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**KNOWLEDGE ECONOMY AND EDUCATIONAL POLICY IN  
ISRAEL IN THE CONTEXT OF GLOBALIZATION**

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**Author**

**MASHAL Lama**

**Scientific supervisor**

**GOLOVATAIA Ludmila**

Doctor of Economics, Ph.D.,  
Associate Professor

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**UNIVERSITATEA DE STAT DIN MOLDOVA**  
**ȘCOALA DOCTORALĂ ȘTIINȚE JURIDICE ȘI ȘTIINȚE ECONOMICE**

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**ECONOMIA CUNOAȘTERII ȘI POLITICA EDUCAȚIONALĂ**  
**ÎN ISRAEL ÎN CONTEXTUL GLOBALIZĂRII**

Teză de doctor în științe economice  
521.02 Economie mondială; Relații economice internaționale

**Author**

**MASHAL Lama**

**Conducător științific**

**GOLOVATAIA Ludmila**

doctor in economy,  
conferențiar universitar

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## CONTENTS

<b>ADNOTARE .....</b>	<b>6</b>
<b>ANNOTATION.....</b>	<b>7</b>
<b>АННОТАЦИЯ .....</b>	<b>8</b>
<b>LIST OF ABBREVIATIONS .....</b>	<b>9</b>
<b>LIST OF FIGURES.....</b>	<b>12</b>
<b>INTRODUCTION .....</b>	<b>14</b>
<b>1. THEORETICAL ASPECTS OF ECONOMY KNOWLEDGE AND EDUCATIONAL POLICY IN THE GLOBAL WORLD .....</b>	<b>22</b>
1.1. Concept and approaches to defining the knowledge economy.....	22
1.2. The role of educational policy in the knowledge economy in the context of globalization...	38
1.3. Directions for assessing the effectiveness of educational policy in the context of the knowledge economy .....	56
1.4. Conclusions to Chapter 1 .....	71
<b>2. ANALYSIS OF THE DEVELOPMENT OF ECONOMY AND KNOWLEDGE OF ISRAEL AS A FACTOR OF EDUCATIONAL POLICY .....</b>	<b>73</b>
2.1. Diagnostics of the knowledge economy in educational policy at the international level.....	73
2.2. Study of the educational system and educational policy of Israel.....	97
2.3. Influence of factors on the implementation of the concept of the knowledge economy in Israeli educational policy.....	115
2.4. Conclusions to Chapter 2.....	129
<b>3. IMPROVING ISRAEL'S EDUCATIONAL POLICY IN THE CONTEXT OF ISRAEL'S KNOWLEDGE ECONOMY AND GLOBALIZATION CONDITIONS.....</b>	<b>131</b>
3.1. Improving Israeli educational policy based on the model of integrating the concept of the knowledge economy .....	131
3.2. Development of structural components of a model for integrating the concept of the knowledge economy into Israeli educational policy .....	146
3.3. Assessing the effects of Israeli educational policy in the context of globalization.....	166
3.4. Conclusions to Chapter 3.....	179
<b>GENERAL CONCLUSIONS AND RECOMMENDATIONS .....</b>	<b>181</b>
<b>BIBLIOGRAPHY.....</b>	<b>185</b>
<b>APPLICATIONS.....</b>	<b>201</b>
Appendix 1. Evolutionary stages of development of the knowledge economy .....	202
Appendix 2. Characteristics of researchers' approaches to determining educational policy.....	203

Appendix 3. The dual nature of education policy .....	204
Appendix 4. World Education Index for 2021 .....	205
Appendix 5. Dependence of the education index on government funding in the education system of European countries, 2021 .....	210
Appendix 6. Dependence of the education index on government funding in the education system of Asian countries, 2021 .....	212
Appendix 7. Dependence of the education index on government funding in the education system of African countries, 2021 .....	214
Appendix 8. Dependence of the education index on government funding in the education system of American countries, 2021 .....	216
Appendix 9. Education level – region Europe.....	218
Appendix 10. Education level – region Africa.....	220
Appendix 11. Education level – region Asia.....	222
Appendix 12. Education level – region America .....	224
Appendix 13. Education level – all regions.....	225
Appendix 14. Global knowledge index by pillars .....	226
Appendix 15. Global knowledge index by years, 2020-2023 .....	228
Appendix 16. Global Innovation Index by years, 2020-2023 .....	229
Appendix 17. Global Innovation Index by pillars, 2023 .....	231
Appendix 18. Educational institutions by indicators in the Republic of Moldova, 2019-2023 ..	233
Appendix 19. Structure of the Israeli education system.....	234
Appendix 20. Student application to higher education in Israel, by faculties and years.....	235
Appendix 21. Colleges budget by sub-sections (thousand USD) 2017 -2021 .....	236
Appendix 22. Education expenditures funding in 2020 by types.....	237
Appendix 23. Strategic guidelines for educational policies of higher education institutions in Israel in the context of globalization .....	238
Appendix 24. PEST analysis of the Israeli education system .....	239
Appendix 25. The contribution of economic factors to integration of the knowledge economy in Israel .....	242
Appendix 26. The key categories: economic factors / economic outputs and values, Israel, 2000-2020 .....	245
<b>RESPONSIBILITY STATEMENT .....</b>	<b>246</b>
<b>IMPLEMENTATION LETTERS .....</b>	<b>248</b>
<b>CURRICULUM VITAE .....</b>	<b>249</b>

**ADNOTARE**  
la teza de doctor în științe economice  
**"ECONOMIA CUNOAȘTERII ȘI POLITICA EDUCAȚIONALĂ ÎN ISRAEL ÎN CONTEXTUL  
GLOBALIZĂRII"**  
**Lama Mashal, Chișinău, 2024**  
Specialitate 521.02 Economie mondială; Relații economice internaționale

**Structura disertației:** introducere, trei capitole, concluzii generale și recomandări, bibliografie din 221 titluri, 26 anexe, 171 pagini de text principal, 41 de figuri, 28 de tabele. Rezultatele au fost publicate în 16 articole științifice.

**Cuvinte cheie:** economia cunoașterii, globalizare, politică educațională, relații economice internaționale, sistem educațional, cooperare internațională în educație.

**Scopul studiului** este de a dezvolta un model de îmbunătățire a politicii educaționale a Israelului, integrând elemente cheie ale economiei cunoașterii, în vederea stimulării cooperării internaționale productive în domeniul educației și îmbunătățirii în continuare a strategiilor educaționale și a direcțiilor de dezvoltare în contextul globalizării.

**Obiectivele cercetării:** descrieți conceptul și abordările pentru definirea economiei cunoașterii; caracterizarea rolului politicii educaționale în economia cunoașterii în contextul globalizării; să prezinte o evaluare a eficacității economiei cunoașterii în contextul globalizării; stabilirea direcțiilor de evaluare a eficacității politicii educaționale în contextul economiei cunoașterii; realizarea unui diagnostic al economiei cunoașterii în politica educațională la nivel internațional; efectuează cercetări asupra sistemului de învățământ și politica educațională israeliană; defini influența factorilor asupra implementării conceptului economiei cunoașterii în politica educațională israeliană; dezvoltarea modalităților de îmbunătățire a politicii educaționale bazate pe un model integrat al economiei cunoașterii; dezvoltarea componentelor structurale ale unui model de integrare a conceptului economiei cunoașterii în politica educațională israeliană; dezvoltarea unui sistem de evaluare a efectelor politicii educaționale israeliene în contextul globalizării.

**Noutatea și originalitatea științifică** constă în următoarele aspecte: dezvoltarea unei definiții proprii a economiei cunoașterii, care include esența economiei cunoașterii în contextul globalizării; a fost elaborat și propus pentru implementare un model de introducere a conceptului economiei cunoașterii în politica educațională israeliană în contextul globalizării; se formează modalitățile și etapele de aplicare a modelului, care se exprimă în scopuri strategice; A fost elaborată o evaluare a eficacității modelului, care poate fi utilizată atât la nivel de stat, cât și la nivel universitar.

**Rezultatele obținute, care contribuie la soluționarea problemei științifice,** constau în fundamentarea din punct de vedere științific și metodologic a necesității dezvoltării unui model de îmbunătățire și introducere a conceptului economiei cunoașterii în politica educațională a Israelului, care să devină un stimulent pentru construirea de relații internaționale productive pe probleme educaționale pentru a facilita implementarea cu succes a practicilor și strategiilor educaționale inovatoare în concordanță cu principiile unei lumi globalizatoare. Acest fapt promovează o cooperare mai strânsă între Israel și alte țări în domeniul educației, prin schimbul de cunoștințe și experiență. O astfel de interacțiune va contribui la consolidarea poziției sistemului educațional israelian pe scena mondială și la îmbogățirea mediului educațional al acestuia.

**Semnificația teoretică a studiului** este de a oferi o alternativă rațională, fezabilă și aplicabilă de idei, concluzii și recomandări care să contribuie la dezvoltarea sistemului de formare educațională la toate nivelurile în Israel.

**Semnificația aplicată a lucrării** disertația este de a dezvolta un model specific pentru introducerea aspectelor conceptuale ale economiei cunoașterii în politica educațională israeliană, ținând cont de procesul de globalizare din lume. În plus, autorul a propus obiective strategice pentru uz guvernamental și pentru instituțiile de învățământ în legătură cu procesul de implementare a modelului. Un rezultat practic important este dezvoltarea unui sistem de evaluare a eficacității politicii educaționale după modificările aduse pentru îmbunătățirea acesteia.

**Implementarea rezultatelor științifice.** Rezultatele dezvoltărilor științifice ale autorului sunt reflectate în 16 articole publicate în reviste științifice și sub formă de discursuri la conferințe de specialitate.

ANNOTATION  
to the doctoral thesis in economics  
"KNOWLEDGE ECONOMY AND EDUCATIONAL POLICY IN ISRAEL IN THE CONTEXT OF  
GLOBALIZATION"

Lama Mashal, Chisinau, 2024

Specialty: 521.02. World economy; International economic relations

**Structure of the dissertation:** introduction, three chapters, general conclusions and recommendations, bibliography of 221 titles, 26 appendices, 171 pages of main text, 41 figures, 28 tables. The results were published in 16 scientific articles.

**Key words:** knowledge economy, globalization, educational policy, international economic relations, education system, international cooperation in education.

**The purpose of the study** is to develop a model for improving Israel's educational policy, integrating key elements of the knowledge economy, in order to stimulate productive international cooperation in the field of education and further improve educational strategies and development directions in the context of globalization.

**Research objectives:** describe the concept and approaches to defining the knowledge economy; characterize the role of educational policy in the knowledge economy in the context of globalization; determine directions for assessing the effectiveness of educational policy in the context of the knowledge economy; conduct a diagnosis of the knowledge economy in educational policy at the international level; conduct research on the education system and Israeli educational policy; define the influence of factors on the implementation of the concept of the knowledge economy in Israeli educational policy; develop ways to improve educational policy based on an integrated model of the knowledge economy; develop structural components of a model for integrating the concept of the knowledge economy into Israeli educational policy; develop a system for assessing the effects of Israeli educational policy in the context of globalization.

**Novelty and scientific originality** lies in the following aspects: the development of our own definition of the knowledge economy, which includes the essence of the knowledge economy in the context of globalization; a model for introducing the concept of the knowledge economy into Israeli educational policy in the context of globalization has been developed and proposed for implementation; the ways and stages of applying the model are formed, which are expressed in strategic goals; An assessment of the effectiveness of the model has been developed, which can be used both at the state level and at the university level.

**The results obtained, which contribute to the solution of the scientific problem** consist in substantiating from a scientific and methodological point of view the need to develop a model for improving and introducing the concept of the knowledge economy into the educational policy of Israel, which should become an incentive for building productive international relations on educational issues in order to facilitate the successful implementation of innovative educational practices and strategies consistent with the principles of a globalizing world. This fact promotes closer cooperation between Israel and other countries in the field of education, through the exchange of knowledge and experience. Such interaction will help strengthen the position of the Israeli education system on the world stage and enrich its educational environment.

**The theoretical significance of the study** is to provide a rational, feasible and applicable alternative of ideas, conclusions and recommendations that will contribute to the development of the educational training system at all levels in Israel.

**Applied significance of the work** dissertation is to develop a specific model for introducing the conceptual aspects of the knowledge economy into Israeli educational policy, taking into account the process of globalization in the world. In addition, the author proposed strategic objectives for government use and for educational institutions in connection with the process of implementing the model. An important practical result is the development of a system for assessing the effectiveness of educational policy after the changes made to improve it.

**Implementation of scientific results.** The results of the author's scientific developments are reflected in 16 published articles in scientific journals and in the form of speeches at specialized conferences.

## АННОТАЦИЯ

### к диссертации на соискание ученой степени кандидата экономических наук «ЭКОНОМИКА ЗНАНИЙ И ОБРАЗОВАТЕЛЬНАЯ ПОЛИТИКА В ИЗРАИЛЕ В УСЛОВИЯХ ГЛОБАЛИЗАЦИИ»

Лама Машал, Кишинев, 2024

Специальность: 521.02. Мировая экономика; Международные экономические отношения

**Структура диссертации:** введение, три главы, общие выводы и рекомендации, библиография из 221 наименований, 26 приложений, 171 страниц основного текста, 41 рисунка, 28 таблиц. Результаты опубликованы в 16 научных статьях.

**Ключевые слова:** экономика знаний, глобализация, образовательная политика, международные экономические отношения, система образования, международное сотрудничество в образовании.

**Цель исследования** - разработка модели совершенствования образовательной политики Израиля, интеграции ключевых элементов экономики знаний, с целью стимулирования продуктивного международного сотрудничества в сфере образования и дальнейшего совершенствования образовательных стратегий и направлений развития в условиях глобализации.

**Задачи исследования:** описать концепцию и подходы к определению экономики знаний; охарактеризовать роль образовательной политики в экономике знаний в условиях глобализации; определить направления оценки эффективности образовательной политики в контексте экономики знаний; провести диагностику экономики знаний в образовательной политике на международном уровне; провести исследования системы образования и образовательной политики Израиля; определить влияние факторов на внедрение концепции экономики знаний в образовательную политику Израиля; разработать пути совершенствования образовательной политики на основе интегрированной модели экономики знаний; разработать структурные компоненты модели интеграции концепции экономики знаний в образовательную политику Израиля; разработать систему оценки эффектов образовательной политики Израиля в условиях глобализации.

**Новизна и научная оригинальность** заключается в следующих аспектах: разработано собственное определение экономики знаний, включающее в себя сущность экономики знаний в условиях глобализации; разработана и предложена к реализации модель внедрения концепции экономики знаний в образовательную политику Израиля в условиях глобализации; сформированы пути и этапы применения модели, которые выражаются в стратегических целях; разработана оценка эффективности модели, которая может применяться как на государственном уровне, так и на уровне университета.

**Полученные результаты, способствующие решению научной проблемы** заключаются в обосновании с научной и методологической точки зрения необходимости разработки модели совершенствования и внедрения концепции экономики знаний в образовательную политику Израиля, которая должна стать стимулом для построения продуктивных международных связей по вопросам образования в целях способствовать успешной реализации инновационных образовательных практик и стратегий, соответствующих принципам глобализующегося мира. Этот факт способствует более тесному сотрудничеству между Израилем и другими странами в сфере образования, посредством обмена знаниями и опытом. Такое взаимодействие поможет укрепить позиции израильской системы образования на мировой арене и обогатить ее образовательную среду.

**Теоретическая значимость исследования** заключается в предоставлении рациональной, осуществимой и применимой альтернативы идей, выводов и рекомендаций, которые будут способствовать развитию системы образовательной подготовки на всех уровнях в Израиле.

**Прикладная значимость работы** диссертации состоит в разработке конкретной модели внедрения концептуальных аспектов экономики знаний в образовательную политику Израиля, с учетом процесса глобализации в мире. Кроме того, автором были предложены стратегические задачи для государственного применения и для учебных заведений в связи с процессом внедрения модели. Важным практическим результатом является разработка системы оценки эффективности образовательной политики после сделанных изменений по совершенствованию.

**Внедрение научных результатов.** Результаты научных разработок автора отражены в 16 опубликованных статьях в научных журналах и в виде выступлений на специализированных конференциях.



## **LIST OF ABBREVIATIONS**

CHE - Council of Higher Education  
DOI - Digital Opportunity Index  
GDP - Gross Domestic Product  
GII - Global Innovation Index  
GKI - Global Knowledge Index  
ICT - information and communication technologies  
ICT -OI - Information and communication technologies opportunity Index  
IT – Information Technology  
ITU - International Telecommunication Union  
K4D - Knowledge for Development  
KAM - Knowledge Assessment Methodology  
NE - new economy  
OECD - Organisation for Economic Co-operation and Development  
PEST - Political, Economic, Social, Technological factors  
R&D – research and development  
SWOT - Strengths, Weaknesses, Opportunities, Threats factors  
UNESCO - United Nations Education, Scientific and Cultural Organization  
USPTO - United States Patent and Trademark Office  
VET - vocational education and training  
VR, AR - virtual reality, augmented reality  
WIPO - World Intellectual Property Organization

## LIST OF TABLES

Table 1.1. Definitions of the concept of knowledge economy.....	26
Table 1.2. Characteristics of the main components of the knowledge economy.....	34
Table 1.3. The role of actors in shaping educational policy models.....	41
Table 1.4. Levels of integration processes in the field of education in the context of globalization.....	46
Table 1.5. Characteristics of indices and indicators for assessing the knowledge economy.....	62
Table 1.6. Models for assessing the effectiveness of educational policy in the context of the knowledge economy.....	69
Table 2.1. Groups of qualitative indicators for assessing the areas of “knowledge economy” and “globalization” of educational policy.....	89
Table 2.2. Directions of globalization and the knowledge economy in the state model of educational policy.....	90
Table 2.3. Directions of globalization and the knowledge economy in the market model of educational policy.....	91
Table 2.4. Directions of globalization and the knowledge economy in the social-corporate model of educational policy.....	94
Table 2.5. Advantages and disadvantages of the Israeli education system.....	104
Table 2.6. The national Israeli budget Annual – education (In Millions USD) 2018 – 2021.....	108
Table 2.7. Average wage in knowledge economy professionals occupational in Israel 2018 -2021 (by €).....	110
Table 2.8. Comparative characteristics of Israeli educational policy reforms of 1968 and 2004.....	111
Table 2.9. Factors influencing the Israeli education system.....	116
Table 2.10. Numerical and statistical characteristics of teachers in Israel (Jewish Education Sector, 2021) .....	118
Table 2.11. Numerical and statistical characteristics of teachers in Israel (Arab education sector, 2021) .....	119
Table 2.12. SWOT analysis of the influence of factors on the implementation of the concept of the knowledge economy in Israeli education policy.....	127
Table 3.1. A set of principles for the model for introducing the concept of the knowledge economy into Israeli educational policy in the context of globalization.....	141
Table 3.2. Structure of the action "Global trade in educational services".....	150
Table 3.3. Structure of the action “Formation of international educational infrastructure”.....	151
Table 3.4. Structure of the action “Internationalization of capital in education”.....	152

Table 3.5. Structure of the action “Bringing consumers and the educational environment closer together at the international level” .....	153
Table 3.6. Structure of the action “International movement of factors in the provision of educational services” .....	154
Table 3.7. Structure of the action “Improving the institutional structure”.....	157
Table 3.8. Structure of the action “Stimulating the development of an innovative education system” .....	158
Table 3.9. Structure of the action “Improving the quality of education and the learning process” .....	160
Table 3.10. Structure of the action “Development of information infrastructure”.....	161

## LIST OF FIGURES

Figure 1.1. Theories of the knowledge economy.....	30
Figure 1.2. Structure of the knowledge economy concept.....	32
Figure 1.3. The relationship between actors and approaches to determining educational policy.....	44
Figure 1.4. Education policy structure.....	45
Figure 1.5. Directions and consequences of the influence of globalization on education policy.....	49
Figure 1.6. The process of adaptation of educational policy in the context of the knowledge economy in the context of globalization.....	53
Figure 1.7. Scheme of stages for assessing the effectiveness of educational policy.....	60
Figure 1.8. Structure of indices for assessing the effectiveness of knowledge.....	65
Figure 2.1. Educational Index by region, 2021.....	74
Figure 2.2. Dependence of the education index on government funding in the education system of countries in the world's regions, 2021.....	75
Figure 2.3. Dependence of the education index on government funding in the education system of European countries, 2021.....	77
Figure 2.4. Dependence of the education index on government funding in the education system of Asian countries, 2021.....	79
Figure 2.5. Dependence of the education index on government funding in the education system of African countries, 2021.....	80
Figure 2.6. Dependence of the education index on government funding in the education system of American countries, 2021.....	81
Figure 2.7. Structure of the sample of countries in the world regions, according to the education index, 2021.....	83
Figure 2.8. Global Knowledge Index for a selection of countries, 2020.....	84
Figure 2.9. Dynamics of the Global Knowledge Index for a sample of countries, 2020-2023.....	85
Figure 2.10. Global Innovation Index by years, 2020-2023.....	86
Figure 2.11. Global Innovation Index by pillar, 2023.....	88
Figure 2.12. Educational institutions by indicators in Republic Moldova, 2019-2023.....	93
Figure 2.13. Number of Hebrew primary schools in Israel from 2018/19 to 2021/22.....	98
Figure 2.14. Students in institutions of higher education by type of institution .....	100
Figure 2.15. Israeli Higher Education Destinations for 2020/21.....	101
Figure 2.16. Israeli university students by education level.....	102
Figure 2.17. Share of people with tertiary education in OECD countries in 2020.....	103
Figure 2.18. Indexes of ranking criteria for Israeli universities in the QS rankings in 2022..	104
Figure 2.19. The number of people employed in technological (High Tech) professions compared to the number of people employed in the periphery (north and south of Israel), years 2012- 2021.....	106
Figure 2.20. Public expenditure on education in Israel for 2013-2021 (% of GDP).....	108
Figure 2.21. The sub-sections education budget in the academic years 2017 – 2021 (by	

thousand USD).....	109
Figure 2.22. Model of the Israeli academic conversion process.....	121
Figure 2.23. Teachers who completed teacher training and retraining programs in Israel 2017-2021.....	122
Figure 2.24. Percentage of teachers leaving the education system in Israel, 2017-2021..	123
Figure 3.1. The structure of the model for introducing the concept of the knowledge economy into Israeli educational policy, taking into account globalization processes in the global education market.....	134
Figure 3.2. Structural diagram of the first level of the model “Diagnostics and goal setting of the model” .....	136
Figure 3.3. Transition from a cumulative approach to an integrative approach when constructing a heuristic model of a system for conducting a comprehensive study of the educational context.....	137
Figure 3.4. Block diagram of the second stage of the model “Formation of the model structure” .....	148
Figure 3.5. Strategic vector of development of the model for introducing the concept of the knowledge economy into Israeli educational policy, taking into account globalization processes in the global education market.....	162
Figure 3.6. The structure of the mechanism for implementing the model for introducing the concept of the knowledge economy into the educational policy of Israel, taking into account globalization processes in the world education market.....	164
Figure 3.7. Roadmap for implementing the model for introducing the concept of the knowledge economy into Israeli educational policy, taking into account globalization processes in the global education market.....	165
Figure 3.8. Block diagram of the third stage of the model “Assessing the effectiveness of the model” .....	168
Figure 3.9. Algorithm for assessing the effectiveness of the model introducing the concept of the knowledge economy into Israeli educational policy, taking into account globalization processes in the global education market.....	172

## INTRODUCTION

### **Theoretical relevance and practical significance of the problem under consideration.**

The current era entails various structural changes in all spheres of life, including education. A striking example of such changes is the transformation of the economic paradigm, which has a direct impact on educational policy and the education system in Israel. Promising changes can be seen in the transition from a local economy based on the strength and resource capabilities of the country to an open, internationally developed economy. This new economic reality largely depends on the structure of human capital, the high quality of education and the development of the knowledge economy in the context of the education system.

