in 2008, a program of supplemental income grants was implemented for low-wage workers (“earned income tax credit”). Since then, the employment rates of Arabs and Haredim have risen significantly more than that of non-Haredi Jews. However, the former are typically employed in fields characterized by relatively low wages and a dearth of human capital. Thus, the massive entry of Arabs and Haredim into the labor market was accompanied by a widening of wage disparities: The average real wage of Haredi men even declined during the years 2004–2011. This picture reinforces the recognition that while entering the workforce is indeed an essential condition for improving the situation of these groups (relative to a situation of dependency on transfer payments), it is not a sufficient condition for ensuring ongoing improvement in productivity.

The team reached the conclusion that despite the success in boosting employment figures, the stage of integrating Arabs and Haredim in low-wage jobs did not enable these sectors to catch up to the rest of the population and thus should be seen as an intermediate stage. The team emphasized the need to move on to a more advanced stage based on integrating these groups in fields that offer higher added value, characterized by higher human capital and wages, such as the branches of technology.

With this goal in mind, a new program is recommended for the Arab and Haredi sectors—“from employment to productivity.” The new program requires a change of perspective in the utilization of policy tools: The emphasis should be on increasing productivity. A salient factor underlying this program is the low participation in higher education among the Haredim and Arabs relative to the non-Haredi Jewish population. In fact, the disparities in education are even more extreme than in the field of employment. Non-Haredi Jews receive matriculation certificates at much higher rates than the other two populations; and in regard to academic degrees, the ratio is 4 to 1 vis-à-vis Haredim and 3.2 to 1 vis-à-vis Arabs.

The proposed program includes, among others, the following measures:

1. **Require study of core subjects in Haredi education.** The government recently decided to make the funding of Haredi educational institutions conditional upon teaching a core curriculum. This measure is vital for the proposed change in that it provides basic tools for the Haredi population that are essential for their integration in advanced education and for their subsequent employment in a range of economic branches, in particular, in the branches of technology. Thus, there must be verification that this decision is really enforced in full scope and in the shortest possible timeframe, while allocating the required resources for this.
2. **Teach the Hebrew language at a younger age in Arab society.** Fluency in the Hebrew language is a basic component in the integration of Arabs in the advanced branches of the labor market. Instead of starting to teach Hebrew in the third year of elementary school (Grade 3), we recommend introducing the study of Hebrew earlier.
3. **Continue to strengthen the system of daycare facilities.** We recommend continuing the effort to improve daycare facilities, which is now in an advanced process of implementation.

The Eli Hurvitz Conference on Economy and Society

Caesarea
Forum
Since 1992



November 6–7, 2013

Hilton Eilat Queen of Sheba Hotel, Eilat

4 PINSKER STREET, POB 4702, JERUSALEM 9104602, ISRAEL

 Israel Democracy Institute / Tel : 02-5300888

WWW.IDI.ORG.IL