In the context of globalization, when information and knowledge become key resources, education acquires strategic importance. Israel, as a country known for its innovation and high level of scientific research, undoubtedly faces the challenge of adapting its educational policies to the new demands of the global knowledge market. In this regard, the knowledge economy and educational policy in Israel are becoming increasingly important factors influencing the country's competitiveness in the global economy. It is important to research and analyze how Israel adapts its education policies, what methods are used to evaluate its effectiveness, and what results can be observed in the context of globalization.

The knowledge economy is based on the development of spiritual and human capital, paying special attention to its development and cultivation throughout working life, especially in the economic and technological dimension. At the same time, the knowledge economy is reflected in the global world and relies on a complex and fragile network of economic dependencies between countries in terms of production, trade, consumption and capital.

Knowledge is constantly changing, contributing to and influencing the renewal of industries and services, and is gradually becoming an important factor in improving the domestic national product. The characteristics of the knowledge economy, such as innovation, education, research and knowledge transfer, play an important role in the factors contributing to globalization, increased competitiveness, technological motivation, accelerated pace of development and the creation of local knowledge. These aspects promote economic development and also enable countries to adapt to the rapidly changing global economic environment.

An important aspect that underlines the relevance of this study is the need to understand the starting point of education in Israel in the context of comparison with developing global trends related to the knowledge economy and the learning process in various countries around the world. This study will be key to assessing the extent to which Israel has adapted its education system to modern challenges and international market opportunities. Understanding how effectively

educational institutions in the country are integrating knowledge economy concepts and interacting with global trends has helped identify potential areas for improvement and development.

Another factor that increases the relevance of this study is the recognition that the objective trend towards globalization that characterizes the knowledge economy means the inevitable globalization of markets for the provision of educational services, which turns the higher education system into the main sphere of the knowledge economy. This process is transforming higher education into a key area in the knowledge economy, where a variety of cultural, technological and economic influences collide and interact. In the context of the globalization of educational markets, the research component and recommendations formulated by the author become even more significant, since they can serve as a guide to how to effectively adapt Israel's education systems to changing global requirements. The globalization of educational services emphasizes the need not only to meet national educational needs, but also to take into account international standards, cultural characteristics and technological trends.

In today's world, where knowledge, skills and innovation become the dominant factors in creating wealth and increasing the competitiveness of countries, education and educational policy become key elements. In this context, the author of the study analyzed the educational policies pursued by the Israeli Ministry of Education. Understanding how educational processes are organized, how the country responds to the challenges of globalization and provides high-quality education is critical to developing recommendations that can contribute to the creation of a knowledge economy in Israel and the strengthening of productive international relations. The results of this study can positively influence the transformative changes in educational policy needed to establish the knowledge economy as a dominant concept in Israel in the context of globalization and strengthen effective international interaction.

Globalization, as an objective trend of the modern knowledge economy, inevitably transfers its impact to the markets for the provision of educational services. This turns the higher education system into the main participant and driver of development in the field of the knowledge economy. Taking into account this context, today there is not only a theoretical, but also an urgent practical need to create a model that can effectively change educational services from various points of view in the context of globalization processes. Such a model is responsible not only for revealing the theoretical foundations of the economic context of this transformation, but also for reflecting the real significance of the educational services sector. In this context, significance is presented not only in an economic dimension, but also as an integral systemic element of the knowledge economy. This model should be designed to highlight the key aspects that shape the

structure of the modern knowledge economy in education and highlight them in the context of the global education market. This presentation of the model will allow us to better understand and evaluate the contribution of educational services as an element of the modern knowledge economy, emphasizing their value and role in the formation and transfer of knowledge on a global scale.

The results of research in the field of knowledge economy in the education system are presented in the works of authors around the world, since this topic is key to understanding the impact of knowledge on modern society. The features of the knowledge economy and its essential characteristics were analyzed in detail by Israeli authors, such as Avidor, J., Schwartz, D., Dyduch, J., Olszewska, K., Hadad, S. and others. In their research, they identified key aspects that determine the role of knowledge in modern societies.

Among Moldovan researchers dealing with the role of the knowledge economy, one can highlight the works of such scientists as Șavga L., Filip N., Ciobanu C., Capsîzu V. and others. Their works reflect the importance of knowledge in the modern context and its impact on socio-economic development.

The role of educational policy in the knowledge economy in the context of globalization has received wide coverage in the scientific literature. Israeli researchers such as Berkovich I., Markman N., Yogev A., Avigur-Eshel A., Richardson H., Sharma D., Madani RA, Rezaei H., Gupta B.L. and others have made specific contributions to this scientific discussion. Their work highlights the importance of adapting education policy to the demands of the knowledge economy, and also examines current challenges and opportunities in this area.

Moldovan authors, including Andreeva T., Gribincea A., Blagorazumnaya O. and others, also assessed the effectiveness of educational policy in the context of the knowledge economy. Their research highlights the need for educational strategies to respond to the demands of the modern knowledge society and highlights key aspects influencing the effectiveness of educational policies in this context.

**The purpose of the study** is to develop a model for introducing the concept of the knowledge economy into Israeli educational policy, taking into account globalization processes in the global education market for the development of productive international cooperation and further improvement of educational strategies and directions for the development of the country's education system in the context of globalization.

**Research objectives:**

- describe the concept and approaches to defining the knowledge economy;
- characterize the role of educational policy in the knowledge economy in the context of globalization;



- determine the directions for assessing the effectiveness of educational policy in the context of the knowledge economy;
- conduct a diagnosis of the knowledge economy in educational policy at the international level;
- conduct research on the education system and educational policy in Israel;
- determine the influence of factors on the implementation of the concept of the knowledge economy in Israeli educational policy;
- develop ways to improve educational policy based on an integrated model of the knowledge economy;
- develop structural components of a model for integrating the concept of the knowledge economy into Israeli educational policy;
- develop a system for assessing the effects of Israeli educational policy in the context of globalization.

**Hypothesis and research** is that the adaptation of Israeli educational policy in accordance with the principles of the knowledge economy will help strengthen Israel's position in the global economy, while ensuring higher quality education and productive international activities, and the development of international relations in the educational field.

**Generalization of methodologies and research and justification of the selected research methods.** The author used qualitative and quantitative research methods, which were represented by the following types of research: analysis, synthesis, observation, statistical analysis and others. The study consisted of three stages. The first stage was the collection of theoretical data on the research topic. The second stage was empirical research, which concerned the study of the situation on the global market for educational services, as well as at the level of the State of Israel and its education system. The third stage is the development of a model for introducing the concept of the knowledge economy into Israeli educational policy in the context of globalization. At each of the three stages, the author conducted relevant research and used theoretical and practical materials and research results to formulate relevant conclusions and develop effective solutions in the form of recommendations.

**The result obtained, which contributes to the solution of an important scientific problem,** is to substantiate from a scientific and methodological point of view the need to develop a model for introducing the concept of the knowledge economy into the educational policy of Israel, which should become an incentive for building productive international relations on educational issues in order to facilitate the successful implementation of innovative educational practices and strategies that support the principles of a globalizing world. This fact refers to closer

cooperation between Israel and other countries in the field of education, through the exchange of knowledge and experience. Such interaction will help strengthen the position of the Israeli education system on the world stage and enrich its educational environment, with the aim of increasing its overall competitiveness.

**Scientific originality and novelty** are as follows:

- the author has developed his own definition of the knowledge economy, which includes the essence of the knowledge economy in the context of globalization;
- a model for introducing the concept of the knowledge economy into the educational policy of Israel in the context of globalization has been developed and proposed for implementation;
- ways and stages of applying the model have been formed, which are expressed in strategic decisions and specific activities;
- an assessment of the effectiveness of the model has been developed, which can be used both at the state level and at the level of educational institutions.

**Theoretical significance.** The theoretical and conceptual contribution of the study under review is to provide a rational, feasible and applicable alternative of ideas, conclusions and recommendations that will contribute to the development of the educational training system at all levels in Israel. The author formulated his own definitions and supplemented the existing theory on the research topic.

**The practical significance** of the dissertation is to develop a model for introducing the conceptual aspects of the knowledge economy into Israeli educational policy, taking into account the process of globalization. In addition, the author proposed strategic objectives that should be implemented at the level of the State of Israel and at the institutional level, within educational institutions, in connection with the process of implementing the model. An important practical result is the development by the author of a system for assessing the effectiveness of educational policy after changes have been made to improve it.

**Confirmation of research results.** The author's scientific developments are reflected in a number of published articles in scientific journals and in the form of speeches at specialized conferences.

**A brief summary of the chapters of the doctoral dissertation based on the research conducted and a reflection of their necessity to achieve the goal of the research.**

The dissertation is presented on 176 pages of the main text. The structure of the doctoral dissertation includes an introduction, three chapters, general conclusions and recommendations, a bibliography of 221 sources, 28 tables, 41 figures and 26 appendices.

The **introduction** reveals the relevance of the study that served as the starting point for the study. The purpose and objectives of the study are also formulated. A working hypothesis was formulated, which guided the author throughout the study. The methodology is summarized and the research methods that served as tools in developing the study are listed. The result obtained as a result of the research, as well as the scientific novelty and originality of the dissertation, are reflected. The theoretical and practical significance of the study is formulated. The contents of the chapters of the dissertation research are also briefly outlined.

**The first chapter, “THEORETICAL ASPECTS OF THE KNOWLEDGE ECONOMY AND EDUCATIONAL POLICY IN THE GLOBAL WORLD”**, reveals the concept of approaches to defining the knowledge economy. Particular emphasis is placed on studying and clarifying the concept of the knowledge economy and identifying various approaches to its definition, reflected in the scientific works of various authors, researchers, practitioners in the field of education, knowledge economy and globalization of the educational environment. In the course of theoretical research, the author delved into the key characteristics and components of the knowledge economy. This study is intended to reveal the complexity and versatility of the concept of the knowledge economy, which will provide the necessary basis for further analysis and research of the role of this phenomenon in the context of educational policy, as well as within the framework of global economic processes. In this case, the main task was to understand the role and place of the concept of the knowledge economy in educational policy in the context of globalization. In this regard, the author also emphasizes the influence of globalization processes on the development of the education system as a whole, reflecting the peculiarities of interaction between actors in the field of education. An important part of this chapter is to identify areas for assessing the effectiveness of education policies in the knowledge economy. The importance of identifying areas for assessing the effectiveness of educational policy in the knowledge economy is manifested in the need to identify key points that influence the development of human capital and innovation activity. These areas serve as benchmarks for assessing how successfully the educational system meets the requirements of the modern information society in the global educational market. Systematic assessment provides not only an understanding of the extent of knowledge acquisition, but also takes into account its application in real life. This involves not only the number of years of education, but also the degree to which one has mastered the skills and competencies needed to successfully adapt to a rapidly changing economy. The educational system should stimulate creative thinking and research activities. These aspects were deeply analyzed by the author from the point of view of the available theoretical material.

**In the second chapter, “ANALYSIS OF THE DEVELOPMENT OF THE**

**KNOWLEDGE ECONOMY OF ISRAEL AS A FACTOR OF EDUCATIONAL POLICY”,** the author conducted a large-scale and in-depth study in order to identify the dynamics and patterns of the development processes of the knowledge economy in Israel. the global market in a sample of countries, as well as at the level of the State of Israel. The central aspect of this chapter is the analysis, which is to identify the relationship between the development of the knowledge economy and the formation of educational policy. The author has conducted an extensive analysis of data and factors influencing the development of the knowledge economy, both globally and in the Israeli context.

This chapter attempts to highlight the key trends and factors shaping the knowledge economy in Israel and other countries, as well as their impact on educational policy. The author analyzed data related to innovation, research and development, and the role of education in supporting and stimulating the knowledge economy. The main purpose of this chapter is to identify how the development of the knowledge economy can guide the development and adjustment of educational policies, and what lessons and experiences can be drawn from Israel's successful experience in this area in the context of globalization.

**In the third chapter, “IMPROVING ISRAEL'S EDUCATIONAL POLICY IN THE CONTEXT OF THE ISRAELI KNOWLEDGE ECONOMY AND GLOBALIZATION CONDITIONS”,** the author examines in more detail ways to introduce the concept of the knowledge economy into Israeli educational policy. This represents an important step in increasing the country's competitiveness in the global education market.

The author is developing a model that involves the integration of the principles of the knowledge economy into educational programs and strategies. This model provides a framework for more effectively using knowledge and innovation to achieve educational goals. This approach will help Israel achieve better results in the field of education and, as a result, strengthen its position in the global education market.

In addition, in this chapter, the author develops strategic initiatives and formulates specific objectives that will serve as a guide in the implementation of this model at the level of public policy and at the level of individual educational institutions. These initiatives and challenges represent the practical steps needed to successfully implement the knowledge economy concept into the education system.

Particular attention is paid to the system for assessing the effectiveness of recommendations proposed by the author. This system is designed to monitor and evaluate the implementation of the knowledge economy concept in Israeli education policy. Evaluating effectiveness will allow us to quickly identify problems and supplement proposed ideas, ensuring continuous improvement

of the country's educational policy in the context of globalization and a changing educational environment.

**General conclusions and recommendations** arising from the study not only systematize the results obtained, but also serve as the basis for formulating additional discoveries of the author in the context of improving Israel's educational policy in the context of globalization. The author, based on the identified trends and problems, presents targeted theoretical and applied recommendations aimed at the further development of the country's educational system with the help of educational policy.

In terms of theoretical recommendations, the author summarizes key concepts and principles arising from the analysis of global trends in education, as well as taking into account the national characteristics of Israel. He proposes the theoretical foundations on which educational policy should be built, taking into account the dynamics of change in the global educational space.

Applied recommendations, in turn, represent specific steps and activities aimed at solving specific problems and improving key aspects of the Israeli educational system. This includes changes in curricula, introduction of new technologies, improvements in assessment systems and much more arising from identified needs and challenges. Such recommendations, when carefully substantiated and tailored to Israel's specific context, provide the basis for effective strategies to improve education policy and respond to the challenges of globalization by integrating the concept of the knowledge economy into Israeli education policy.

The recommendations formulated by the author are targeted, that is, they are aimed at specific performers in the field of education. The value of this format of recommendations is that they provide concrete guidance and strategies for action to improve Israel's educational policy. The targeted nature of the recommendations allows implementers and decision-makers in the education system to better navigate.

# **1. THEORETICAL ASPECTS OF ECONOMY KNOWLEDGE AND EDUCATIONAL POLICY IN THE GLOBAL WORLD**

## **1.1. Concept and approaches to defining the knowledge economy**

In the modern information and globalizing world, the knowledge economy has become a key factor for the development and prosperity of national economies. Understanding this concept plays an important role in the formation of educational policies, strategies and plans, as well as economic country strategies at the global level. The knowledge economy, as a concept, includes a wide range of aspects related to the production, distribution and use of knowledge and information to create value. This concept is particularly relevant in an environment where rapidly developing technologies and a changing global economic paradigm make knowledge one of the main resources.

In this paragraph, the author aims to explore and specify the concept of the knowledge economy and identify various approaches to its definition, reflected in the scientific works of various authors. During the research, the author delved into the key characteristics and components of the knowledge economy. This study is intended to reveal the complexity and versatility of the concept of the knowledge economy, which will provide the necessary basis for further analysis and research of the role of the knowledge economy in the context of educational policy, as well as within the framework of global economic processes.

The goal of the knowledge economy is to improve the quality of human capital and, accordingly, the quality of life in the production of high - tech knowledge. It follows from this that the role of the knowledge economy in the modern world is enormous and covers many areas of life. The knowledge economy reflects a shift from traditional economic models based on physical resources and productive capacity to a new paradigm where knowledge and information have become key resources and drivers of development. The significance of the concept of the knowledge economy in the modern world is explained by the following<sup>1 2</sup>:

- growth of economic productivity (increasing productivity through improved technology, innovation, effective use of knowledge and information);
- job creation (stimulating job creation in \_ areas related to the IT sphere, creative industry, as well as the development of new professions and specializations);
- development of human capital (education and lifelong learning are becoming key elements

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<sup>1</sup> UNGER, RM *The knowledge economy*. OECD, 2019. 304 r. ISBN 978-1788734974.

<sup>2</sup> DUCA, S. The Resource of Creativity and Creative Human Capital for the Management of Knowledge Economy: Implications for the Republic of Moldova. In: *E3S Web of Conferences. EDP Sciences*, 2023. No. 409, p. 05015. ISSN 2267-1242.

in the knowledge economy, which becomes an incentive for the development of human capital and improving the skills and qualifications of the population);

- the development of global connectivity (knowledge and information are instantly distributed throughout the world thanks to modern technologies and communications, which makes the world economy more interdependent);
- promoting sustainable development (finding more efficient ways to use resources, reducing harmful impacts on the environment and solving social problems) ;
- value creation (knowledge and information can create enormous value in the world, help companies, countries at the international level better adapt to changes and quickly implement new knowledge, most often win in the market).

Thus, the knowledge economy is becoming an increasingly important component of the development of society and the economy. In this regard, it is important to understand the evolutionary stages of development of this phenomenon in order to better understand how the knowledge economy affects the field of education and modern society as a whole. The knowledge economy as a concept developed in certain stages and in different years the dynamics of the formation and improvement of this phenomenon increased<sup>3</sup>. The study of the knowledge economy is closely associated with the formation of theories of the development of post-industrial society<sup>4</sup>. We can say that the origins of the concept of the knowledge economy began from the point of view of a researcher who highlighted the features of post-industrial society<sup>5</sup>:

1. Replacement of the organizing principle of economic activity with theoretical knowledge, which replaced capital in an industrial society;
2. “Cybernetic revolution”, which led to changes in the pace and technology of production of goods.

The process of formation of the concept of the knowledge economy can be divided into stages: the early stage of the emergence of the concept of the knowledge economy, the stage of studying the phenomenon of the knowledge economy by international organizations and institutions, the stage of the digital revolution, the development of the education system and research in the context of the knowledge economy (Appendix 1).

Early stage (1950-1960s years) is associated with the emergence of prerequisites for the

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<sup>3</sup> AVKOPASHVILI, PT et al. The fundamental provisions of the concept of knowledge economy. In: *Industry 4.0: Industrial Revolution of the 21st Century*. 2019. r. 57-64. ISSN 9783030068295.

<sup>4</sup> CHOONG, KK, LEUNG, PW A critical review of the precursors of the knowledge economy and their contemporary research: implications for the computerized new economy. In: *Journal of the Knowledge Economy*. 2022, No.13(2), p. 1573-1610. ISSN 18687865.

<sup>5</sup> BELL, D. *Post-industrial society. The information society reader*. 2004. 944 r. ISBN 9780203622278.

knowledge economy. The focus was on innovation and scientific research, which was the first step towards the transition to a knowledge economy. The concept of “knowledge economy” was first formulated: a sector of the economy focused on the production of knowledge <sup>6</sup>. This researcher also defined the types of knowledge: practical, intellectual, entertainment-knowledge, spiritual and unwanted knowledge. Among the reasons that became the prerequisites for studying the knowledge economy, according to the researcher, the following can be named:<sup>7 8</sup>: transformation of knowledge into the dominant factor of production; increasing the share of the service sector and increasing the level of supply of knowledge-intensive services for business; the growing importance of human capital and investment in the system of developing professional competencies; development and large-scale use of new information technologies; innovations, which become the main source of economic growth.

The next stage was the emergence of the concept of the knowledge economy (1970-1990s). It was determined that the criterion for assessing the state of the economy can be considered the number of people employed in the information sector; the economy becomes informational when information work prevails over other sectors <sup>9</sup>. Another reputable economist noted the paramount importance of the question of which resource is most important in the new economy <sup>10</sup>. There are two main tasks that the state faces in the knowledge economy: privatization of state property; assisting the new owners of this property until they are sufficiently developed.

Support for the development of the knowledge economy by organizations and international institutions (1990-2000s). Many international organizations began to actively explore and support the development of the knowledge economy. The World Bank defines a knowledge economy as an economy that creates, shares and uses knowledge to accelerate its growth and improve competitiveness <sup>11</sup>. OECD defines economy knowledge How a knowledge-based economy is one in which knowledge and technology are key drivers of economic growth and development <sup>12</sup>. The OECD has noted that the term "knowledge economy" has emerged from a greater recognition of

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<sup>6</sup> MACHLUP, F. *Knowledge: Its creation, distribution and economic significance, Volume III: The economics of information and human capital* I. Princeton: university Princeton university press, 2014. 304 r. ISBN 9780691642963.

<sup>7</sup> SPOHRER, J., FODELL, D., MURPHY, W. Ten Reasons Service Science Matters to Universities. In: *Education review*. 2012, No. 47(6), p. 52. ISSN 1945-709X.

<sup>8</sup> MILNER, BZ *Upravlenie znaniyami [Knowledge management]*. Moscow: INFRA-M, 2003. 177 p. ISBN 5-16-001668-6.

<sup>9</sup> PORAT, Mark Uri. *The Information Economy: Definition and Measurement*. Washington: Office of Telecommunications, US Department of Commerce, 1977. 319 p.

<sup>10</sup> DRUCKER, P. *The age of discontinuity: Guidelines to our changing society*. Milton Park: Routledge, 2017. 420 p. ISBN 9781315130873.

<sup>11</sup> The World Bank *Open Knowledge Repository*. (accessed 02.11.2022). Available at: <https://openknowledge.worldbank.org/home>

<sup>12</sup> BRINKLEY, I. *Defining the knowledge economy*. London: The work foundation, 2006. 31 r. (accessed 18.09.2022). Available at: <https://knowledge4all.com/admin/Temp/Files/9219fc8b-7263-416d-b3dc-a7dca118761f.pdf>



the place of knowledge and technology in modern economies and is directly based on the production, dissemination and use of knowledge and information <sup>13</sup>. According to the EU definition, a knowledge-based economy or knowledge economy is an economy that creates, distributes and uses knowledge to ensure its growth and competitiveness <sup>14</sup>. These definitions become the driving force of this stage and trigger the process of creating special programs, strategies, and policies aimed at supporting the concept of the knowledge economy.

At the next stage, the digital revolution occurs (1990-2000s). The advent of the Internet and digital technologies has radically changed the economic environment. Knowledge has become more accessible and information infrastructure has become an important factor in the development of the knowledge economy <sup>15</sup>.

Development of education and research (2000-present). The development of higher education and scientific research has become a priority for many countries and regions seeking to strengthen their position in the knowledge economy.

The presented evolutionary stages of development of the concept of the knowledge economy demonstrate how the phenomenon developed in different periods, from the first prerequisites to more modern challenges and opportunities associated with digital transformation and globalization. The development of the knowledge economy, according to the author, can be associated with the transition of the world to a new stage of development. The impetus for the dynamic development of the knowledge economy was the growth of the globalization process, a general increase in the level of education and intellectual potential of people, information progress, the development of science and technology, as well as the depletion of cheap natural resources. To form a modern view of the problems of the knowledge economy, it seems advisable to highlight several approaches to the consideration of this concept, which focus attention on its various features, namely:

- The first approach is a complex of knowledge-intensive industries engaged in the production and maintenance of information and communication equipment, the creation and distribution of software products, as well as the entire system of generation, storage, distribution

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<sup>13</sup> *The Knowledge-based Economy*, OCDE/GD (96)102, Organization for Economic Co-operation and Development, Paris, 1996. (accessed 06/22/2021). Available at: <https://one.oecd.org/document/OCDE/GD%2896%29102/En/pdf>

<sup>14</sup> DIMA, AM et al. The relationship between the knowledge economy and global competitiveness in the European Union. In: *Sustainability*. 2018, No. 10(6), p. 1706. ISSN 2071-1050.

<sup>15</sup> WIERZBICKA, W. et al. Information infrastructure as a pillar of the knowledge-based economy—an analysis of regional differentiation in Poland. In: *Equilibrium. Quarterly Journal of Economics and Economic Policy*. 2018, No. 13(1), p. 123-139. ISSN 1689765X.

and receipt of information, largely built on the Internet <sup>16</sup>.

- The second approach includes in the concept of the knowledge economy organizational and institutional innovations in the activities of various (including traditional) sectors of the economy. The American economy of the last decade of the twentieth century is generally characterized as a "new economy"<sup>17</sup>;

- Adherents of the third approach pay attention to the financial component of the “knowledge economy.” This approach defines the “knowledge economy” as one of the peaks of the international financial economy, a financial economic model, including the widespread use of information and technological innovation tools in the monetary and financial system <sup>18</sup>.

- The fourth approach considers the “new economy” as a set of industries characterized by a greater share of human capital compared to material elements <sup>19</sup>. In these industries, the technological implementation of knowledge plays a decisive role, and the production of knowledge is a source of economic growth. In this interpretation, the “new economy” includes the sphere of education, information and communication markets, the production of innovations, and the provision of intellectual services.

Thus, summarizing all the views on the development of the knowledge economy discussed above, as well as various approaches to definition, we should highlight the concepts of the knowledge economy formulated by various researchers and presented in Table 1.1.

**Table 1.1. Definitions of the concept of knowledge economy**

Narrow/broad sense of understanding	Author	Definition of the knowledge economy	Features of the concept
Broad meaning	Drucker Peter <sup>20</sup>	an economy in which knowledge, rather than labor and capital, has become the main resource, and in which creative work has become a key activity.	Definition of the main resource - knowledge
	Kleiner George <sup>21</sup>	the state of the country's economy in which knowledge becomes a full-fledged commodity, any new product carries	The state of the country's economy, unique knowledge as a factor of

<sup>16</sup> SYCHEVA, E., BUDAGOV, A., NOVIKOV, A. Urban infrastructure development in a global knowledge-based economy. In: *SHS Web of Conferences. EDP Sciences*, 2020. No. 74, p. 03013. ISSN 2261-2424.

<sup>17</sup> JENTZSCH, N. The new economy debate in the US: A review of literature. In: *SSRN Electronic Journal*. 2001. ISSN 1556-5068 DOI: [10.2139/ssrn.268950](https://doi.org/10.2139/ssrn.268950)

<sup>18</sup> HADAD, S. Knowledge economy: Characteristics and dimensions. In: *Management dynamics in the Knowledge economy*. 2017, No. 5(2), p. 203-225. ISSN 2392-8042.

<sup>19</sup> BURDULI, V. et al. Essence of knowledge economy and the degree of its interoperability with innovative economy. In: *International Journal of New Economics and Social Sciences IJONESS*. 2020, No. 11(1), p. 61-82. ISSN 2450-2146.

<sup>20</sup> PETERS, M.A., REVELEY, J. Retrofitting Drucker: Knowledge work under cognitive capitalism. In: *Culture and Organization*. 2014, No. 20(2), p. 135-151. ISSN 1477-2760.

<sup>21</sup>

		unique knowledge, and knowledge becomes one of the main factors of production	production
	Porter Michael <sup>22</sup>	an economy in which the creation, dissemination and application of knowledge play a key role in wealth creation.	A three-part process: creation, distribution and application.
	Romer Paul <sup>23</sup>	an economy in which knowledge and ideas are the main driving force of growth and development.	Knowledge and ideas are the power of growth and development
Narrow meaning	Stiglitz Joseph <sup>24</sup>	an economy in which investment in human capital and intellectual resources is critical to a country's competitiveness and prosperity.	The importance of human capital
	Solow Robert <sup>25</sup>	an economy in which technological progress and innovation are the key drivers of economic growth.	The importance of technological progress and innovation
	Milner <sup>26</sup>	not only the conditions of the knowledge and information market and the organization of enterprises producing knowledge, but also the type of economy where knowledge plays a decisive role, and the creation and use of knowledge becomes a source of growth that determines the competitiveness of the company, regions and countries	Knowledge is key
	Unger R. <sup>27</sup>	best production practices (the nature of culture and politics that creates the environment most conducive to changing the institutional framework of the market order)	Innovative practices and technologies

Source:<sup>20-27</sup>

The knowledge economy can be understood in a narrow and broad sense. In a narrow sense, it is a system of economic relationships, the formation and characteristics of which are determined by the development of new technologies and the speed of dissemination of information. In a broad sense, it is a new type of economy in which the production and implementation of knowledge and

<sup>22</sup> PORTER, ME Attitudes, values, beliefs, and the microeconomics of prosperity. In: *Culture Matters*. New York: Basic Books, 2000, p. 14-28. ISBN 978-0-465-03175-7.

<sup>23</sup> ROMER, PM, KURTZMAN, J. The knowledge economy. In: *Handbook on Knowledge Management 1: Knowledge Matters*. 2004. p. 73-87. ISBN 13 978-3540435273.

<sup>24</sup> STIGLITZ, J. E. *Knowledge of technology and the technology of knowledge: new strategies for development 1*: In: Capacity for Development. Milton Park: Routledge, 2013. p. 271-280. ISBN 9781616357146.

<sup>25</sup> SOLOW, R. M. Notes on social capital and economic performance. In: *Social capital: A multifaceted perspective*. 2000. No. 6(10), pp.6-10. ISSN 0-8213-4562-1.

<sup>26</sup> MILNER, E. *Managing information and knowledge in the public sector*. Milton Park: Routledge, 2002. 668 p. ISBN 978-0415204231.

<sup>27</sup> UNGER, RM *The knowledge economy*. OECD, 2019. 304 r. ISBN 978-1788734974.

innovation play a decisive role in ensuring long-term sustainable development<sup>28</sup>. Summarizing the analyzed definitions, the knowledge economy is an economy in which the key factors of production are human potential and information processing. At the same time, their level of competitiveness in the market depends on how effectively new knowledge is mastered by companies or states<sup>29</sup>. In many definitions, it becomes clear that the infrastructure of the knowledge economy is education, R&D, ICT, Internet accessibility, and the level of development of scientific institutions. The knowledge economy reorients the focus of production from the material and financial sectors to issues of developing human potential, solving social, environmental problems, problems of science and education.

Thus, the idea of a knowledge economy assumes that society and the economy are increasingly based on knowledge, therefore, it is necessary to develop it in all forms: tangible and intangible, formalized and embodied in people's skills. Thus, the idea of a knowledge economy assumes that society and the economy are increasingly based on knowledge, therefore, it is necessary to develop it in all forms: tangible and intangible, formalized and embodied in people's skills. In fostering a knowledge economy, emphasis should be placed not only on the accumulation of information but also on the ability to adapt, innovate, and apply knowledge effectively, ensuring a dynamic and resilient societal framework that thrives on continuous learning and creativity. Differences in interpretations of the knowledge economy are determined by the emphasis placed in existing research projects and publications. In general, they boil down to the following central points<sup>30</sup>: knowledge becomes a key factor of growth along with capital and labor - the concept of knowledge as a resource<sup>31</sup>; the production of knowledge is the most important and defining "face" of the modern economy - the concept of knowledge as a product<sup>32</sup>; codified knowledge becomes

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<sup>28</sup> AVIDOR, J. Building an innovation economy: Public policy lessons from Israel. In: *Northwestern Law & Econ Research Paper*. 2011, No. 11-18, r. 70. (accessed 09/10/2022). Available at: [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=1856603](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1856603)

<sup>29</sup> ŞAVGA, L. Quality Assurance of Higher Education in Terms of the National Education Performance and Competitiveness Growth. In: *Economy Transdisciplinarity Cognition*, 2013, No. 2, p. 43-49. ISSN 2067-5046.

<sup>30</sup> MASHAL, L., GOLOVATAIA, L. Economia cunoaşterii, semnificaţiile şi tendinţele actuale. In: *Analele Ştiinţifice ale Universităţii de Studii Europene din Moldova*, 2023. p.51-58. ISSN 2435-1114. Available at: [https://ibn.idsi.md/ro/vizualizare\\_articol/184029](https://ibn.idsi.md/ro/vizualizare_articol/184029)

<sup>31</sup> BURCIU, A., KICSI, R. Knowledge as a distinctive resource of competitive advantage. In: *Ecoforum Journal*. 2015, No. 4(1), p.9-14. ISSN 2344-2174.

<sup>32</sup> RELICH, M., ŚWÍC, A., GOLA, A. A knowledge-based approach to product concept screening. In: *Distributed Computing and Artificial Intelligence, 12th International Conference. Springer International Publishing*, 2015. p. 341-348. (accessed 08/06/2022). Available at: [https://www.researchgate.net/profile/Arkadiusz-Gola/publication/278075687\\_A\\_Knowledge-Based\\_Approach\\_to\\_Product\\_Concept\\_Screening/links/557bf0de08aeb61eae21db98/A-Knowledge-Based-Approach-to-Product-Concept-Screening.pdf](https://www.researchgate.net/profile/Arkadiusz-Gola/publication/278075687_A_Knowledge-Based_Approach_to_Product_Concept_Screening/links/557bf0de08aeb61eae21db98/A-Knowledge-Based-Approach-to-Product-Concept-Screening.pdf)

the most important component of economic relations - the concept of codified knowledge<sup>33</sup>; knowledge is based on the development and change of information and communication technologies (ICT) - the concept of the knowledge economy as the most important consequence of the development of the information society<sup>34</sup>.

The knowledge economy enriches all industries, all sectors and all participants in economic processes, not only uses knowledge in a diverse form, but also creates it in the form of scientific and various high-tech products, innovations, highly qualified services, education and competencies<sup>35</sup>. Despite some similarities in definitions, it can be noted that attempts have been made to give an unambiguous definition of a knowledge-based economy, but there is currently no consensus on the definition of a knowledge economy<sup>36</sup>.

The author formulated his own definition of the knowledge economy - this is a world process covering the global economy, in which social progress and economic growth are achieved through the constant updating of knowledge and its use as a new factor of production<sup>37</sup>. This definition can be improved through further research and accumulation of practical experience in a particular area of application of the concept of the knowledge economy.

Existing definitions of the knowledge economy are combined into corresponding theories, which are a natural extension of the study of definitions of the concept of the knowledge economy and represent a set of concepts and ideas that study the relationship between knowledge, innovation and economic growth, as presented in Figure 1.1.

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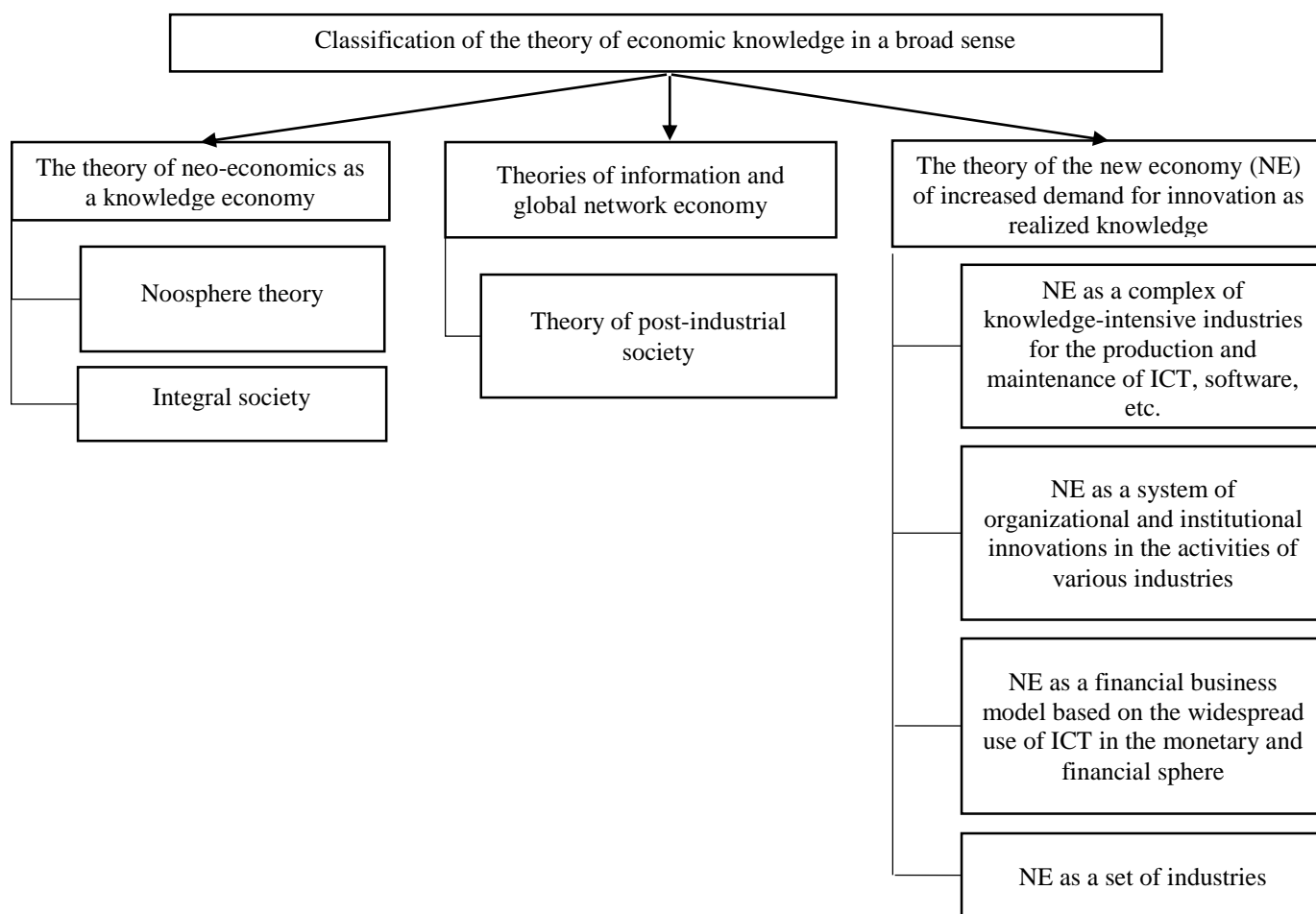
<sup>33</sup> KIMBLE, C. Knowledge management, codification and tacit knowledge. In: *Information Research*, 2013, No.18(2). ISSN 1368-1613. (accessed 05/21/2022). Available at: <https://shs.hal.science/In:halshs-00826911/document>

<sup>34</sup> BOSCHELE, M. The "information society" and the role of knowledge in society. In: *AJIT-e: Academic Journal of Information Technology*. 2014, No.5(14), p. 7-13. ISSN 1309-1581.

<sup>35</sup> MASHAL, L. The expansion of the knowledge economy on the local society. Chisinau: In: *"EcoSoEn" scientific journal, Free international university of Moldova*, Nr' 2, 2019. pp. 102 – 107. ISSN 2587-344X. Available at: [https://ibn.idsi.md/ro/vizualizare\\_numar\\_revista/455/4176](https://ibn.idsi.md/ro/vizualizare_numar_revista/455/4176).

<sup>36</sup> ROBERTS, J. The global knowledge economy in question. In: *Critical perspectives on international business*. 2009, No. 5(4), p. 285-303. ISSN 17422043.

<sup>37</sup> MASHAL, L. Knowledge Economy - An Academic Competitive Advantage. In: *World Wide Journal of Multidisciplinary Research and Development*, vol 5(11), 2019. p. 1-4. E-ISSN: 2454-6615. Available at: <http://www.jmr.com/archive/2019/11/1269/knowledge-economy-an-academic-competitive-advantage/>



**Figure 1.1. Theories of the knowledge economy**

Source:<sup>38 39 40</sup>

The theories presented in the diagram pay special attention to the role of knowledge as a key resource in the modern economy. The theories, to varying degrees, emphasize the importance of knowledge, innovation and education in modern economies. They provide the basis for developing strategies and policies aimed at promoting knowledge-based growth and development<sup>41</sup>.

Within the framework of the classification of the theory of economic knowledge in a broad sense, the theory of neo-economics is highlighted, which emphasizes the role of knowledge in the modern economy, where the ability to create, distribute and use information becomes a determining factor for successful business entities. Neoeconomics highlights the importance of

<sup>38</sup> ROBERTS, J. The global knowledge economy in question. In: *Critical perspectives on international business*. 2009, No. 4, p. 285-303. ISSN 1742-2043.

<sup>39</sup> CHI-ANG LIN, B. A new vision of the knowledge economy. In: *Journal of Economic Surveys*. 2007. No. 21(3), p. 553-584. ISSN 1467-6419.

<sup>40</sup> DOLFSMA, W. Knowledge, the knowledge economy and welfare theory. In: *Understanding the dynamics of a knowledge economy*. 2006, r. 201-221. ISBN 1845423070.

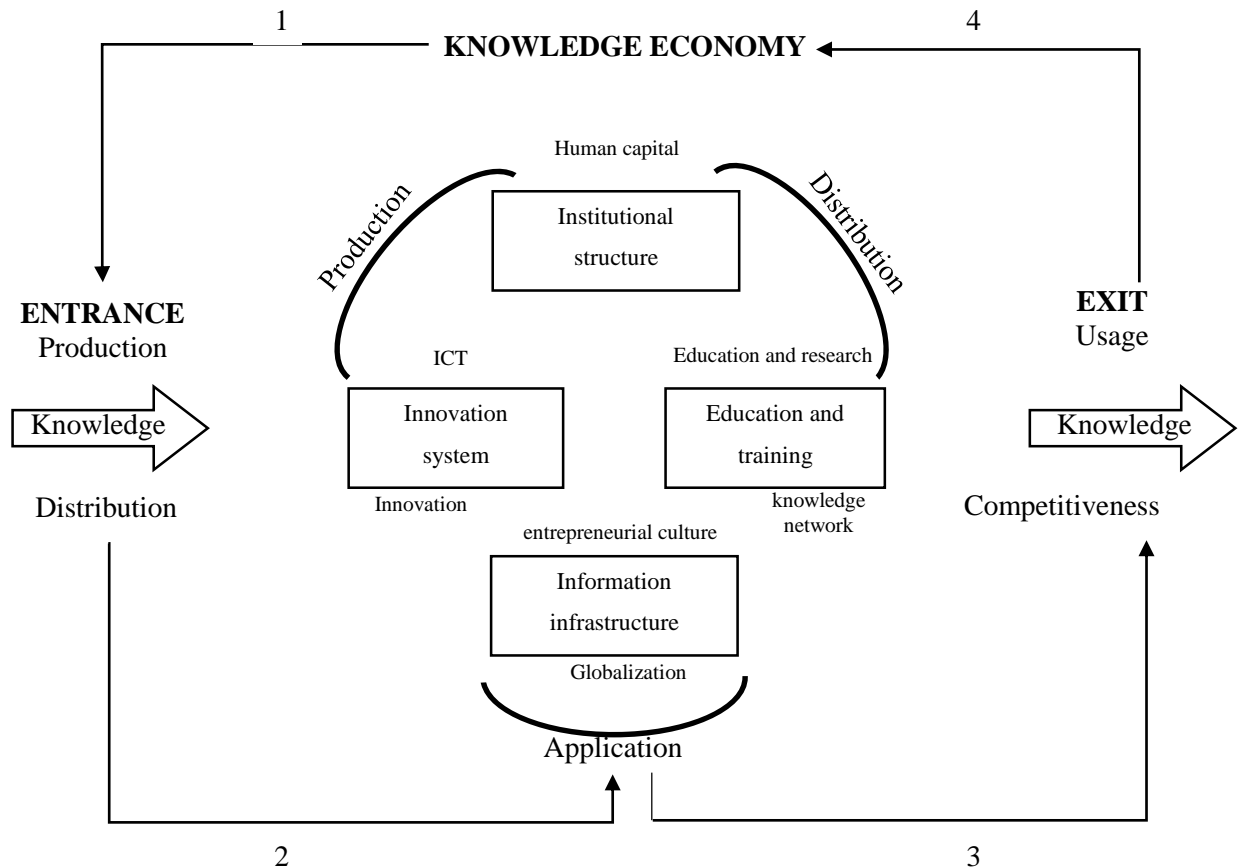
<sup>41</sup> FILIP, N. Knowledge-based economy. Impact and strategies of developing for Moldova. In: *Primii pași în știință*. 5-7 October 2005, Bălți. Bălți: Tipografia Universității de Stat „Alecu Russo” din Bălți, 2005, pp. 105-121. ISBN 9975-931-98-7.

intellectual assets and innovation, which is reflected in company strategies and the orientation of economic development.

In the context of the knowledge economy, the theories of information and global network economics are important. They highlight how modern technology and its associated information infrastructure are transforming economic relationships. Information economics emphasizes the processing and transmission of information as a key component of production and consumption. Moreover, global network economics underscores the interconnected nature of economies in the digital age, emphasizing the significance of cross-border collaboration and the seamless flow of information. As information becomes a central economic driver, the ability to harness and leverage data effectively becomes a critical determinant of success in the knowledge economy. This shift not only reshapes traditional business models but also necessitates a reevaluation of educational systems to equip individuals with the skills required to navigate and contribute to this evolving economic landscape.

The theory of the new economy emphasizes that an emphasis on innovation is the driving force of economic growth in a knowledge-based environment. Here, knowledge turns into an asset that contributes to development, and the high demand for innovation becomes a signal of a change in priorities in the economy, where the ability to create new ideas and apply them in production becomes key.

The author has formed the structure of the knowledge economy, which reflects the organization and interaction of the various components that make up an economic system focused on the production, distribution and use of knowledge, which is presented in Figure 1.2.



**Figure 1.2. Structure of the knowledge economy concept**

Source: developed by the author

This diagram reflects the structure of the concept of the knowledge economy, which can be characterized in two ways <sup>42</sup>:

1. On the input side - characterized on the basis of an assessment of the total amount of costs (total investments) for the development of its base sector, in which its new knowledge is generated and disseminated.

2. On the output side - characterized when assessing the output by gross added value of industries that consume hi-tech, high technology, the defense industry, the sphere of high-tech services, as well as education, health care, culture and management.

The entry and exit sides demonstrate that the knowledge economy creates (produces), distributes and uses knowledge to ensure its growth and competitiveness through three main interrelated activities within the knowledge economy: production, distribution and use. Knowledge production focuses on the creation of new knowledge, research and development. This means generating new ideas, concepts, technologies and innovations. This may include research

<sup>42</sup> KEFELA, GT Knowledge-based economy and society has become a vital commodity to countries. In: *International NGO Journal*. 2010, No. 5(7), p. 160-166. ISSN 1993-8225.



activities in universities, laboratories, scientific institutes, as well as innovations occurring in the business environment. Once knowledge has been created, it must be disseminated and made available to a wide range of people and organizations. This includes teaching, publishing scientific research, and developing educational programs. Knowledge utilization refers to how society and organizations use knowledge to improve their performance. This may include introducing new technologies, optimizing business processes, developing new products and services, and applying knowledge to management and decision making. The use of knowledge helps improve the productivity and competitiveness of organizations and contributes to economic growth.

The above processes are implemented within the framework of fundamental components knowledge economy<sup>43</sup>:

1. Institutional structure. The institutional structure is based on the creation of certain incentives of an economic nature and institutional nature that support the large-scale dissemination and effective application of local and global knowledge in all spheres of economic life of society, promoting the development of entrepreneurship, and also supporting the economic and social transformations generated by the knowledge revolution.

2. Innovation system. In the context of an innovation system, effective organizational forms and business environments are created that encourage innovation and entrepreneurship, covering commercial structures, scientific and research centers, universities and other institutions that act in the interests of developing global knowledge and at the same time, transforming in accordance with local requirements, applying knowledge to produce innovative products, services and business pathways<sup>44</sup>.

3. Education and training - the formation of a society of qualified, dynamic and creative people with the prospects of obtaining a decent education and lifelong learning for all members of society.

4. Information infrastructure. The process of creating a dynamic infrastructure, as well as a competitive, innovative, information-based economic space provides various effective and competitive services and tools intended for a wide range of spheres of society <sup>45</sup>. This process is implemented not only in the format of high technologies - such as the Internet and mobile

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<sup>43</sup> WHITE, D.S., GUNASEKARAN, A., ARIGUZO, G.C. The structural components of a knowledge-based economy. In: *International Journal of Business Innovation and Research*. 2013, No. 7(4), p. 504-518. ISSN 2525-3654.

<sup>44</sup> SCHWARTZ, D. The regional location of knowledge-based economy activities in Israel. In: *The Journal of technology transfer*, 2006, No. 31, p. 31-44. ISSN 1573-7047.

<sup>45</sup> CIOBANU, C., CAPSÎZU, V. Towards a knowledge-based society—an imperative of our time. Particularities of its edification in the Republic of Moldova. In : *Classical and Innovative Approaches in Contemporary Economic Thought*. 2016, p. 79-86. ISBN 978-9975-75-844-4.

communications, but also radio, television and various media, computer technologies and other means for storing, implementing operations and using information, including a large range of communication services.

Considering the structure of the concept of the knowledge economy in more detail, it is necessary to refer to the characteristics of the components of this concept and their constituent elements, presented in Table 1.2.

**Table 1.2. Characteristics of the main components of the knowledge economy**

Component		Contents of component characteristics	The role of the component in the knowledge economy
Institutional structure	Human capital	The workforce in the knowledge economy is highly skilled and adaptable. Ongoing training and upskilling is necessary for individuals to remain competitive in this environment. New methods and methods of human resource management are emerging, in which the consumer of knowledge participates in its creation.	Represents the qualifications, skills and education of workers, which makes them more competitive.
	Information and Communication Technologies (ICT)	Particular attention is paid to innovation and the creation of new ideas, products and services. Research and development (R&D) is essential for continuous innovation. To stimulate innovation and creativity, protecting intellectual property rights (such as patents, copyrights and trademarks) is critical. The formation of national innovation systems serves as the institutional basis of the economy.	Provide access to knowledge, information exchange and digital interaction.
And innovation system	Innovation	Knowledge-based economies rely heavily on information and communication technology as a resource, such as the Internet, software and data analytics tools, to facilitate the rapid exchange of information and knowledge.	The basis for the development of new knowledge-based products, services and technologies.
	Education and research	High-quality educational and research institutions produce skilled workers, promote innovation and generate new knowledge.	They form human capital, generate new knowledge and ideas.
About education and training	Knowledge networks	Various types of networks, such as professional organizations, industry groups, online communities, and open source projects, serve as hubs for knowledge sharing and collaboration. These networks promote the exchange of best practices, innovations and experiences among their members. This uses a resource (email, computers, etc.) that has a network nature.	Facilitate the dissemination and exchange of knowledge between people and organizations.
	Globalization	Integration into the global economy, where knowledge economies participate in the global exchange of ideas, goods and services, and their competitiveness is influenced by their ability to adapt to global trends.	Strengthens the mobility of knowledge, business connections and cultural exchange.
Information infrastructure	Entrepreneurial culture	An entrepreneurial culture often prevails in knowledge economies, encouraging individuals and organizations to take risks, develop new technologies, and create start-ups. At the same time, the state focuses on improving the overall quality of life, including access to healthcare, education and cultural resources.	Promotes the creation and diffusion of innovations, as well as the development of knowledge entrepreneurship.

Source: developed by the author based on<sup>46 47</sup>

<sup>46</sup> HADAD, S. Knowledge economy: Characteristics and dimensions. In: *Management dynamics in the Knowledge economy*, 2017, No. 5(2), p. 203-225. ISSN 2392-8042.

<sup>47</sup> TKACHENKO, O. et al. The impact of knowledge components on the world competitiveness. In: *National'nyi Hirnychiy Universytet. Naukovyi Visnyk*. 2021, No. 1, r. 198-203. ISSN 2071-2227.

**Component "human capital"** emphasizes that in a knowledge economy, human resources are the most valuable asset because they represent the collective knowledge, skills and innovative potential of the workforce. Both the disappearance of occupations and the creation of new occupations can reduce occupational security and lead to structured technological unemployment and increased time devoted to leisure and family<sup>48</sup>. The working-age population will be required to move frequently between different jobs, careers and employers, control and simultaneously work in multiple occupations, work in multiple types of employment, and continually acquire new skills and abilities in response to changing realities. In this case, the education system must train its students for flexible working life and enable them to identify changes in the future world of work and acquire the skills and tools to cope with them<sup>49</sup>.

**The information and communication technologies component** reflects, that the concept of the knowledge economy is linked to the broader idea of the "information age" or "digital age", in which information and knowledge are the main drivers of social and economic change<sup>50</sup>. An economy becomes information-based when information work dominates other sectors. The decisive resource importance goes to information, as a factor determining the level of competitiveness and productivity of firms<sup>51</sup>.

**Innovation component.** The knowledge economy requires structural changes - central planning and a state controlled by bureaucracy will not be effective, since the basis of such an economy is innovation, which can only be carried out by private small businesses<sup>52</sup>. Innovations are new forms of business organization, both external and internal<sup>53</sup>.

**The education and research component** emphasizes that an essential feature of the knowledge economy is the generation and use of new knowledge. Knowledge economics is defined as "economic knowledge" that examines the theory and empirical evidence needed to make rational decisions about knowledge investments, creative processes, and the management of knowledge-intensive industries and institutions<sup>54</sup>. The accumulation of knowledge through higher

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<sup>48</sup> OLSEN, M., PETERS, M. Neoliberalism, higher education and the knowledge economy: From the free market to knowledge capitalism. In: *Journal of education policy*. 2005 No. 20(3). p. 313-345. ISSN 02680939.

<sup>49</sup> POWELL, W. W., SNELLMAN, K. The Knowledge Economy. In: *Annual Review of Sociology*, 2004, No.30, p. 199-220. ISSN 1545-2115.

<sup>50</sup> PORAT, M., RUBIN, M. *The information economy. Definition and Measurement*. Washington: US Government Printing Office, 1977. 319 p. ISBN N/A.

<sup>51</sup> XU, S., HE, X., XU, L. Market or government: who plays a decisive role in R&D resource allocation? In: *China Finance Review International*. – 2019. No. 9(1), p. 110-136. ISSN 20441398.

<sup>52</sup> DRUCKER, P. F. *The age of discontinuity: Guidelines to our changing society*. New Jersey: Transaction Publishers, 2011. 434 p. ISBN 978-1560006183.

<sup>53</sup> DYDUCH, J., OLSZEWSKA, K. Israeli innovation policy: An important instrument of perusing political interest at the global stage. In: *Polish Political Science Yearbook*. 2018, No. 47(2), p.265-283. ISSN 0208-7375.

<sup>54</sup> COWELL, R. *Towards knowledge societies. UNESCO World Report*. Paris: UNESCO Publishing. 2005. 226 p. ISBN 92-3-104000-6.

education, scientific research and industrial R&D is a key factor in economic and social development<sup>55</sup>. The methodical idea refers to knowledge based on intellectual capital, which allows one to achieve wealth and power through sophisticated control over ideas and information<sup>56</sup>. The economy is global and dynamic, focused on technology and its interconnections.

**Knowledge Network Component** emphasizes the importance of interaction, collaboration and effective exchange of information and knowledge<sup>57</sup>. Many organizations in the knowledge economy seek external input and ideas from a network of partners, customers and even competitors through open innovation practices. This approach can lead to the creation of new products and services through the collective wisdom of the wider community. In a networked knowledge economy, entire ecosystems of interconnected organizations, government agencies, universities and businesses facilitate the creation, exchange and application of knowledge<sup>58</sup>. These ecosystems foster innovation and drive economic growth.

**The "globalization" component** reflects that today's global economy can be described as transitioning to a "knowledge economy" or an "information society"<sup>59</sup>. The rule of thumb for 20th century economic success needs to be reconsidered as the depletion of physical resources gives way to the development of human capital. This will lead to the reallocation of labor, the creation of new markets for intellectual assets and the development of soft skills, reducing the use of obsolete physical and industrial assets<sup>60</sup>. The knowledge economy is not limited by geographical boundaries. In this context, international cooperation in research and development is widespread.

**Entrepreneurial culture component** encourages individuals and organizations to identify and take advantage of opportunities in rapidly changing markets. An entrepreneurial spirit is necessary to stimulate innovation, create new businesses and adapt to technological advances. The knowledge economy supports entrepreneurial culture by providing access to information,

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<sup>55</sup> *New sources of growth: knowledge-based capital. Key analyzes and policy conclusions.* Synthesis report. OECD, 2013. 70 r. (accessed 10/18/2022). Available at: <https://www.oecd.org/sti/inno/knowledge-based-capital-synthesis.pdf>

<sup>56</sup> HISLOP, D., BOSUA, R., HELMS, R. *Knowledge management in organizations: A critical introduction.* Oxford university press, 2018. 344 rub. ISBN 0198724012.

<sup>57</sup> PACHURA, P. et al. Networking in Knowledge Economy (Part I). In: *Annales Universitatis Apulensis Series Oeconomica*. 2008, No. 2(10), p. 1-12. ISSN 1454-9409.

<sup>58</sup> VALKOKARI, K. Business, innovation, and knowledge ecosystems: How they differ and how to survive and thrive within them. In: *Technology innovation management review*, 2015, No. 5 (8), p.17-24. ISSN 1927-0321.

<sup>59</sup> SAGIKYZY A. et al. Knowledge Society: Essence, Conceptual Models, and Potential for Implementation. In: *Revista Espacios*, 2020, No. 41(15), pp.4-11. ISSN 0798 1015.

<sup>60</sup> ANDREWS, D., CRISCUOLO, C. *Knowledge-based capital, innovation and resource allocation.* OECD, 2013. 80 rub. ISSN 18151973.

networks and digital platforms that enable startups and small businesses to thrive<sup>61</sup>.

The components of the knowledge economy identified by the author represent characteristics, significance, and degree of expression of which are steadily increasing at this time. Innovation plays a key role both in the creation of new knowledge and in the production of goods and services. The Internet, numerous information applications and programs, of course, simplify the work of an employee, but do not replace his intelligence and creativity, the deficit of which in the knowledge economy is not decreasing, but is only increasing. Countries that successfully transition to knowledge-based economies often experience increased productivity, higher wages and improved living standards. However, they also face challenges related to income inequality, the digital divide and the need for continued investment in education and technology infrastructure to remain competitive in the global marketplace.

Thus, the essence of the knowledge economy lies in the fact that the main role in it belongs to man, and not to technology, since it is he who generates new knowledge, which in turn makes it possible to introduce innovations in production. A knowledge economy means that a country has a high level of development and focuses on improving the quality of human capital, living standards, knowledge production, the introduction of high technology, innovation and the provision of high-quality services.

The concept of a knowledge economy refers to an economic system in which knowledge, information and technology play a central role in driving economic growth and development. In a knowledge economy, the main productive resource is intellectual capital, which includes the skills, knowledge and innovations of individuals and organizations. The knowledge economy is a relatively new look at the formation of value, competitiveness and product, both goods and services.

Existing approaches to the phenomenon of the knowledge economy, from the definitions of individual researchers to theories that are combined into areas of study of international organizations, specialized companies and specialists, are aimed at solving the problem of the most comprehensive definition of the knowledge economy. However, these approaches do not formulate an unambiguous approach, but only complement the theoretical basis of the problems of the knowledge economy. In this regard, the author formulated his own definition of the knowledge economy, including aspects of globalization and the social aspect of constant updating of knowledge.

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<sup>61</sup> STAM, E., GARNSEY, E. Entrepreneurship in the knowledge economy. In: *SSRN Electronic Journal*, 2007, p. 1-24. ISSN 1556-5068. DOI: [10.2139/ssrn.1923098](https://doi.org/10.2139/ssrn.1923098)

The structure of the concept of the knowledge economy is a cyclical process that includes input data (production and dissemination of knowledge) and output data (use and competitiveness of knowledge). The structure includes interrelated components (institutional structure, innovation system, education and training, information infrastructure), which are based on the constituent elements that form the core of the knowledge economy.

## **1.2. The role of educational policy in the knowledge economy in the context of globalization**

Education is important in a global world because it equips people with the skills and knowledge needed to succeed in an increasingly interconnected and competitive global job market. It promotes cultural awareness and tolerance, promoting an understanding of diversity and the ability to respectfully interact with people of different backgrounds. In an era of rapid technological advancement and global challenges such as climate change and pandemic, political instability, education empowers people to understand complex issues, engage in informed discussion, and contribute to innovative solutions. Education policy plays a key role in bridging socio-economic gaps and reducing inequalities, which is essential for promoting social equality and economic development globally<sup>62</sup>. The knowledge economy brings new challenges and opportunities, requiring educational systems to strategically adapt to dynamic demands<sup>63</sup>.

The purpose of the paragraph is to determine the impact of the process of globalization and the knowledge economy on educational policy. At the same time, it will be considered what place the knowledge economy occupies in the formation of educational policy, meeting the requirements of the changing world market, as well as promoting the introduction of innovations in the context of global transformations.

The term educational policy arises from two concepts: “education” and “policy”, and therefore contains the essential features of both the first and second concepts. From both theoretical and practical points of view, it seems necessary to distinguish between two concepts that are close, but do not coincide in scope and content: “policy in the field of education” and “educational policy.” The first of them covers a set of measures taken or programmed by the state, its bodies, political parties and other subjects of political action in relation to education as a social institution. The second concept, in addition to this, also includes educational components and the educational

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<sup>62</sup> BROWN, P. et al. Education, globalization and the future of the knowledge economy. In: *European Educational Research Journal*. 2008, No. 7(2), p. 131-156. ISSN 1474-9041.

<sup>63</sup> BERKOVICH, I. Educational governance transition in a social democratic country: A process-tracing analysis. In: *Journal of Educational Change*. 2019, No. 20(2), p. 193-219. ISSN 1573-1812.

impact of other areas of the state's internal policy (economic, social, information, etc.)<sup>64</sup>. Educational policy is a system of targeted actions aimed at shaping the educational environment and influencing learning processes, taking into account social, economic and cultural aspects in a globalizing world. The concept of educational policy covers a wide range of issues, including curriculum development, access to education, and the management and evaluation of educational outcomes.

The theory has formed the main approaches of researchers to defining educational policy, which distinguishes four main directions in the formation of the definition: the influence of state power; interaction of interests of subjects in the educational space, the influence of three main actors (market, state, university); inclusion in the concept of economic aspects of society (Appendix 2).

The first approach is that educational policy is **the exclusive prerogative of state power**. State policy in the field of education is a system of relations that develops within social groups to ensure interaction within social institutions<sup>65</sup>. Education as a social good is the object of state educational policy. Individuals, communities and social institutions are the subjects of the influence of educational state policy. This approach includes several important points in educational policy<sup>66</sup>: firstly, the development and maintenance of constant "rules of the game" in the field of education, that is, norms and rules; secondly, creating conditions for fair competition in the field of education; thirdly, quality control of education.

Thus, by educational policy, followers of this approach understand the decision-making process regulated by the state to implement the constitutional right of citizens to receive an education, taking into account the influence of various subjects. They define educational policy as a set of laws, norms, rules and practices that shape, regulate and influence the processes of teaching and learning<sup>67</sup>. In general, according to this approach, educational policy refers to the activities of the state, its authorities and other authorized bodies to create and improve the education system in the country.

The second approach is associated with the assertion that educational policy cannot be an

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<sup>64</sup> MORROW, RA, TORRES, C.A. The state, globalization, and educational policy. In: *Globalization and education*. Milton Park: Routledge, 2013. p. 27-56. ISBN9781315022642.

<sup>65</sup> SYKES, G., SCHNEIDER, B., PLANK, D. N. (ed.). *Handbook of education policy research*. Milton Park: Routledge, 2012. 1064 p. ISBN 9780415989923.

<sup>66</sup> COHEN, DK, HILL, HC *Learning policy: When state education reform works*. New HavenL Yale University Press, 2008. 224 p. ISBN 978-0300089479.

<sup>67</sup> SHEPARD, L., HANNAWAY, J., BAKER, E. *Standards, Assessments, and Accountability. Education Policy White Paper*. California : National Academy of Education (NJ1). 2009. (accessed 03/10/2023). Available at: [https://www.researchgate.net/publication/234706397\\_Standards\\_Assessments\\_and\\_Accountability\\_Education\\_Policy\\_White\\_Paper](https://www.researchgate.net/publication/234706397_Standards_Assessments_and_Accountability_Education_Policy_White_Paper)

integral part of state policy, since the state does not and cannot have any interests, levers, or subjectivity to participate in education. Researchers of this approach define educational policy **as a platform for various interests subjects working in the educational space**. These subjects, on the one hand, fight with each other for this or that educational resource or for this or that position in this springboard and, on the other hand, according to Machiavellian ideas about politics, they do everything possible to ensure that no one dies in this struggle<sup>68</sup>. The most valuable property is the property of politics, that is, the multiplicity of different positions and interests<sup>69</sup>. In a broad sense, educational policy is the more or less constant establishment and determination by various subjects of criteria and goals, the determination of means and organization, the use of tools and resources to create and provide an educational system<sup>70</sup>. Certain educational standards can be considered as criteria.

The third approach considers educational policy through **determining the greatest influence in the field of education of three main actors: the market, the state, the academy (university)**, with the participation and influence of external factors. By education policy, adherents of this approach understand policies aimed at any changes (or resistance to changes) in the education system<sup>71</sup>. Based on this understanding of educational policy, the definition should be based on the presence or absence, as well as the degree of influence of certain entities responsible for implementing educational policy<sup>72</sup>.

There is also a research consensus that educational policy is the result of complex relationships between the state, educational institutions, teachers, students and parents, including strategies and practices aimed at achieving educational goals<sup>73 74</sup>. This definition complements **the various** actors that influence the content of educational policy.

The fourth approach expands the definition of educational policy to include economic factors. The researchers emphasize that the definition should be expanded to **include the economic aspects of society in educational policy**, since they most directly affect the accessibility of

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<sup>68</sup> GULSON, KN, SELLAR, S. Emerging data infrastructures and the new topologies of education policy. In: *Environment and Planning D: Society and Space*. 2019, No. 37(2), p. 350-366. ISSN 1472-3433.

<sup>69</sup> BERKOVICH, I., MARKMAN, N. *State and pedagogical organizations*. Jerusalem: Van Leer Jerusalem Institute, 2010. p.53–71 (Hebrew).

<sup>70</sup> DATNOW, A., PARK, V. Conceptualizing policy implementation: Large-scale reform in an era of complexity. In: *Handbook of education policy research*. Milton Park: Routledge, 2012, p. 348-361. 978-0415989923.

<sup>71</sup> HENRY, M. et al. *Educational policy and the politics of change*. Milton Park: Routledge, 2013. 208 p. ISBN 9780415118712.

<sup>72</sup> CLARK, C. Educational research, educational policy-making and practice. In: *Journal of Philosophy of Education*. 2011, No. 45(1), p. 37-57. ISSN 1467-9752.

<sup>73</sup> BURCH, P. Educational policy and practice from the perspective of institutional theory: Crafting a wider lens. In: *Educational researcher*. 2007, No. 36(2), p. 84-95. ISSN 1935-102X.

<sup>74</sup> YOGEV, A. *Approaches to value education in a pluralistic society*. Jerusalem: Model Institute in cooperation with the Ministry of Education, Office of the Chief Scientific Officer, 2001, p. 355-379 (Hebrew).



<sup>75</sup>education. In contrast to the third approach, in which the educational policies of individual countries are classified according to the prevailing role of one or another subject, in this case it is assumed that economic aspects are an integral part of determining any type of educational policy.

According to the author, summarizing the studied approaches to defining the concept of educational policy, it can be noted that educational policy is aimed at creating an education system that meets the current and future needs of society, as well as at the development of human capital and the training of qualified specialists. This view is supported by some researchers who view education policy as a set of declarations and decisions that create the general environment and infrastructure for education, and also provide a basis for assessing its quality and effectiveness<sup>76</sup>.

Of particular scientific interest is the approach that involves interaction within the framework of the development and implementation of educational policy of the three main actors. Each participant plays a role, which determines the corresponding educational policy model, which is clearly presented in Table 1.3.

**Table 1.3. The role of actors in shaping educational policy models**

Actor	Role in educational policy	Education policy model
Government	"Acting State" and "Intervening State"	State-paternalistic, social
Market	A funding regulator that stimulates competition and change in the education system	Market, liberal
Higher education institutions (academy)	And the state's agent in the production of education services	Social and corporate

Source:<sup>77</sup>

The actual role of the state can be different and identifies two extreme forms of state influence on the education system<sup>78</sup>: the “facilitating state” and the “intervening state.” The state-paternalistic model focuses on the provision of educational services by the state. The state sees education as a public good that ensures high rates of development and has positive institutional external effects (for example, it helps to familiarize students with certain norms and values of life). Educational institutions, not having the freedom to choose a development strategy when implementing state policy, receive a guarantee from the state to ensure their activities.

<sup>75</sup>ANYON, J. What “Counts” as Educational Policy? Notes towards a New Paradigm. In: *Harvard Educational Review*. 2005, No. 75, p. 65–88. ISSN 0017-8055.

<sup>76</sup>ANDERSON, JR Methodologies for studying human knowledge. In: *Behavioral and brain sciences*. 1987, No. 10(3), p. 467-477. ISSN 1469-1825.

<sup>77</sup>WISMAN, RA, INGLE, WK Actors, interests, and actions in shaping state education policy. In: *Maximizing the Policy-Relevance of Research for School Improvement*. 2021. p.43. ISBN 978-1648022487.

<sup>78</sup>VAUGHT, FA, Van. *Governmental Strategies and Innovation in Higher Education*. London: Lemma, 1989. 49 p.

If there is no visible government influence on education, the market acts as an effective force for coordination<sup>79</sup>. But it is more correct in relation to education to talk about “market-like” behavior and the existence of quasi-market structures. There is no educational system that is completely regulated by the market. Market mechanisms in education do not work, on the one hand, due to its specificity as a form of activity (teaching and research), and, on the other hand, because education is a common good, in the existence, accessibility and effectiveness of which the whole society is interested, and not just individuals.

The topic of the market when discussing educational policy is usually addressed in cases where similarities between individual elements of the educational process and the market system are discovered. Market elements, as a rule, are those elements in which competition is most noticeable. Examples of market elements can be: the role of students in the education system (their struggle for educational places; the interest of educational institutions in certain students in connection with opportunities for obtaining funding); degree of research funding on a competitive basis<sup>80</sup>.

The liberal model emphasizes individual rights and freedoms in choosing education, and also emphasizes the role of the private sector in the education<sup>81</sup> system. The market plays a leading role in it, characterized by the employer’s orientation towards a “ready” worker, with the educational institution’s individual responsibility for the results of its activities and with its high mobility as an independent participant in the educational services market. The state is the guarantor of creating equal competitive conditions for the activities of educational organizations at the federal level, and the functions of monitoring their activities are delegated to local authorities<sup>82</sup>.

Higher educational institutions are the third force in developing higher education policy, and schools are the third force in developing secondary education policy. The specificity of educational institutions is that they unite around knowledge, regarding its production and transmission. Any form of knowledge, including scientific knowledge, exists because it is in demand by someone, be it the market, government, class structure or political system. In addition, knowledge itself influences them, and therefore the production of knowledge is an element of the

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<sup>79</sup> AVIGUR-ESHEL, A. Synthesizing depoliticization and responsabilization: The case of financial education in Israel. In: *Competition & change*, 2018, No. 22(5), p. 509-528. ISSN 1024-5294.

<sup>80</sup> GOEDEGEBUURE, L., KAISER, F., MAASEN, P. Higher Education Policy in International Perspective: An Overview. In: *Higher Education Policy. An international comparative perspective*. New York: Oxford, 1994. p. 1–12. ISBN 9780080423937.

<sup>81</sup> FOX, CR A liberal education for the 21st century: Some reflections on general education. In: *Currents in Teaching & Learning*. 2016, No. 8(2), p. 5-17. ISSN 1877-1297.

<sup>82</sup> RICHARDSON, H. Liberal education. In: *New Studies in the History of Education*. Milton Park: Routledge, 2023. p. 20-32. ISBN 9781003039532.

mechanism of social struggle. Within the framework of the social-corporate model, in which the academy (educational institution) is dominant, the state, represented by a centralized government, has taken upon itself the planning, coordinating and controlling functions of the production of general and vocational education in order to reduce the risks of investment in education for independent economic entities through their unification and redistribution between all market entities<sup>83</sup>.

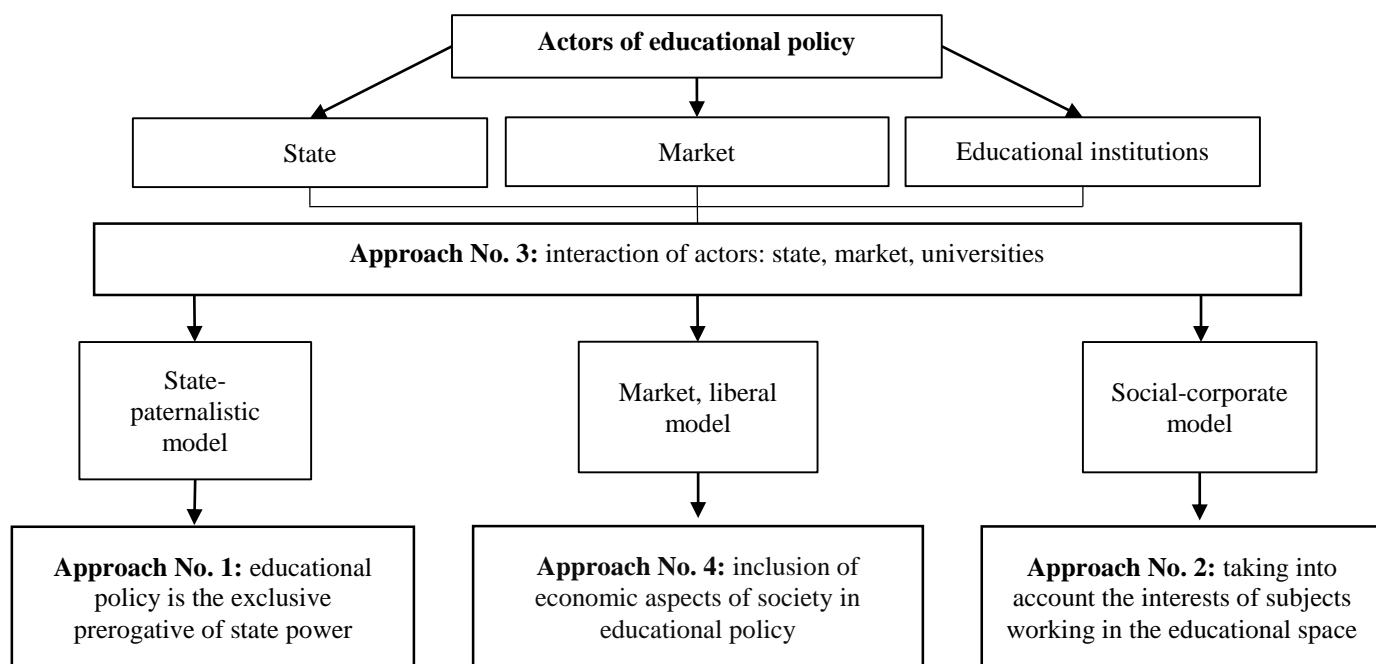
Within this model, educational institutions act as agents of the state in the production of educational services, since the state has delegated the corresponding powers to them. At the same time, educational institutions are aimed not only at producing specialists who have a high monetary value in the labor market, but also at the socialization of individuals into civil society through the education system. The presented models of educational policy reflect a variety of philosophical and methodological concepts concerning the functional roles of the state, the private sector and society in the context of the educational system<sup>84</sup>.

Variations in their combination appear depending on the unique sociocultural, economic and political characteristics of a particular country or region. This diversified range of approaches represents the complex interplay between government intervention, private initiatives and public participation in the formation and implementation of educational policy, based on different social, cultural and economic contexts. The relationship between actors and approaches to determining educational policy is presented in Figure 1.3.

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<sup>83</sup> SHARMA, D. Integrating Social and Educational Responsibility: Concept, Model and Challenges. In: *International Perspectives on Policies, Practices & Pedagogies for Promoting Social Responsibility in Higher Education*. Emerald Publishing Limited, 2020. Vol. 32, p. 25-37. ISBN 978-1-83909-855-0.

<sup>84</sup> GOLOVATAIA, L. Educația ca „soft power” în cercetarea științelor politice moderne. In: *Relații internaționale. Plus* Nr. 2(22), 2022. p. 30-41 DOI:[https://doi.org/10.52327/1857-4440.2022.2\(22\).03](https://doi.org/10.52327/1857-4440.2022.2(22).03). ISSN 1857-4440. Available at: [https://ibn.idsi.md/ro/vizualizare\\_articol/186993](https://ibn.idsi.md/ro/vizualizare_articol/186993)



**Figure 1.3. The relationship between actors and approaches to determining educational policy**

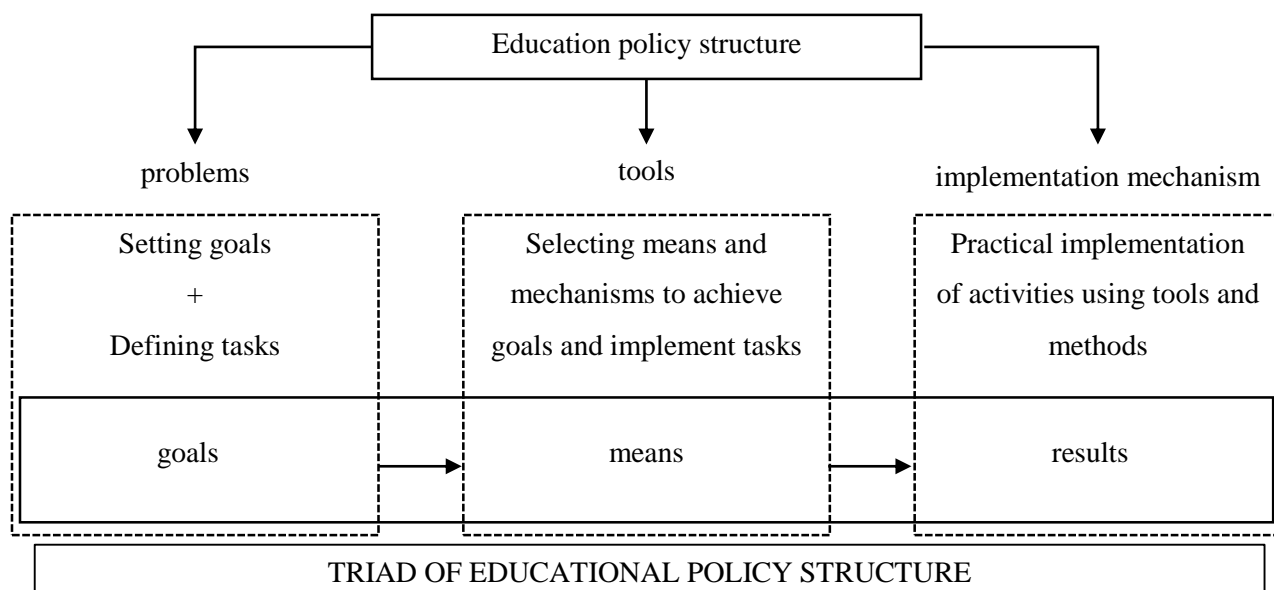
Source: developed by the author

The relationship between actors and approaches in education policy is a complex and important dynamic that defines the modern education system. An important aspect of the relationship is the feedback between all participants in the system, which is realized, among other things, due to the presence of different approaches to determining educational policy.

This diagram demonstrates that all approaches to understanding the essence of the concept of educational policy are interconnected through actors and corresponding models of policy formation. Therefore, understanding the essence of educational policy consists of an integrated approach, including the features of approaches - the interaction of actors, the influence of government power, the role of the economic aspect, taking into account the interests of subjects in the field of education.

Educational policy has a dual nature, since it is simultaneously an instrument of social management in the form of a specific document and a key factor in the formation of social development, as an adaptive tool (Appendix 3). Educational policy is not only focused on the formulation and approval of principles, but also on their constant updating and adaptation to changing sociocultural and economic conditions. According to the author, educational policy is a set of ideological, legislative, administrative and pedagogical activities in the field of education, which are carried out by various actors and other interested parties to achieve certain political, socio-economic, cultural and pedagogical goals. The author notes **three** main elements of

educational policy - its goals, their implementation with the help of various kinds of instruments, and the mechanism for implementing activities. The internal relationship of these elements, specifically the structure of educational policy as an activity, is better illustrated in Figure 1.4.



**Figure 1.4. Education policy structure**

Source: developed by the author based on<sup>85</sup>

About defining the goals and objectives of educational policy at the appropriate levels is carried out by certain management structures. In the triad “goals–means– results” of educational policy, the decisive role belongs to the goals, which represent a rather complex education. By their nature, goals can be general or specific, complex (united into a single doctrine of educational policy) or individual; main, auxiliary or secondary; strategic or tactical; promising or immediate; real or fictitious, finally, objective or subjective.

In the selection and justification of means and methods for achieving these goals and objectives. When undertaking any educational event to achieve a specific goal, it affects not only the object of this event, but also those areas of public life that are directly or indirectly connected with it. However, it is not always possible to consider and evaluate such connections, to predict the directions, nature and results of their changes, and to foresee the full range of consequences of the steps taken. This often leads to the fact that educational activities not only do not achieve the desired effect, but also give a completely undesirable result.

The practical implementation of measures and obtaining results can be observed at different **levels**: in the law (in legislative practice); in administrative and management practice; in

<sup>85</sup> NICHOLSON-CROTTY, J., MEIER, KJ Politics, structure, and public policy: The case of higher education. In: *Educational Policy*. 2003, No. 17(1), p. 80-97. ISSN 1464-5106.

educational practice, that is, directly in the educational activities of educational institutions. On the other hand, “educational” results are achieved through the implementation of more than just educational policies. They can be indirect, side effects, long-term consequences of steps prescribed in educational policy.

Globalization is being implemented and strengthened, gradually manifesting itself at each level of integration processes (global, national, regional and local) in the form of a socio-economic effect when applying the economic implementation mechanism. The author examined the levels of integration processes in the field of education in the context of globalization, presented in Table 1.4.

**Table 1.4. Levels of integration processes in the field of education in the context of globalization**

Level	Form	Economic mechanism of implementation	Socio-economic effect	Priorities and goals
Global	Horizontal transnational industry integration	Institutional mobility program, franchising, international agreements, branches	strengthening economic and political influence, increasing the competitiveness of universities at the international level	Economically, pedagogical
National	Horizontal interterritorial sectoral integration		strengthening the economic potential of universities, increasing their competitiveness in the national market of educational services, increasing the accessibility of higher education for the population, improving the quality of life of the population by region	Economic
Regional	Vertical sectoral and horizontal intersectoral (science, education, production)	Merger, creation of university associations, research and production complexes, agreements, formation of clusters	strengthening the economic potential of universities, increasing their competitiveness in regional markets for educational services, increasing the accessibility of higher education, improving the quality of life within the region, improving the quality of education, developing innovations	Economic, innovative development

Local	Vertical sectoral (formal and non-formal education), horizontal intersectoral (science, education, culture, production, social protection)	Cluster formation, social partnership, merger, agreements, informal connections, use of learning region models	saving limited resources, using synergistic effects, improving the quality of education, developing innovative potential, sustainable development of territories, accumulation of social capital	Economic, innovative development, social
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Source:<sup>86 87</sup>

The table represents a systematic picture of the levels of integration processes in the field of education in the context of globalization. Each level covers certain forms of integration, economic mechanisms of implementation, socio-economic effects, and also highlights priorities and goals<sup>88</sup>.

At the global level, educational institutions strive for horizontal cross-national industry integration through institutional mobility programs, franchising, international agreements and affiliates. The main emphasis is on strengthening economic and political influence, as well as increasing the competitiveness of universities at the global level. Economic and pedagogical aspects play a key role in this case.

The national level assumes horizontal interterritorial industry integration aimed at strengthening the economic potential of universities and increasing their competitiveness in the national market of educational services<sup>89</sup>. This is also associated with increasing accessibility to higher education for the population and improving the quality of life in the regions, which highlights economic aspects as fundamental.

The regional level combines vertical industry and horizontal intersectoral integration in science, education and production. The creation of university associations, research and production complexes and the formation of clusters are aimed at strengthening the economic potential of universities, increasing their competitiveness in regional markets for educational services and developing innovation<sup>90</sup>. The main priorities here are economic and innovative development.

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<sup>86</sup> MAKAROVA, EA, MAKAROVA, EL, KORSKOVA, TV The role of globalization and integration in interdisciplinary research, culture and educational development. In: *Journal of Historical Culture and Art Research*. 2019, No. 8(1), p. 111-127. ISSN 2147-0626.

<sup>87</sup> HAJISOTERIOU, C., Angelides P. Examining the nexus of globalization and intercultural education: theorizing the macro-micro integration process. In: *Globalisation, Societies and Education*. 2020, No. 18(2), p. 149-166. ISSN 14767724.

<sup>88</sup> MASHAL, L. Economics as interdisciplinary area. In: *International Journal of History and Scientific Studies Research (IJHSSR)*, vol 1 (6), 2019. pp. 21-25. ISSN: 2581-8767. Available at: [http://www.ijhssr.org/paper/v1is6/IJHSSR\\_D016021025.pdf](http://www.ijhssr.org/paper/v1is6/IJHSSR_D016021025.pdf)

<sup>89</sup> KFIR, D., ARIAV, T. The "Academization" of Teacher Education in Israel. In: *Teacher Education*. No. 5(2), 2006, p. 151-161. ISSN 1047-6210.

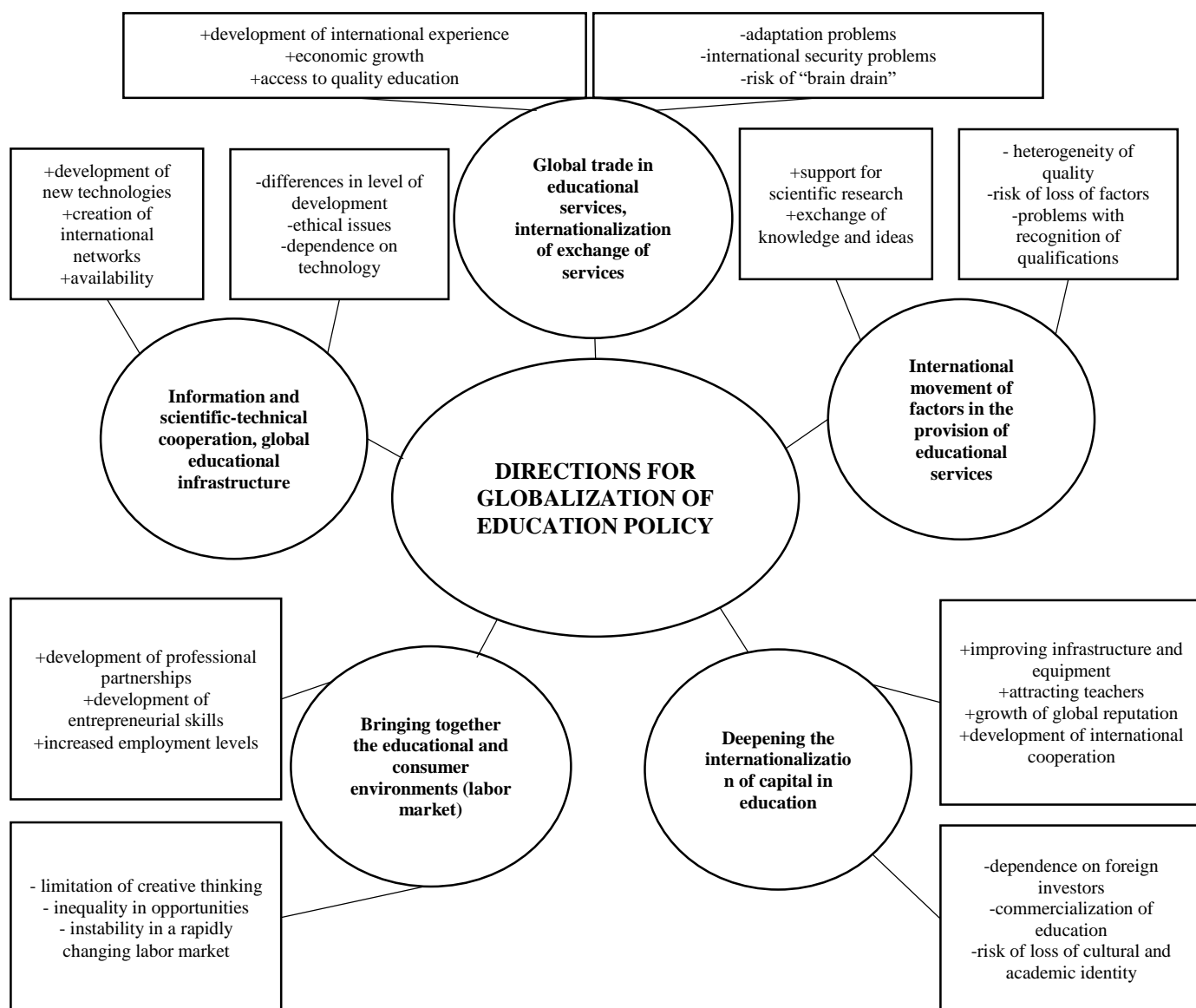
<sup>90</sup> OPTALKA, I. Organizational citizenship behavior of teachers in Israel: phenomenon, content and sources. In: *Journal of Educational Research and Studies, published by the Mofet Institute*, 2007. p. 35-64. (Hebrew).

The local level represents vertical sectoral integration in formal and informal education, as well as horizontal intersectoral integration with the participation of science, education, culture, production and social protection. This includes cluster formation, social partnerships and mergers. Here the emphasis is on saving limited resources, synergistic effects, improving the quality of education, developing innovative potential and sustainable development of territories, which emphasizes the multidimensionality of priorities, including economic, innovative and social aspects.

Thus, author can note a systematic approach to the presentation of integration processes in the field of education in the context of globalization processes, emphasizing the diversity of levels and their impact on economic, social and innovative potential. In the context of globalization, it is important to consider different levels of integration in order to ensure the effective development of educational systems at the global, national, regional and local levels. By emphasizing the diverse impact of these processes across various levels—ranging from global to local—this perspective underscores the need for a nuanced understanding to facilitate the effective development of educational systems in the ever-evolving globalized context. Furthermore, acknowledging these multilevel considerations is crucial for addressing the intricate interplay between education, economy, society, and innovation on a global scale.

The directions and consequences of the influence of globalization on education policy are presented in Figure 1.5.





**Figure 1.5. Directions and consequences of the influence of globalization on education policy**

*Note: "-" means negative impact and "+" means positive impact on educational policy*

Source: developed by the author based on<sup>91</sup>

The presented diagram demonstrates an important picture of modern transformations in the field of education under the influence of global processes, in particular, it reflects the directions and their positive and negative impact on educational policy. The globalization of education policy is manifested in several key directions, each of which is accompanied by both positive and negative changes. Global trade in educational services and the internationalization of exchanges of services contribute to expanding access to education and enriching the cultural experience of students, but

<sup>91</sup> RIZVI, F., LINGARD, B. *Globalizing education policy*. Milton Park: Routledge, 2009. 240 p. ISBN 9780415416276.

at the same time can create inequalities in the quality of educational programs. International movement of educational delivery factors, including students and teachers, can lead to the exchange of knowledge and experience, but also cause problems with adaptation and loss of highly qualified personnel. Deepening the internationalization of capital in education can improve access to education and promote infrastructure development, but carries the risk of trade in educational services and loss of cultural and academic identity. The convergence of the educational and consumer environment in the labor market can lead to increased competitiveness of graduates, but at the same time limit creative thinking and create dependence on market demands. Information and scientific-technical cooperation, as well as global educational infrastructure, facilitate the exchange of knowledge and new technologies, but can cause problems with cybersecurity and a loss of emphasis on research activities. Overall, globalization in education requires careful consideration and balancing of advantages and disadvantages for the benefit of students, educational institutions and society as a whole.

Thus, the framework presented by the author allows us to conclude that globalization is integrally linked to education policy at various levels, emphasizing the importance of adapting educational systems to the changing world context and strategic alignment with global trends.

Next, it is necessary to reflect the influence of the process of globalization and the knowledge economy on educational policy. This issue is practically not covered in theoretical studies. Therefore, the author drew conclusions based on the effects of the knowledge economy and globalization in the development of educational policy.

The greater the processes of globalization of the education system, the higher the efficiency of the knowledge economy. Globalization of the education system can contribute to the development of a knowledge economy, where the key emphasis is on the creation, transfer and use of knowledge as the main driver of economic growth. Globalization processes in the field of education can lead to greater access to advanced knowledge and technologies, the exchange of best practices, as well as strengthening international ties in the field of education and science.

The global aspect of the concept of the knowledge economy allows us to explore and develop practical recommendations regarding the process of developing, introducing and implementing education policy:

- internationalization of processes of production and use of knowledge as part of the transformation of systems of scientific research, education, innovation, scientific and technical information;
- organization of global knowledge flows and the formation of a global knowledge market;
- formation of an effective system for regulating the migration of highly qualified

specialists and students;

- development of international business in the field of knowledge;
- interstate scientific and technical cooperation, implementation of large-scale innovative projects;
- activities of international organizations related to the field of knowledge.

The knowledge economy is more susceptible to globalization trends and shows increased international flows and interactions. Globalization fundamentally changes the conditions for obtaining knowledge and creates new opportunities for its use <sup>92</sup>. First of all, this concerns enterprises and individuals who feel the quality of globalization processes in the field of knowledge. For states, the globalization of knowledge creates new challenges in terms of regulating external educational relations and creating more favorable conditions for their use within the country, which can be included as directions in education policy.

You should also pay attention to complex changes in the field of education. The knowledge economy, focused on the creation, transfer and use of knowledge, is becoming a key factor in the formation of educational strategies. Globalization processes, in turn, are accelerating this transition by supporting international cooperation and the exchange of best practices.

The influence of the knowledge economy is manifested in the desire of educational institutions to adapt programs to the needs of the modern labor market. Education policy is becoming more flexible, focused on developing skills that are in demand in the economy, such as critical thinking, creativity and technological literacy.

The essence of globalization is bringing changes to the educational environment through the establishment of international partnerships and student exchanges<sup>93</sup>. This promotes a diversity of cultural experiences and supports the global exchange of knowledge. However, when faced with these challenges, it is important to consider potential negative aspects such as loss of cultural identity, differences in the quality of education and the risks of trade in educational services.

Some authors see a number of threats in the current scenario for the development of knowledge-based economies at the global level<sup>94 95</sup>. Firstly, many countries that have crossed the

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<sup>92</sup> DALE, R. Specifying globalization effects on national policy: a focus on the mechanisms. In: *The Routledge Falmer Reader in Education Policy and Politics*. Milton Park: Routledge, 2007. p. 58-74. ISBN 9780203567203.

<sup>93</sup> REZAEI, H., et al. Internationalization or globalization of higher education. In: *Journal of education and health promotion*. 2018, No. 7. DOI: [10.4103/jehp.jehp\\_25\\_17](https://doi.org/10.4103/jehp.jehp_25_17)

<sup>94</sup> GODIN, B. The knowledge-based economy: conceptual framework or buzzword? In: *The Journal of technology transfer*. 2006, No. 31, p. 17-30. ISSN 1573-7047.

<sup>95</sup> SAGIYEVA, R. et al. Intellectual input of development by knowledge-based economy: problems of measuring in countries with developing markets. In: *Entrepreneurship and Sustainability Issues*. 2018, No. 6(2), p. 711. ISSN 2345-0282.

stage of social development and moved to an industrial society are not ready for a change of guidelines. Secondly, today, in the world economy there is an increase in differences between the centers and lagging states, which poses a threat to peripheral countries to turn into unique reservoirs of scientific research and its testing that is dangerous for civilization.

The primary task of educational policy at the present stage is to achieve modern quality of education, its compliance with the current and future needs of the individual, society and the state<sup>96</sup>. However, educational policy, reflecting national interests in the field of education and presenting them to the world community, at the same time takes into account the general trends of world development. This shows the relationship between educational policy and globalization processes. The main modern trends in global development that determine significant changes in the education system include<sup>97</sup>:

- acceleration of the pace of development of society and, as a consequence, the need to prepare people for life in rapidly changing conditions;
- transition to a post-industrial, information society, a significant expansion of the scope of intercultural interaction, in connection with which the factors of sociability and tolerance acquire particular importance;
- the emergence and growth of global problems that can only be solved as a result of cooperation within the international community, which requires the formation of modern thinking among the younger generation;
- democratization of society, expansion of opportunities for political and social choice, which necessitates increasing the level of readiness of citizens for such a choice;
- dynamic development of the economy, increased competition, reduction in the scope of unskilled and low-skilled labor, profound structural changes in the employment sector, which determine the constant need to improve professional qualifications, retrain workers, and increase their professional mobility;
- growth in the importance of human capital, which in developed countries accounts for 70-80% of national wealth, which leads to intensive, rapid development of education for both youth and adults.

Thus, taking into account the influence of the knowledge economy and globalization on educational policy, there is a need to consider the balance between adapting to the needs of the

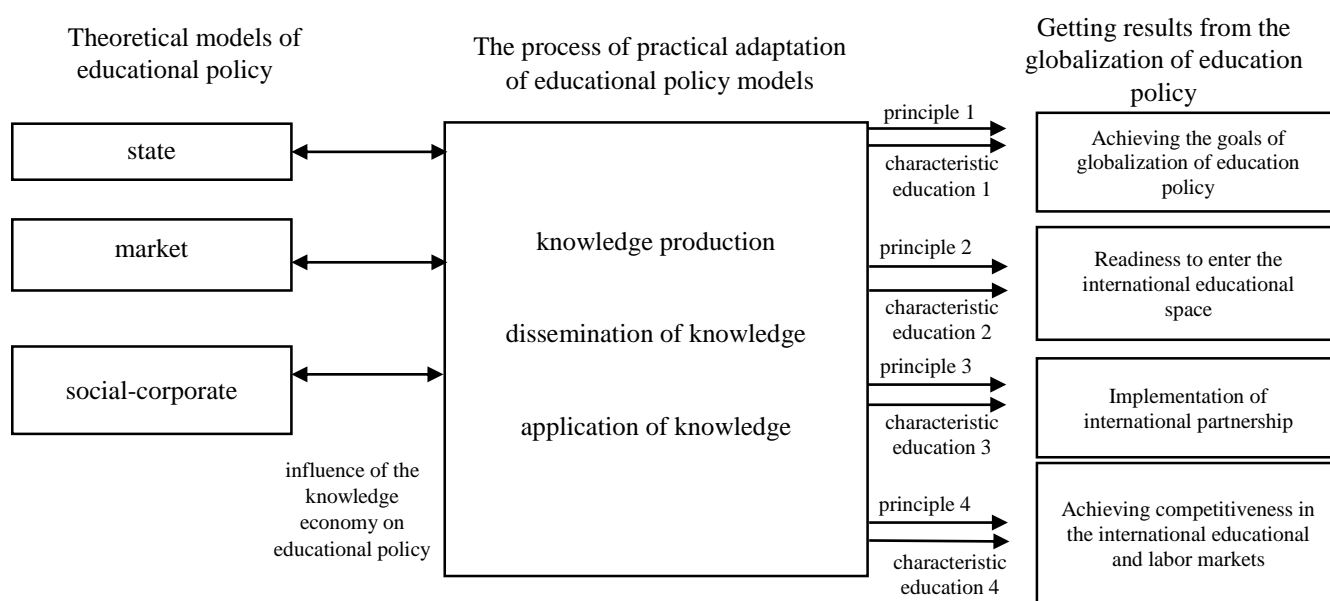
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<sup>96</sup> MADANI, R.A. Analysis of Educational Quality, a Goal of Education for All Policy. In: *Higher Education Studies*. 2019, No. 9(1), p. 100-109. ISSN 1925-475X.

<sup>97</sup> MAASSEN, P., CLOETE, N. Global reform trends in higher education. In: *Transformation in higher education: Global pressures and local realities*. Dordrecht: Springer Netherlands, 2006. p. 7-33. ISBN 9781402040054.

modern world and preserving the values of education, such as equality of access, quality of learning and respect for diversity.

According to the author, educational policy in its classical sense needs to be adapted to the new realities of globalization and the knowledge economy. The process of adapting educational policy in the context of the knowledge economy in the context of globalization is presented in Figure 1.6.



**Figure 1.6. The process of adaptation of educational policy in the context of the knowledge economy in the context of globalization**

Source: developed by the author

Globalization influences the structure of educational policy as interconnected with the concept of the knowledge economy of the system. The globalization of educational systems and the convergence of national educational environments are important trends in the modern world. In the context of these changes, it becomes critically important to consider educational policy models in the context of the knowledge economy in the context of the globalization of the educational space. The knowledge economy plays a critical role in globalization as it covers the production, distribution and use of knowledge. Knowledge is becoming a key resource shaping a country's competitiveness in the global economy<sup>98</sup>. The knowledge economy creates conditions for the development of education, science and innovation, which in turn becomes a factor in global competitiveness.

<sup>98</sup> AVNIMELECH, G. Targeting the biotechnology clusters in North Carolina and Israel: lessons from successful and unsuccessful policy making. In: *Technology Analysis & Strategic Management*, 2013, No.25(7), p. 835-851. DOI: [10.1080/09537325.2013.815710](https://doi.org/10.1080/09537325.2013.815710)

Educational policy models must take into account the dynamism of knowledge, ensuring flexibility and adaptability, so that the result of educational policy allows achieving the country's educational goals in the context of globalization (integrate into the rapidly changing global labor market, the ability to intercultural interaction, promoting sustainable development, etc.).

In order to assess the adaptability of educational policy models in the context of the globalization of the educational market and their essential characteristics, according to the author, it is necessary to be guided by the following principles:

- the principle of the necessary variety of ways to obtain education;
- the principle of ensuring a diversity of educational approaches and methods to meet the needs of different groups of students in different markets;
- the principle of dual response - educational policy models must be able to effectively respond to changing circumstances in the education market (the dual nature of educational policy);
- the principle of feedback - the establishment of mechanisms for the systematic collection and analysis of feedback from various actors involved in the development, implementation and implementation of educational policy.

Taking principles into account alone is not sufficient in the context of adapting education policy models to the global market and knowledge economy. Attention should also be paid to the characteristics of education, which reflect the essence of adapting these models in the context of global dynamics and the requirements of the knowledge economy.

The characteristics of education that reflect the adaptability of education policy models in the realities of the global educational market and trends in the knowledge economy are as follows: quality of education, regulatory framework for education, management of educational institutions, financial support.

In modern conditions of globalization, it becomes impossible to rely on formal performance indicators or individual characteristics of a country's specific educational policy.

In the state-paternalistic model, most universities do not bear any responsibility for **the quality** and content of education. This is confirmed by the presence of a gap in the requirements of the labor market and the content of the educational process, despite the existence of an educational policy. According to this indicator, the social-corporate model is the most adaptive to the conditions of globalization. In general, assessment of the quality of education is intended to influence decision-making in the state's educational policy, but operating within the framework of the initially allocated budgetary funds limits the actions of policymakers.

The most adaptive model of educational policy will be considered to be the one that **legislates** to the greatest extent the diversity of types of education and actors.

Also, when reforming educational policy, it is important to take into account **the management of educational institutions and the level of their autonomy**<sup>99</sup>. The main principle of policy in this case is the autonomy of institutions in order to guarantee freedom for teachers to strengthen the local democracy of the educational institution and complete the decentralization process. Autonomy in the context of globalization has become a tool for achieving the main educational goal - greater freedom is given to educational institutions to improve the quality of education<sup>100</sup>.

In all countries representing various educational policy models, the level of public funding for education is increasing, depending on greater integration into the global educational space. Basically, the distribution of **budget funds** is carried out by the central authorities, however, in some countries that represent the social-corporate model, such distribution is transferred to the local level. More decentralized financing of education is observed in the liberal model. Free education, including higher education, is declared in the state-paternalistic model and partly in the social-corporate one. Assessing the adaptability of the educational policy model, the author drew attention to the variety of sources of education financing. If in the state-paternalistic model the main source is the state, in the liberal one - the private sector, then in the social-corporate model the form of financing is called public-private partnership. The greater number and diversity of entities involved in financing education in the social-corporate model allows us to call it the most adaptive to new conditions and trends of globalization processes and the knowledge economy in education compared to the other two models.

Thus, educational policy is formed at all levels of the educational system: international, national, regional and the actual level of the educational institution. Therefore, characterizing the levels of development and studying the mechanisms of formation of educational policy in the activities of various actors is an independent task of studying the phenomenon of “educational policy” at the present stage of development of society. Three main subjects take part in the process of developing and implementing educational policy: the state, the market and the academy (educational institution). Depending on the role of each of them, the following models of educational policy are distinguished: state-paternalistic (with the dominant role of the state), liberal (with the dominance of the market), social-corporate (with the primary role of the educational institution).

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<sup>99</sup> GUPTA, BL, CHOUBEY, AK Higher education institutions—some guidelines for obtaining and sustaining autonomy in the context of NEP 2020. In: *Higher Education*. 2021, No. 9(1), p.72-87. ISSN 2455-6211.

<sup>100</sup> ZWARTHOED, D. Autonomy Education Beyond Borders. In: *Global Justice: Theory Practice Rhetoric*. 2020, No. 12(01), p. 100-120. ISSN 1835-6842.

The main task of educational policy at the present stage is to achieve modern quality of education, its compliance with current and promising needs individuals, societies And states in the context of globalization and the knowledge economy. Educational policy, reflecting national interests in the field of education and presenting them to the world community, takes into account, at the same time, general trends in world development.

Most of the principles of adaptability are already embedded in the liberal model of educational policy due to the large number of subjects involved in decision-making in this model of educational policy. However, having analyzed the social-corporate and state-paternalistic models, the author noted that the expansion of powers of various subjects is inherent to a greater extent in the social-corporate model. This is due to the practice of public-private partnerships in financing education and the historically large role of civil organizations in education management.

### **1.3. Directions for assessing the effectiveness of educational policy in the context of the knowledge economy**

Measuring the effectiveness of educational policy is a methodologically very complex process, since knowledge is a product, on the one hand, private, which can be appropriated, and on the other, public, belonging to everyone. In the context of the dynamic development of the knowledge economy and rapid changes in the educational space, the issue of the effectiveness of educational policy becomes relevant and acquires importance. Assessing the effectiveness of educational policy in the context of the knowledge economy is a complex and multifaceted task that requires in-depth analysis and assessment of various directions and mechanisms. In addition, in recent years, along with the theoretically emerging methodological apparatus for assessing the effectiveness and highlighting the role of the knowledge economy in educational policy, the question of measuring the degree of progress of the education system towards such an economy has also become relevant.

The purpose of this paragraph is to identify and characterize approaches, tools and methodology for assessing the effectiveness of educational policy in the context of the knowledge economy, taking into account the globalization of the educational market and measuring the achievement of educational goals.

Assessing the effectiveness of education policy is a set of evaluation studies conducted in various areas of activity in the field of education (international educational cooperation, technological integration, academic mobility, management of the internationalization process, etc.). The main question of such studies is to determine the factors, indicators, and criteria that



influence the correctness of measuring the effectiveness of education policy <sup>101</sup>. Such studies make it possible to explain patterns and identify cause-and-effect relationships between the measures established in educational policy and the actual results of the education system.

Determining specific goals and objectives for conducting evaluation research in the field of educational policy is a rather labor-intensive process. It is often impossible to identify the ultimate goal of a study to evaluate the effectiveness of an education policy. However, among the typical goals of such research, the following can be distinguished<sup>102 103</sup>:

- defining goals and objectives in the field of education in accordance with the desire for integration into the international educational space;
- dissemination of information about achievements and potential opportunities education systems;
- creating circumstances conducive to the introduction of the knowledge economy in the field of educational policy;
- assessment of students' compliance with state educational policy goals;
- determining the relationship between various goals and objectives of educational policy;
- conducting assessment studies aimed at identifying needs in the field of education in accordance with changing trends in the global educational market.

Evaluation of the effectiveness of educational policy is the systematic analysis and measurement of the achievements, results and impact of educational policies and programs to determine their relevance to their goals and ensure continuous improvement of educational processes <sup>104</sup>.

Another researcher believes that assessing the effectiveness of educational policy is a process of assessing the effectiveness and success of decisions, activities and reforms in the educational field, taking into account the achievement of educational goals, improving the quality of education, and adapting the system to changing social needs and challenges <sup>105</sup>. Both definitions refer to the entire process of assessing the effectiveness of educational policies, but there are some differences in their formulations. The first definition emphasizes the systematic and analytical

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<sup>101</sup> MIDDLEAUGH, MF *Planning and assessment in higher education: Demonstrating institutional effectiveness*. New Jersey: John Wiley & Sons, 2011. 256 p. ISBN 9780470400906.

<sup>102</sup> DARLING-HAMMOND, L. Performance-based assessment and educational equity. In: *Transforming curriculum for a culturally diverse society*. Milton Park: Routledge, 2013, p. 245-272. ISBN 9781315045634.

<sup>103</sup> HÉNARD, F., ROSEVEARE, D. Fostering quality teaching in higher education: Policies and practices. In: *An IMHE guide for higher education institutions*. 2012, No. 1(1), p. 7-11. ISBN N/ A

<sup>104</sup> PARK, S. et al. *Continuous Improvement in Education. Advancing Teaching--Improving Learning. White Paper*. Stanford: Carnegie Foundation for the advancement of teaching. 2013. 44 r.

<sup>105</sup> LINGARD, B. It is and it isn't: Vernacular globalization, educational policy, and restructuring. In: *Politics, policies and pedagogies in education*. Milton Park: Routledge, 2013. p. 86-104. ISBN 9780203765708.

nature of the assessment process. Emphasizes the measurement of achievements and results of educational policies and programs and emphasizes the importance of meeting goals and continuous improvement of educational processes.

The second definition more broadly covers aspects of the success and effectiveness of educational policy, paying attention not only to achieving goals and results, but also to ensuring the quality of education. The importance of adapting the education system to changing social needs and challenges is emphasized. Thus, the first definition focuses more narrowly on outcome measurement and systematic analysis, while the second more broadly covers aspects of success and emphasizes the importance of adapting the educational system to changing conditions.

According to the author, assessing the effectiveness of educational policy in the context of the knowledge economy is a systematic analysis based on the use of indices and indicators to measure the degree of adaptation within the educational policy of the concept of the knowledge economy through the implementation of various educational strategies and activities. The main focus of the assessment is to measure the ability of education policies to support intellectual capital, develop the skills needed to function successfully in the modern knowledge economy, and stimulate and actively support innovation processes in the education system <sup>106</sup>.

The effectiveness of educational policy has two components <sup>107</sup>:

- production efficiency of educational policy, which correlates input parameters (time and resources) with the educational process to obtain the desired result;
- exchange efficiency, which correlates the output results of educational policy with the educational needs of society.

The effectiveness of educational policy is the minimization of all costs to obtain a result of a given value, that is, precisely from the point of view of financial efficiency <sup>108</sup>. However, the use of this concept for analysis is possible only with a full understanding of it: input and output parameters occurring within the processes and results of the activity of a certain system. This approach to the education system allowed the author to identify the following components, which will subsequently be subject to evaluation:

- input parameters describing the characteristics of: students; teachers; place of study

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<sup>106</sup> MASHAL, L. Policy of Knowledge Economy (The Israeli Case). In: *World Wide Journal of Multidisciplinary Research and Development*, vol 5(11), 2019. pp. 5-8. E-ISSN: 2454-6615. Available at: <http://www.jmr.d.com/archive/2019/11/1270/policy-of-knowledge-economy-the-israeli-case>

<sup>107</sup> KOSOR, MM Efficiency measurement in higher education: Concepts, methods and perspective. In: *Procedia-Social and Behavioral Sciences*. 2013, No. 106, p. 1031-1038. ISSN 1877-0428.

<sup>108</sup> MERRIFIELD, J. Defining continuous improvement and cost minimization possibilities through school choice experiments. In: *Journal of School Choice*, 2009, No. 3(3), p. 271-289. ISSN 15582159.

(educational institution); equipment and methodological support; material base (buildings, premises, etc.); processes of an educational institution that transform input parameters into output parameters: form of educational activity; alternative technologies; use of students' and teachers' time.

– output parameters that are a direct result of the educational process (their measurement is often difficult or simply impossible): achievements in the field of knowledge; improved skills; changes in consciousness; changes in behavior; the results of the system's activity, which are manifested in the relationship of the products of the system's activity with the social environment.

Elements of assessing the effectiveness of education policy include analysis of production and exchange efficiency, which includes an examination of values and principles, relevance to strategic goals, coherence with other policy areas, financing, legitimacy, legislative framework, and mechanisms for planning and monitoring qualitative and quantitative changes. A comprehensive assessment of these elements allows us to determine the effectiveness of educational policy, its compliance with national priorities and the ability to achieve set goals in the field of education.

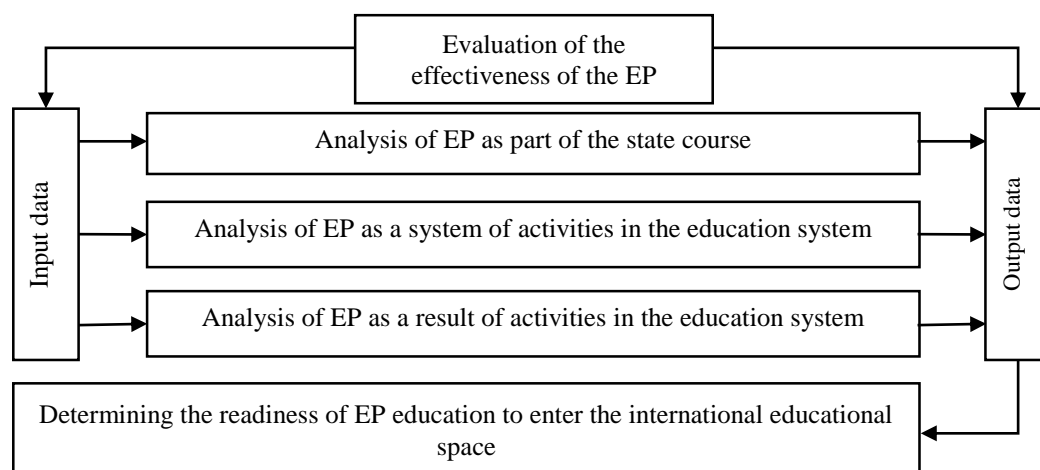
Approaches to assessing the effectiveness of educational policy <sup>109</sup>, which are reflected in various scientific studies, were combined by the author within the framework of the following stages of assessing the effectiveness of education policy:

- 1) analysis of educational policy as an organic part of the internal political course of the state;
- 2) analysis of educational policy as an integral system of measures covering all levels of the education system;
- 3) research results activities in various areas, areas of influence of educational policy, as interconnected elements of the overall system of educational policy.

The diagram of the stages of assessing the effectiveness of educational policy is presented by the author in Figure 1.7.

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<sup>109</sup> MARSH, H. W. et al. Assessing educational effectiveness: Policy implications from diverse areas of research. In: *Fiscal Studies*. 2011, No. 32(2), p. 279-295. ISSN 0143-5671.



**Figure 1.7. Scheme of stages for assessing the effectiveness of educational policy**

Source: developed by the author based on<sup>110</sup>

The author examined the levels of educational policy analysis sequentially indicated in the diagram and the specific tasks that have to be solved at each of them. This will help clarify the internal logic of studying educational policy, which is very significant, since the quality of education, its development as a whole, and the readiness of the education system to enter the global educational space depend on it.

**The first stage** of performance assessment is the starting point a point for studying educational policy as an organic component of the internal political course of the state. At this stage, a detailed analysis of the role and place of education problems in the system of the country's political vector (ideological justification of educational policy)<sup>111</sup>, in the system of internal political tasks (programs, educational policy strategies)<sup>112</sup> and in the system of political actions (implementation of measures in specific government actions)<sup>113</sup> is carried out. Such an analysis, carried out in parallel with the consideration of general ideas, programs and actions of domestic state policy, with the identification of the objective needs of the socio-economic and cultural development of the country, makes it possible to reveal the role and place of educational policy in state development.

When considering these issues, it is necessary to take into account that the role of education problems in the country's internal policy system, and the state's motives for addressing these

<sup>110</sup> HECK, R.H. *Studying educational and social policy: Theoretical concepts and research methods*. Milton Park: Routledge, 2004. 408 r. ISBN 9780805844610.

<sup>111</sup> CLARKE, M. The sublime objects of education policy: quality, equity and ideology. In: *Freud, Lacan, Zizek and Education*. Milton Park: Routledge, 2020, p. 144-158. ISBN 9780367586140.

<sup>112</sup> TESHOME, A. A review of education policy, strategies and programs. In: *Digest of Ethiopia's national policies, strategies and programs*. 2008, p. 47-92. ISBN 9789994450190.

<sup>113</sup> LEIDERER, S. Donor coordination for effective government policies? In: *Journal of International Development*. 2015, No. 27(8), p. 1422-1445. ISSN 0954-1748.

problems (including the set of educational policy objectives) do not remain constant<sup>114</sup>. They change over time, which leads to a change in the proportion of activities in educational policy in the country's internal political course, and a change in the very nature of educational policy.

At this stage, the first component of the educational policy structure triad “educational policy goals” is assessed. And an adequate assessment of educational policy, as well as any of its individual activities, is possible only if the nature of the goals being pursued is revealed. It is equally important when analyzing educational policy to identify and reveal the internal structure of these goals, that is, the relationship and hierarchy of various target components - political, economic, social, sociocultural, pedagogical, etc.

**The second stage** considers educational policy as an integral system activities, covering all levels of the education system. This level is the main one, since only the understanding of educational policy as an integral system makes obvious both its place in the overall complex of domestic policy and the relationship its individual actions and activities addressed to various parts of the education system<sup>115</sup>.

In the course of solving this problem, the following extensive set of issues must be considered:<sup>116 117</sup>:

- the essence and structure of educational policy as a type and as a system of activity;
- general goals of educational policy and their compliance with the needs of the socio-economic and cultural development of the country;
- general and specific in the hierarchy of target elements of educational policy, in the complex of its means and methods in relation to various parts of the education system;
- the specific weight of each of these links in the overall system of educational policy and the reasons for its changes at different stages of social development;
- regional and national features of educational policy and their origins;
- policy formation mechanism;
- the educational policy program, its essence, main ideas and directions, its relationship with the general internal political program of the state;

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<sup>114</sup> VERGER, A. Why Do Policy-Makers Adopt Global Education Policies? Toward a Research Framework on the Varying Role of Ideas in Education Reform. In: *Current Issues in Comparative Education*. 2014, No. 16(2), p. 14-29. ISSN 1523-1615.

<sup>115</sup> VIENNET, R., Pont B. *Education policy implementation: A literature review and proposed framework*. OECD Publishing, 2017. DOI: 10.1787/fc467a64-en

<sup>116</sup> COOKE, P., SCHWARTZ, D. Regional knowledge economies: An EU-UK and Israel perspective. In: *Tijdschrift voor economische en sociale geografie*, 2008, No.99(2), p. 178-192. ISSN 0040-747X.

<sup>117</sup> BLAGORAZUMNAYA, O., TRIFONOVA, L. Educational policy in the context of globalization and international cooperation. In: *Journal of Research on Trade, Management and Economic Development*. 2023, No. 19(1), p. 134-145. ISBN ISSN 2345-1424.

– the nature and main features of educational legislation, the materialization in it of the goals, objectives, means and methods of educational policy;

– foreign analogues of educational policy;

It should be emphasized that the analysis of all these problems will be complete only with a dynamic and not static consideration of them, namely, with the disclosure of continuity and changes in the general course of educational policy. Moreover, over a sufficiently long period of time, allowing us to see and evaluate the essence of these changes and their causes.

At this stage, the second component of the triad of educational policy structure “methods and means of educational policy” is assessed<sup>118</sup>. Often, when analyzing educational policy, it is not taken into account that its methods, as well as its goals, unlike its means, are never politically neutral. The latter may be such, due to which the same economic, social, pedagogical means are often chosen to achieve different goals. The means and methods of politics can also distort any of its goals.

**The third stage** is to study educational policy from the point of view of analysis and results of activities in relation to various areas of the education system in their interdependence and interrelation. At this stage, it is important to show how the activities are interconnected and influence the education system comprehensively, and not separately, its development in the context of globalization processes and the influence of the concept of the knowledge economy.

At this stage, the second component of the educational policy structure triad “implementation of measures” is assessed<sup>119</sup>. The degree of its readiness for integration into the international educational space depends on how effectively the measures (both in the context of globalization and in the context of the knowledge economy) of educational policy are implemented.

To assess the effectiveness of educational policy in the context of the knowledge economy, it is necessary to determine with the help of which indices and indicators the knowledge economy itself is measured. The author identified indices and indicators inherent in assessing the knowledge economy, presented in Table 1.5.

**Table 1.5. Characteristics of indices and indicators for assessing the knowledge economy**

Index / indicator	Description	Criteria for evaluation
The Global Innovation Index	Reflects the country's ability to innovate and its readiness to introduce new technologies.	Investments in research and development, innovation

<sup>118</sup> HECK, R.H. *Studying educational and social policy: Theoretical concepts and research methods*. Milton Park: Routledge, 2004. 408 r. ISBN 9780805844610.

<sup>119</sup> RIGBY, JG, WOULFIN, SL, MÄRZ, V. Understanding how structure and influence agency education policy implementation and organizational change. In: *American Journal of Education*. 2016, No. 122(3), p. 295-302. ISSN 0195-6744.

		infrastructure, patents.
The International Property Rights Index	Measures the effectiveness of a country's property rights system, which is important for stimulating innovation and economic growth.	Laws on the protection of intellectual property, the effectiveness of the judicial system.
The Knowledge Index	Evaluates the level of education, research and intellectual capital in a country.	Educational infrastructure, scientific research, access to education.
The Knowledge Economy Index	Measures a country's willingness and ability to use knowledge and information to achieve economic growth.	Digital technology infrastructure, innovative activity, quality of management.
ICT Development Index	Assesses the level of development of information and communication technologies, including access to the Internet and the use of digital technologies.	Internet accessibility, use of modern technologies, electronic readiness.
Networked Readiness Index	Reflects the country's readiness to integrate into the global information network and its ability to effectively use network technologies.	Availability of network infrastructure, digital literacy, quality of Internet connection.
Indicators of science intensity and science productivity	They include an assessment of the country's contribution to scientific research, the number of scientific publications, innovation activity and the transfer of knowledge to the economy.	Funding of scientific research, number of scientific publications, technology transfer.

Source:<sup>120 121</sup>

**The Global Innovation Index** is a global study and an accompanying ranking of countries around the world based on the level of innovation development, which is calculated using the methods of the international business school INSEAD in France <sup>122</sup>. At the moment, research on this index represents the most comprehensive set of indicators of innovative development for various countries of the world. The Global Innovation Index is made up of 80 different variables that characterize in detail the innovative development of countries around the world at different levels of economic development.

The success of an economy is associated with the presence of both innovative potential and conditions for its implementation, therefore the index is calculated as a weighted sum of assessments of two groups of indicators:

- 1) available resources and conditions for innovation (Innovation Input): institutions, human capital and research, infrastructure, domestic market development, business development;
- 2) achieved practical results of innovation (Innovation Output): development of technology and knowledge economy, results of creative activity. Thus, the final index represents the ratio of

<sup>120</sup> ALIYEV, AG et al. Development system of hierarchical indicators for analyzing and measuring the level of growth of information and knowledge economy. In: *Management dynamics in the knowledge economy*. 2021, No. 9(1), p. 65-80. ISSN: 2392-8042.

<sup>121</sup> ŠIRÁ, E. et al. Knowledge economy indicators and their impact on the sustainable competitiveness of the EU countries. In: *Sustainability*. 2020, No. 12(10), p. 4172. ISSN 2071-1050.

<sup>122</sup> The Global Innovation Index. (accessed 01/12/2023). Available at: [https://www.wipo.int/global\\_innovation\\_index/en/](https://www.wipo.int/global_innovation_index/en/)

costs and benefits, which makes it possible to objectively assess the effectiveness of efforts to develop innovation in a particular country.

**2) The International Property Right Index** is a composite indicator that measures the achievements of countries around the world in terms of protecting property rights <sup>123</sup>. The index is calculated by The Property Rights Alliance. The purpose of the study is to study on a global scale the state and effectiveness of the protection of private property rights - both physical and intellectual. The index reflects the country's achievements in terms of the state and effectiveness of protection of private property rights in three main categories:

1) legal and political environment - independence of the judicial system and impartiality of courts, the rule of law, political stability, level of corruption;

2) rights to physical property - protection of physical property rights, registration of property, availability of loans;

3) intellectual property rights - protection of intellectual property rights, protection of patent law, level of “piracy”.

The indicators used in the ranking are based on statistical analysis of data from the Organization for Economic Cooperation and Development, the World Bank, the World Trade Organization, the Office of the US Presidential Special Representative for Trade Negotiations, and international and national research centers.

**3) The quality of institutional support for the knowledge economy is measured using the knowledge index and the knowledge economy index**<sup>124 125</sup>. Two international organizations are developing indicators for measuring knowledge - the Organization for Economic Cooperation and Development and the World Bank.

Organization for Economic Cooperation and Development proposed a system of indicators that identifies indicators used to measure knowledge and compare it between different countries. The system includes more than 200 indicators in four areas: information society, globalization of the economy, productivity and financial structure. To measure knowledge, it is proposed to use the following indicators: the level of international mobility of scientists and researchers; number of patented innovations; expenses for new technologies; the contribution of non-OECD countries to the development of world science and innovation; the degree of diffusion of information

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<sup>123</sup> *The International Property Right Index*. (accessed 01/12/2023). Available at: <https://www.internationalpropertyrightsindex.org/>

<sup>124</sup> *Knowledge Economy Index (World Bank)*. (accessed 01/12/2023). Available at: <https://datasource.kapsarc.org/explore/dataset/knowledge-economy-index-world-bank-2012/information/>

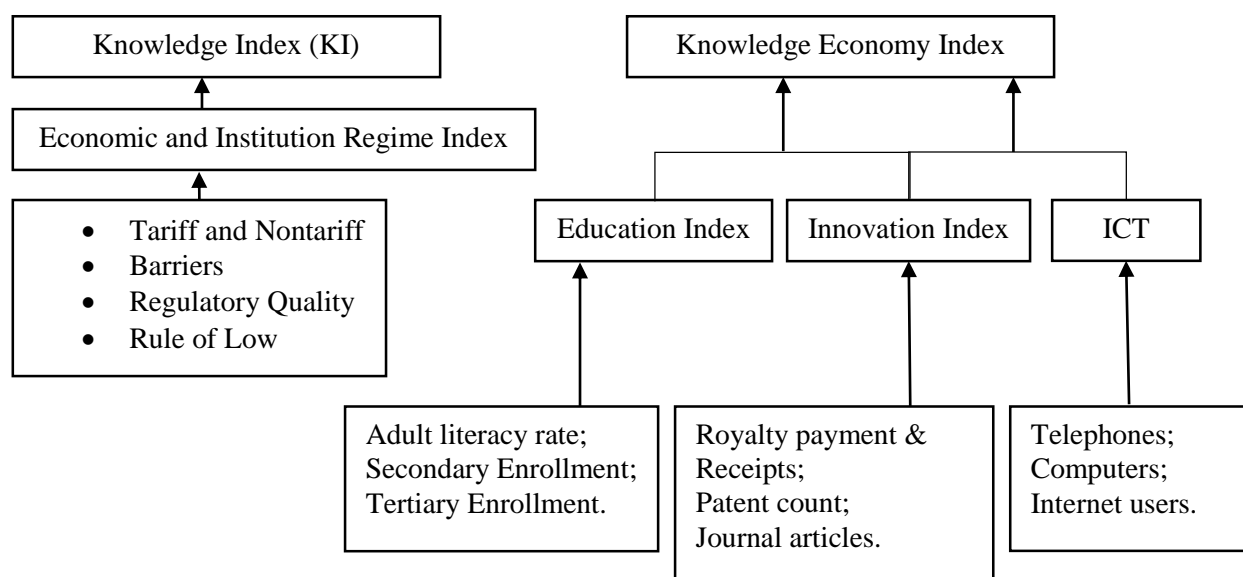
<sup>125</sup> *The Global Knowledge Index (GKI)*. (accessed 01/12/2023). Available at: <https://www.undp.org/publications/global-knowledge-index-2020>



technology among firms and households; productivity growth in OECD countries; annual turnover of companies.

The World Bank has also developed a knowledge assessment methodology that includes 81 indicators for 132 countries. The indicators are divided into the following areas: economic indicators, institutional regime, government, innovation system, education, gender indicators and information and communication technologies. This comprehensive knowledge assessment methodology by the World Bank enables a nuanced evaluation of a country's readiness and capacity in various domains crucial for navigating the knowledge economy. The utilization of such a robust framework not only aids in benchmarking nations on a global scale but also contributes to the formulation of strategies that address the intricate interdependencies among economic, social, and technological factors.

All indicators of both international organizations are normalized on a scale from 0 to 10. Based on these indicators, two composite indices were compiled - The Knowledge Economy Index (KEI) and The Knowledge Index (KI), which is shown in Figure 1.8.



**Figure 1.8. Structure of indices for assessing the effectiveness of knowledge**

Source:<sup>126 127</sup>

**The Knowledge Index** measures a country's ability to create, absorb and disseminate knowledge <sup>128</sup>. The knowledge index is a simple average of a standardized presentation of country

<sup>126</sup> GOLDSMITH, TE, JOHNSON, PJ, ACTON, WH Assessing structural knowledge. In: *Journal of Educational Psychology*. 1991, No. 83 (1), p.88–96. <https://doi.org/10.1037/0022-0663.83.1.88>

<sup>127</sup> GOLDSMITH, T., KRAIGER, K. Structural knowledge assessment and training evaluation. In: *Improving training effectiveness in work organizations*. London: Psychology Press, 2014. p. 85-108. ISBN 978-0340647622.

<sup>128</sup> CAMISÓN, C., FORÉS, B. Knowledge absorptive capacity: New insights for its conceptualization and measurement. In: *Journal of Business Research*. 2010, No. 63(7), p. 707-715. ISSN 0148-2963.

indicators from three groups of indicators: education and human resources, innovation system and information and communication technologies.

**The Knowledge Economy Index** shows how favorable the environment is for the effective use of knowledge in a particular country <sup>129</sup>. This is a composite index showing the overall level of development of a country towards a knowledge economy. The knowledge economy index is calculated as a simple average of a standardized representation of a country's indicators from four groups of indicators: institutional regime, education and human resources, innovation and information and communication technologies.

The World Bank, within the framework of the Knowledge for Development (K4D) program, has developed a methodology for measuring the “knowledge economy”, which allows assessing the readiness of a country to transition to a knowledge economy model <sup>130</sup>. The methodology includes 109 indicators, combined into 4 groups and characterizing the following key parameters: institutional regime, which stimulates the effective use of existing and the creation of new knowledge, as well as the development of entrepreneurship; the level of education of the population and the availability of skills related to the use, exchange and creation of knowledge; information and communication infrastructure that facilitates the effective dissemination and processing of information; national innovation system.

The calculation of the Knowledge Economy Index is based on another methodology proposed by the World Bank, The Knowledge Assessment Methodology (KAM), which establishes a direct relationship between the so-called “intelligence” of the economy and long-term, stable economic growth, as well as the country’s competitiveness in the international market <sup>131</sup>. The Knowledge Economy Index, unlike the Knowledge Index, does not assess the potential of a country, but rather the extent to which the environment in a particular country contributes to the effective use of knowledge in economic development. To do this, in addition to the three groups of factors listed above, a fourth category is added - the institutional regime. Thus, the knowledge economy index is the arithmetic average of four subindices: institutional regime, education, information and communication infrastructure, and innovation system. Each subindex includes three indicators with equal weight.

1) *The institutional regime of a country* is determined using three indicators:

– tariff and non-tariff barriers - evaluates existing tariff and non-tariff barriers that limit free

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<sup>129</sup> GARCIA, C. Sustainable Knowledge Economy Index. In: *Journal of Educational and Human Resource Development (JEHRD)*. 2020, No. 8, p. 1-15. ISSN 2545-9759.

<sup>130</sup> *Knowledge for Development (K4D)*. (accessed 02/17/2023). Available at: <https://k4d.ch/>

<sup>131</sup> *What is KAM (Knowledge Assessment Methodology)*. (accessed 01/28/2023). Available at: <https://www.igi-global.com/dictionary/kam-knowledge-assessment-methodology/44103>

trade: import bans, quotas, customs duties, licensing requirements, etc.;

– quality of regulatory measures - assesses the spread of government actions hostile to the market: price controls, excessive banking supervision, inadequate regulation of foreign trade and business development, etc. To assess the indicator, Governance Indicators are used - assessments of the economic measures of the authorities of various countries - members of the World Bank Group<sup>132</sup>.

– the rule of law - the level of crime, the efficiency and predictability of the judiciary, the ability to enforce contracts, etc. are assessed. The World Bank Governance Indicators are also used to assess it.

2) *Level of education of the population*<sup>133</sup>. This subindex is formed by three indicators: the level of education of the adult population (calculated as the percentage of people who can read and write among the population over 15 years of age); gross enrollment in secondary education (calculated as the ratio of the number of people actually receiving secondary education, regardless of age, to the number of people at the typical age for receiving secondary education in a given country); gross enrollment in higher education (calculated as the ratio of the number of people actually receiving higher education, regardless of age, to the number of people who are of a typical age for receiving higher education in a given country).

3) *ICT Development Index* was developed by the International Telecommunication Union, ITU<sup>134</sup>. It includes indicators: number of telephones per 1000 inhabitants; number of computers per 1000 inhabitants; number of Internet users per 1000 inhabitants;

4) *Innovation system*. The development of the innovation system is determined by the following indicators: the amount of royalties (type of license fee) and license payments per 1 million inhabitants; the number of scientific and technical articles in journals devoted to physics, biology, chemistry, mathematics, clinical medicine, engineering, technology and astronomy, per 1 million inhabitants; number of patents issued by the United States Patent and Trademark Office (USPTO), per 1 million inhabitants<sup>135</sup>.

Knowledge economy indices are calculated for each country, for groups of countries and for the world as a whole. Each country creates its own conditions for the formation of a knowledge

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<sup>132</sup> *Governance Indicators*. (accessed 12/19/2022). Available at: <https://www.worldbank.org/en/publication/worldwide-governance-indicators>

<sup>133</sup> *Adult education level*. (accessed 12/19/2022). Available at: <https://data.oecd.org/eduatt/adult-education-level.htm>

<sup>134</sup> *ICT Development Index*. (accessed 12/22/2022). Available at: <https://www.itu.int/en/ITU-D/Statistics/Pages/IDI/default.aspx>

<sup>135</sup> DZIALLAS, M., BLIND, K. Innovation indicators throughout the innovation process: An extensive literature analysis. In: *Technovation*. 2019, No. 80, p. 3-29. ISSN 01664972.

economy. The quality of institutional support for the knowledge economy is measured using the knowledge index and the knowledge economy index.

**5) ICT Development Index** was developed by the International Telecommunication Union (ITU) and combined three pre-existing indices proposed by the ITU to assess the development and use of ICT in different countries: Digital Access Index (DAI), Digital Opportunity Index (DOI) and ICT Opportunity Index (ICT -OI)<sup>136</sup>.

**6) Networked Readiness Index** consists of three subindexes, each of which includes three sections <sup>137</sup>: 1. The subindex “Environment” measures the friendliness of the environment for ICT development and consists of 30 indicators grouped into three sections: market environment; political and regulatory environment; infrastructure environment. 2. The “Readiness” subindex reflects how interested and prepared key participants are in using ICT in their daily activities. The subindex consists of 23 indicators, divided into three groups: government readiness, individual readiness; business readiness. 3. The “Use” subindex measures the actual use of ICT and consists of 15 indicators divided into three groups: individual usage; b business usage; government usage.

**7) Indicators of science intensity and science output (input and output)<sup>138</sup>**

The complex indicator of science intensity includes the following “input” parameters: the share of R&D expenditures in GDP, the specific parameter of the number of researchers per 10 thousand people employed in the economy, the absolute number of researchers. The comprehensive indicator of scientific output “at the output” includes the following parameters: the share of high-tech exports in total merchandise exports, the GDP per employee characterizing the productivity of the national economy, the international competitiveness index calculated by the World Economic Forum. The indices and indicators considered by the author are important tools for a comprehensive assessment of the knowledge economy. The assessment covers education, innovation, technological readiness for global integration. Analysis of the obtained indices will allow us to identify the strengths and weaknesses of the country’s educational policy, which will become the basis for the development of effective strategies for the development of the knowledge economy. The knowledge economy requires a systematic approach to assessing the effectiveness of educational policy, taking into account the dynamism of knowledge and its impact on socio-economic processes. In this context, evaluation models provide tools for analyzing various aspects

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<sup>136</sup> *ICT Development Index*. (accessed 12/22/2022). Available at: <https://www.itu.int/en/ITU-D/Statistics/Pages/IDI/default.aspx>

<sup>137</sup> *Networked Readiness Index*. (accessed 12/17/2022). Available at: <https://networkreadinessindex.org/>

<sup>138</sup> IKEUCHI, K. et al. *Science intensity of industry by using linked dataset of science, technology and industry*. Mimeo, 2017. (accessed 10/12/2022). Available at: [https://www.oecd.org/sti/013%20-%20STI\\_indicator\\_paper20160725.pdf](https://www.oecd.org/sti/013%20-%20STI_indicator_paper20160725.pdf)

of the educational system, ranging from values and strategic goals to actual results and management mechanisms, as presented in Table 1.6.

**Table 1.6. Models for assessing the effectiveness of educational policy in the context of the knowledge economy**

Model name	Elements to evaluate	Advantages	Flaws
Kirkpatrick model	Reaction Assimilation Behavior Result	Kirkpatrick assessment turns learning into a business tool—something that is not abstractly educational, but something that is tangible and useful.	The financial side is not taken into account - whether the training was spent.
Phillips model	Reaction Assimilation Behavior Result ROI	Everything is taken into account: how the training shows up in practice, whether it led to the goal and whether the money was spent.	To accurately calculate the ROI of training, you need a strong financial department. That is, well-established processes, a large or long-established company.
Stufflebeam model (CIPP)	With context evaluation Input evaluation Process evaluation Product evaluation	The emphasis is distributed evenly across all stages: we evaluate preparation for training, the process, and life after.	Lacks focus on clear results.
CIRO model	With context evaluation Input evaluation Reaction evaluation Outcome evaluation	Attention is paid to students, person-centeredness.	There are not enough clear answers for business: did educational policy measures work and pay off?
Tyler model	Clear and detailed goals Achievability of goals Efficiency	Detailed development of goals	The focus is shifted to developing goals - there is a risk of building on this stage, slowing down the launch of training, or ideas will dry up on the way to evaluating the results and not paying enough attention to them.
Scrivens model	An external evaluator selects criteria for assessing the outcome of an educational policy	Removing the task of working out the details of the assessment (process, criteria). An expert's view from the outside.	We need well-trained, experienced appraisers, experts, and specialists.
Knowledge for development model (K4D)	76 indicators (World Bank)	Comprehensive assessment of effects through a detailed set of indicators	Difficulty in finding information to evaluate for each indicator
The Knowledge Assessment Methodology (KAM)	Knowledge Index Knowledge Economy Index (Worldwide Bank, OECD, WEF, agencies UN)	Aggregated Knowledge Economy Index Countries are ranked by indicators in 4 groups from “best” (10) to “worst” (0).	Many data on country indicators are difficult to find due to a lack of statistical data.

Source: developed by the author based on<sup>139 140 141 142 143</sup>

The presented characteristics of models for assessing the effectiveness of educational policy in the context of the knowledge economy highlight elements for assessment, advantages and disadvantages of the model, as a subjective assessment of the author. These models not only serve as a tool for measuring the effectiveness of educational policies, but also provide valuable analytical insights for long-term planning and adjustment.

One of the key aspects of the presented models is the consideration of the dynamic nature of the knowledge economy <sup>144</sup>. Models, to varying degrees, pay attention not only to current educational needs, but also adapt to constant changes in knowledge and technology. This allows education policy to remain relevant in the context of the rapid development of new branches of knowledge and innovation.

Models for assessing the effectiveness of educational policies in the knowledge economy represent an integral tool for strategic management of education <sup>145</sup>. Their comprehensive approach to analysis and assessment allows them to effectively adapt to changing conditions, providing high quality education that meets the requirements of a modern, dynamic society in the era of globalization.

However, in the process of conducting an evaluation of the effectiveness of educational policies, a researcher may encounter a number of problems. From an economic and social point of view, the main difficulties in assessing the effectiveness of education policies are <sup>146</sup>:

- the non-profit nature of the education system in many countries;
- lack of a clear and understandable definition of the cost of input and output parameters of the system;
- multiplicity of output parameters when assessing educational institutions with a large

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<sup>139</sup> SAHLBERG, P. Education policies for raising student learning: The Finnish approach. In: *Journal of education policy*. 2007, No. 22(2), p. 147-171. ISSN 02680939.

<sup>140</sup> MEHRA, A. et al. Estimating returns to training in the knowledge economy. In: *Mis Quarterly*. 2014, No. 38(3), p. 757-772. ISSN 0276-7783.

<sup>141</sup> CAHAPAY, M. Kirkpatrick model: Its limitations as used in higher education evaluation. In : *International Journal of Assessment Tools in Education*. 2021, No. 8(1), p. 135-144. ISSN 2148-7456.

<sup>142</sup> PHILLIPS, PP, PHILLIPS, JJ *ROI basics*. American Society for Training and Development, 2019. 221 p. ISBN-13: 978-1-950496-37-2.

<sup>143</sup> CORYN, CL, HATTIE, JA, SCRIVEN, M., HARTMANN, DJ Models and mechanisms for evaluating government-funded research: An international comparison. In: *American Journal of Evaluation*, 2007, No. 28(4), p. 437-457. ISSN 1557-0878.

<sup>144</sup> HADAD, S. Knowledge economy: Characteristics and dimensions. In: *Management dynamics in the Knowledge economy*. 2017, No. 5(2), p. 203-225. ISSN 2392-8042.

<sup>145</sup> BAGWASI, MM The major educational policies, models and ideas that have influenced Botswana's education system. In: *Policy Futures in Education*. 2019, No. 17(3), p. 370-382. ISSN 14782103.

<sup>146</sup> JONES, G. *The youth divide. Diverging paths to adulthood*. UK: Joseph Rowntree Foundation, 2002. 53 p. ISBN 1842630768.

number of input parameters, which theoretically can influence the result of activity.

The problem of assessing the effectiveness of education policy while taking into account the influence of the concept of the knowledge economy, although relevant, nevertheless remains not fully resolved in theoretical terms. At the moment, researchers and practitioners have not developed an unambiguous structure for assessing the effectiveness of educational policy in the context of the knowledge economy and have not given an exact definition suitable for the context under consideration. In this regard, the author formulated his own definition, covering the main points important for assessment, both from the point of view of the educational component of education policy, and from the point of view of the component dictated by the knowledge economy. The process of assessing the effectiveness of educational policy is in most cases understood as an economic or technical assessment, taking into account quantitative indicators and indicators, but also taking into account the social aspects of the system. This indicates a one-sided consideration of the problems of assessing the effectiveness of educational policy, excluding in many cases the qualitative component of the assessment. Most models for assessing the effectiveness of educational policy in the context of the knowledge economy, considered by various researchers, use a systematic approach of the form “input parameters – system (and its internal parameters) – output parameters.” The behavior of the system is described by some empirical function of many variables, which is estimated on the basis of statistical data - the input, internal and output parameters are not certain and are chosen by the authors differently based on their own judgments.

#### **1.4. Conclusions to Chapter 1**

1. Based on the analysis of theoretical sources and points of view of various researchers and authors of scientific works, the author identified the multidimensionality of the formation of educational policy. Educational policy, an important area of social activity, is formed at several levels of the education system, including international, national, regional and the level of educational institutions. A deep theoretical study of these levels and the mechanisms of their interaction represents a significant task for understanding the phenomenon of educational policy in a globalizing world.

2. The process of developing and implementing educational policy includes three key subjects: the state, the market and the academy (educational institutions). Depending on the dominant role of each of them, three main models of educational policy are distinguished: state-paternalistic, liberal and social-corporate.

3. The main goal of educational policy in modern conditions is to achieve high quality

education that meets the current needs of the individual, society and state in the context of globalization and the knowledge economy. This policy, representing the interests of the nation and reflecting them in a global context, takes into account global development trends in the field of education.

4. The author identified the special nature of the role of the knowledge economy in the modern economic system. The concept of a knowledge economy recognizes the central role of knowledge, information and technology in driving economic growth and development. The main production resource in this system is intellectual capital, including skills, knowledge and innovation.

5. A variety of approaches to defining the knowledge economy has been identified. Existing approaches to understanding the essence of the concept of the knowledge economy, presented by various researchers and international organizations, are aimed at a comprehensive definition of this phenomenon. However, the author noted the absence of a unified approach, but rather the diversity of theories and definitions, which emphasizes the complexity and versatility of this concept.

6. The structure of the concept of the knowledge economy is a cyclical process that includes input and output components. Input includes the production and dissemination of knowledge, and output is its use and competitiveness. The internal structure includes interrelated components, such as institutional structure, innovation system, education and training, and information infrastructure.

7. The problem of assessing the effectiveness of educational policy in the context of the knowledge economy remains relevant and has not been solved theoretically. The lack of a clear structure of the methodology and a precise definition appropriate to the given context complicates both theoretical and practical solutions to this problem.

8. It can be argued that the process of assessing the effectiveness of educational policies is often perceived by researchers solely as an economic or technical assessment that takes into account quantitative parameters. However, according to the author, such a one-sided consideration does not take into account the important qualitative component of the assessment, especially in the context of the knowledge economy.

9. Most models for assessing the effectiveness of educational policy related to the knowledge economy use a systematic approach based on the structure “input parameters – system (internal parameters) – output parameters.” However, the author noted that this model often faces uncertainty, since the choice of input, internal and output parameters depends on the subjective decisions and judgments of researchers and developers of the educational model.



## **2. ANALYSIS OF THE DEVELOPMENT OF ECONOMY AND KNOWLEDGE OF ISRAEL AS A FACTOR OF EDUCATIONAL POLICY**

### **2.1. Diagnostics of the knowledge economy in educational policy at the international level**

In recent years, the global educational market has seen significant changes in the field of education, affecting the philosophy of education, its global goals and objectives, organizational structures of educational systems, the content of education, approaches to the development of educational standards and curricula, forms and methods of ensuring the quality of education, control over quality of education and activities of educational institutions, financing and many other aspects.

The knowledge economy has had a particular impact on the educational market, the challenges of which naturally lead many countries to a new “educational boom”, to a wave of deep reforms of education systems <sup>147</sup>. They are focused on the current and future needs of society, the efficient use of resources, the digitalization of education systems, and the development of inclusiveness of the educational process.

In this regard, the author diagnosed the presence of the knowledge economy in the educational policies of a sample of countries around the world. Diagnosing the effects of the knowledge economy in educational policy at the international level is an important area of research aimed at analyzing and assessing the strategies and specific measures taken by various countries in the field of education to effectively participate in the global educational market. International analysis allows us to identify similarities and differences in approaches to the formation and implementation of educational policies in different countries, as well as assess their effectiveness in terms of activities and innovations.

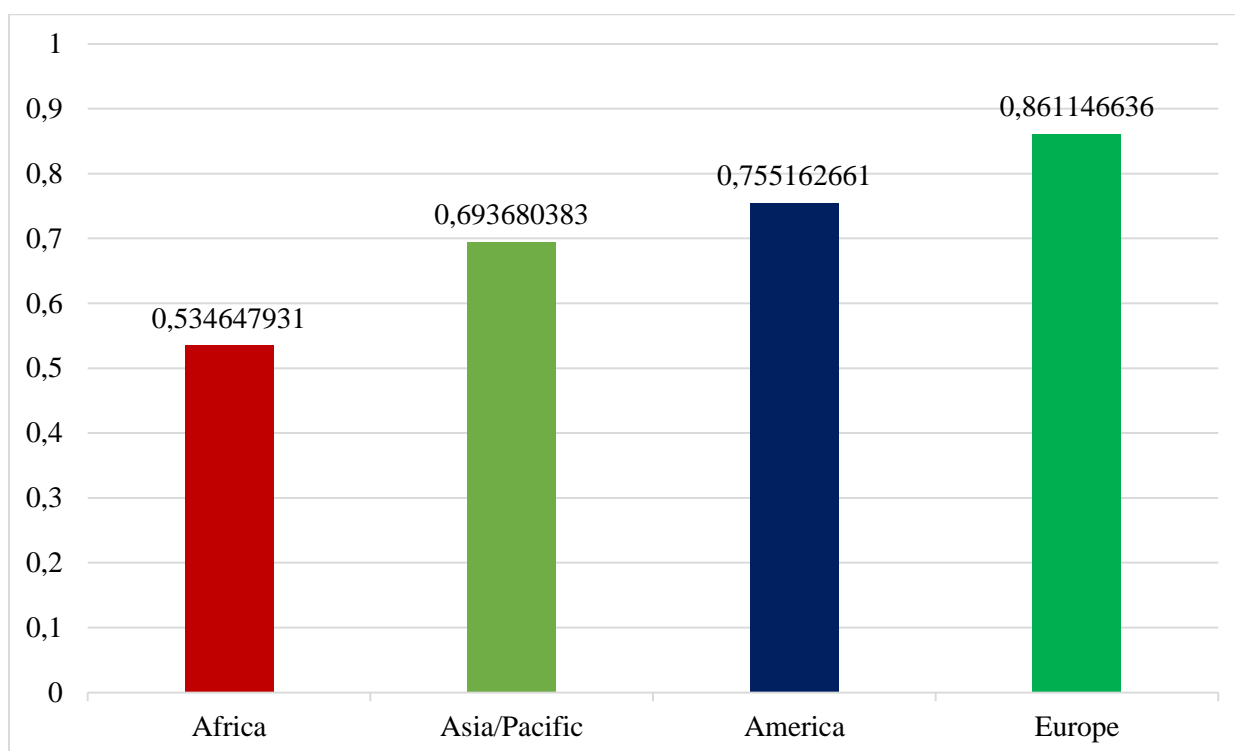
This paragraph presents the process of diagnosing the knowledge economy at the international level, the methods used and the approaches that the author used to conduct the research. An important role in the study was played by data collected in the form of reports, statistics by international organizations (OECD, UNESCO, World Bank and others).

The author's research-based analysis of the World Education Index provides an important tool for measuring and comparing the performance of education systems in different parts of the planet. This index evaluates various aspects of education, such as access to education, quality of curriculum, teacher competence, literacy levels and other key factors. Graphically, the results of

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<sup>147</sup> MASHAL, L. Development of Knowledge Economy in the Modern World. In: *European Journal of Economic and Financial Research*. 2019, No. 3(5), p. 1-8. ISSN 2501 – 9430.

this analysis are presented in Figure 2.1.



**Figure 2.1. Educational Index by region, 2021**

Source: <sup>148</sup>

This graph reveals significant differences in the educational index between different regions of the world. The European region takes the lead with a high index score of 0.86. This success can be attributed to an integrated approach to education, which includes not only the availability of educational resources, but also the high quality of curricula, the professionalism of teachers and active investments in the education sector.

America follows Europe with a moderate index of 0.75. This suggests that education systems in countries in this region are generally effective, but there is room for improvement. This may be due to the uneven distribution of educational resources and differences in the quality of education between individual countries.

The Asian region ranks third with an index of 0.69. Despite the high level of education in some Asian countries, the average indicates that there are unresolved issues, such as possible differences in the quality of education between different countries in the region.

The African region comes in last place with the lowest index score of 0.53. This factor is likely due to lack of access to education, insufficient investment and socio-economic challenges, which may limit opportunities for quality education in various African countries. Removing these

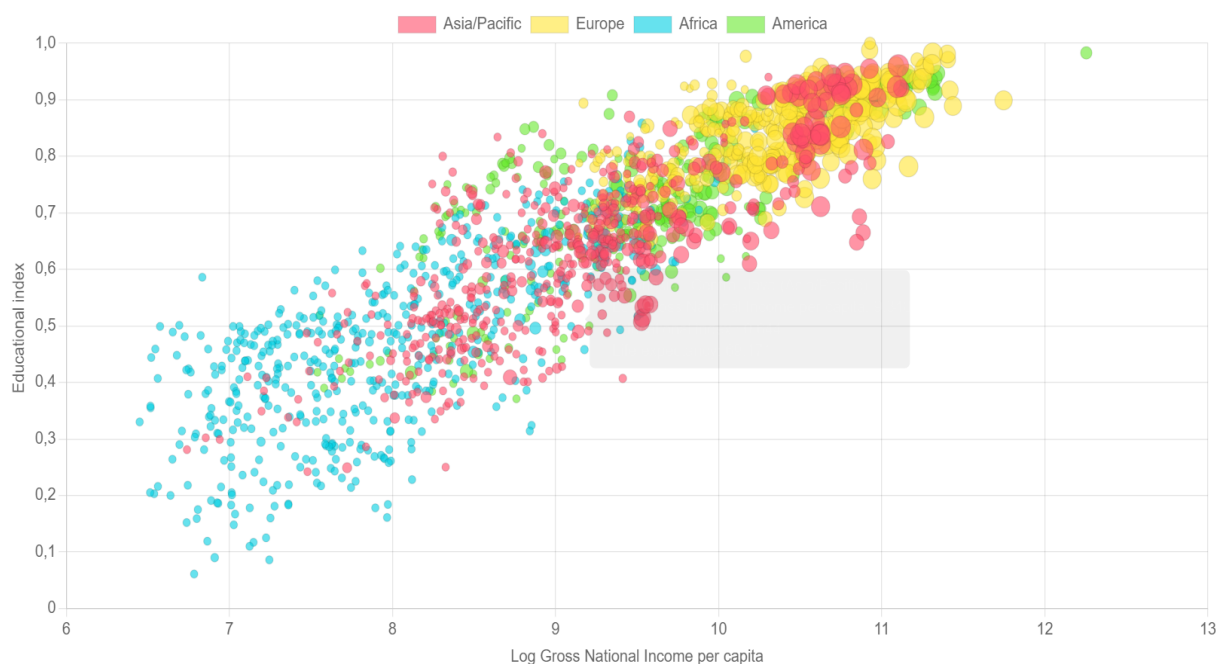
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<sup>148</sup>Education index. (accessed 02/22/2023). Available at: <https://globaldatalab.org/shdi/table/2021/edindex+lgnic/>

barriers could be a key element in improving the educational index in this region.

Analysis of the educational index of world regions allows us to identify trends, problems and successful practices in the field of education. It can be a useful tool for developing policies aimed at improving education systems and ensuring equal opportunities for all citizens to receive a quality education.

The author also analyzed the dependence of the education index on government funding in the countries of the world corresponding to the continents, which is presented in Figure 2.2.



**Figure 2.2. Dependence of the education index on government funding in the education system of countries in the world's regions, 2021**

Source:<sup>149</sup>

An educational index provides a quantitative measure of the level of education in a specific area, such as a region, a country or a global community (Appendix 4). In the context of this study, these are continents. This index includes various parameters and indicators related to education, such as literacy rates, access to education, quality of educational programs, level of education of the population, and others. The main purpose of the education index is to assess the degree of success of the education system and its contribution to social and economic development. A high education index indicates that a high level of education is provided, which, in turn, can contribute to the intellectual development of the population, innovation, economic growth and improved quality of life.

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<sup>149</sup>Education index. (accessed 03/20/2023). Available at: <https://globaldatalab.org/shdi/table/2021/edindex+lgnic/>

Looking at different regions of the world allows for comparative analysis and drawing conclusions about differences in funding and quality of education between these regions. From the content of the presented graph, it can be noted that in the analyzed regions (Europe, Asia, Africa and America) the distribution of funding is uneven. This suggests that different countries place different importance and investment in education to varying degrees.

Carrying out a comparative analysis of regions, it can be noted that the European and American regions occupy leading positions in the educational index. This indicates that these regions are actively investing in education, providing a high level of access to educational resources, quality educational programs and providing training to the population. This approach contributes to the formation of an educated society capable of effectively coping with the challenges of the modern world.

Asian countries also show leadership, although there is some variability in educational attainment among individual countries in the region. Differences may be due to different educational systems, cultural backgrounds and different levels of economic development <sup>150</sup>. It is important to note that despite these differences, most Asian countries are successful in investing in education, which contributes to their overall development.

In contrast to the above-mentioned regions, African countries lag behind in the education index. This is due to various challenges, such as limited access to educational resources, social and economic inequality. To overcome these challenges, it is critical to focus on improving educational opportunities and increasing funding in these regions.

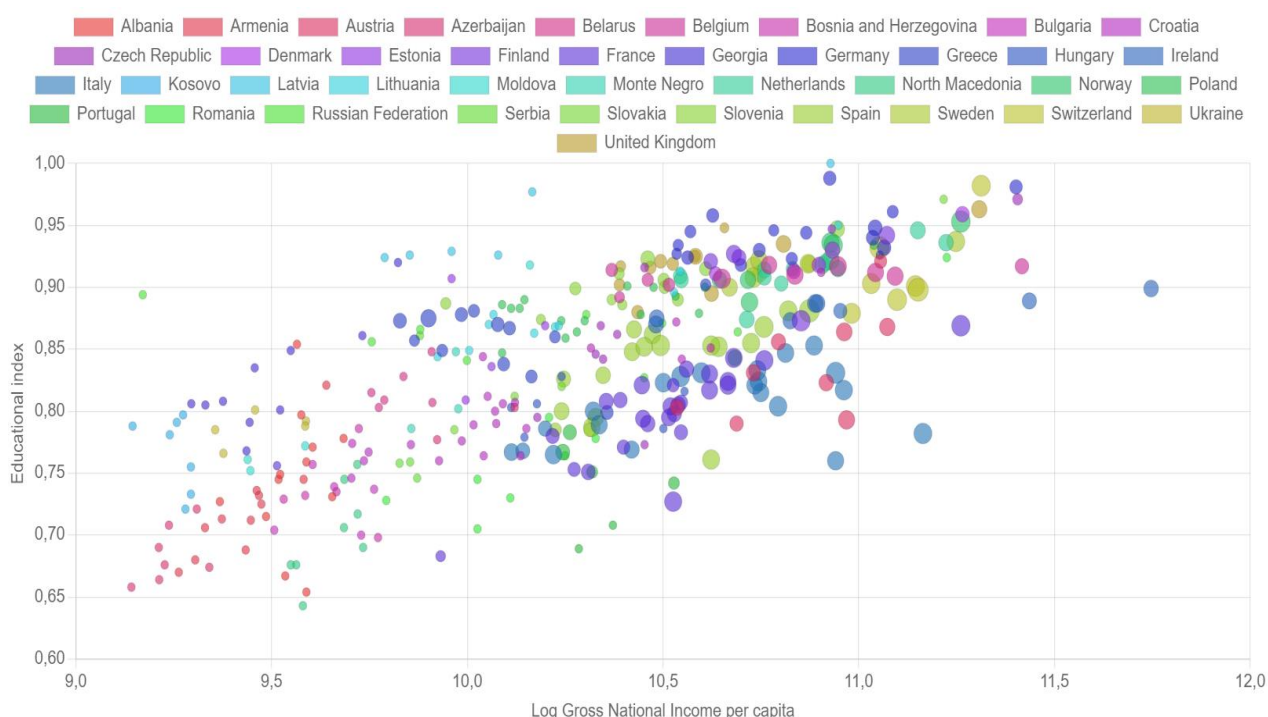
The author concludes that the more the state invests financial resources in the development of the education system, the more effective and competitive it becomes. An increase in the education index indicates not only a high level of education, but also the ability of society to effectively cope with the challenges of the modern world, contributing to sustainable development.

The diversity of educational systems and policies in different regions of the world creates unique dynamics in education. The educational index is becoming an important tool for assessing the effectiveness of educational systems and their contribution to the process of globalization. Analysis of these regions will provide a deeper understanding of how different countries and continents are coping with the challenges associated with ensuring access to education, improving the quality of educational programs and overcoming social and economic inequalities on the way to integration into the international educational space.

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<sup>150</sup> BARUCH, A. F., et al. Equity, access to and democratization of higher education: Report of current policies in practices in Israel. In: *Revista Multimédia de Investigação em Inovação Pedagógica e Práticas de e-Learning*. 2022, No. 5(1), p. 52-62. ISSN 2184-1837.

is of scientific interest from the point of view of such research. The dependence of the educational index on government funding in the education system of European countries is clearly shown in Figure 2.3.



**Figure 2.3. Dependence of the education index on government funding in the education system of European countries, 2021**

Source:<sup>151</sup>

The relationship between the educational index and public funding in European countries represents a key aspect of the development and globalization of education (Annex 5). A graph showing the relationship between these two variables allows you to identify trends and patterns. The graph shows how changes in the level of government funding are accompanied by changes in the educational index. It is likely that countries with higher levels of government funding have higher educational index scores. This may be due to the possibility of providing better quality curricula, increasing teacher pay, updating educational materials, and providing widespread access to educational resources.

Based on the analysis, we can conclude that there is a positive relationship between government funding and the educational index in European countries. This highlights the importance of government investment in education to ensure high levels of educational standards and the development of the educational system as a whole.

The European educational space, conditionally divided in accordance with three models of

<sup>151</sup>Education index. (accessed 03/20/2023). Available at: <https://globaldatalab.org/shdi/table/2021/edindex+lgnic/>

educational policy into social-corporate, liberal and state-paternalistic, is unified within the framework of a single institutional model of the Bologna process <sup>152</sup>. The main characteristic of each of the previously existing models is adaptability to new realities. We can conclude that the social-corporate model is more adaptable. Using such adaptability criteria as the principles of necessary diversity, dual response and feedback, we can conclude that each of these principles is already embedded in the market model of educational policy due to the large number of subjects involved in decision-making in this policy model. However, having analyzed the trends in the social-corporate and state-paternalistic models, the author noted that the expansion of powers of various subjects is inherent to a greater extent in the social-corporate model. This expansion is determined by the practice of public-private partnerships in financing education and the historically large role of civil organizations in education management. The intricate dynamics within the social-corporate model highlight the evolving roles of different stakeholders in shaping educational policies and practices.

Moreover, the author underscores the need to carefully navigate the delicate balance between state, corporate, and civil involvement in education to ensure effective governance and alignment with overarching societal goals. This nuanced understanding is imperative for creating adaptive policies that harness the strengths of each sector while mitigating potential drawbacks. As education systems continue to evolve in response to societal shifts, maintaining a comprehensive perspective on these models becomes essential for fostering sustainable and equitable educational development.

Continuing the regional study, the author examined **the Asian region**, whose detailed analysis of countries by education index is presented in Figure 2.4.

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<sup>152</sup> MASHAL, L. International economic models for the development of euro regions and cross-border areas. In: *Performantica, Iași, România*, 2020, No. 37, p. 327-331. ISBN 978-606-685-742-0.



**Figure 2.4. Dependence of the education index on government funding in the education system of Asian countries, 2021**

Source:<sup>153</sup>

As can be seen in the graph, sharp jumps and differences between Asian countries in the education index are due to many factors (Appendix 6). First, education systems in Asia show significant differences in structure and organization. Some countries are actively investing in modern educational technologies and innovations, which contributes to an increase in the index. While others face limited access to educational resources and may experience difficulties in improving the quality of education.

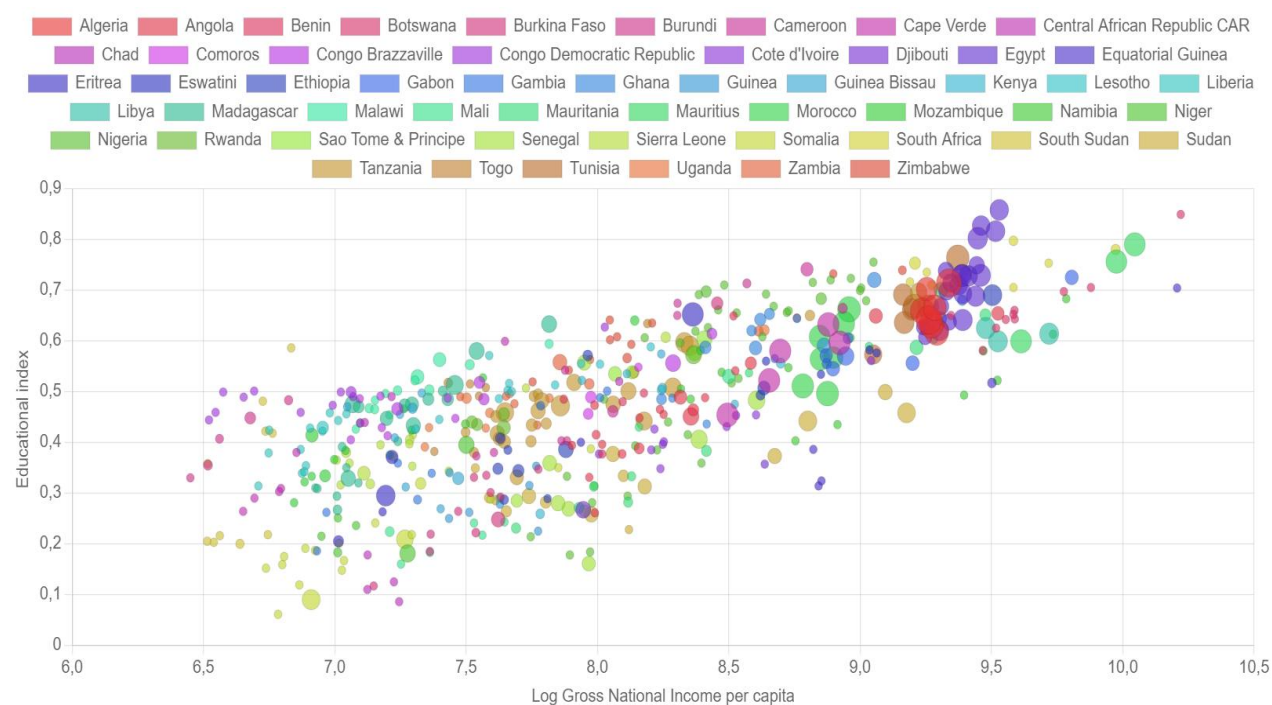
Overall, the region can be characterized as dynamic and diverse in nature. Asian countries differ in their level of economic development, cultural traditions and social conditions, which influence the educational development strategies in each of them. Asian countries are characterized by education focused on achieving high standards. Many of them emphasize technical and engineering education, which promotes the development of a highly skilled workforce and emphasizes the desire for a knowledge economy. In some countries, the emphasis is on developing the skills needed for the modern information economy, such as programming and digital literacy.

The analysis highlights the need to take into account the diversity and uniqueness of education policies in different Asian countries. Effective public funding plays an important role in

<sup>153</sup>Education index. (accessed 03/20/2023). Available at: <https://globaldatalab.org/shdi/table/2021/edindex+lgnic/>

ensuring high levels of education, but achieving uniform improvement also requires taking into account the specific needs and characteristics of each country in the region. We should strive to create sustainable and inclusive educational systems capable of providing quality education to all segments of the population.

Another continent that complements the research picture is **the African region**, the results of the analysis of which are presented in Figure 2.5.



**Figure 2.5. Dependence of the education index on government funding in the education system of African countries, 2021**

Source:<sup>154</sup>

As the graph shows, sharp jumps and differences between African countries in the education index are due to a complex combination of factors (Appendix 7). This region often experiences limited access to financial resources for education, which can significantly affect the level of the educational index. Some countries, faced with limited funding options, may have difficulty creating and maintaining high-quality educational programs and infrastructure.

Overall, the region can be characterized as facing educational challenges related to social and economic inequalities. Lack of funding can impact access and quality of education, as well as vocational training opportunities.

African countries, although lagging behind in terms of educational index, show resilience and desire to develop areas of globalization and the knowledge economy. It is not uncommon to

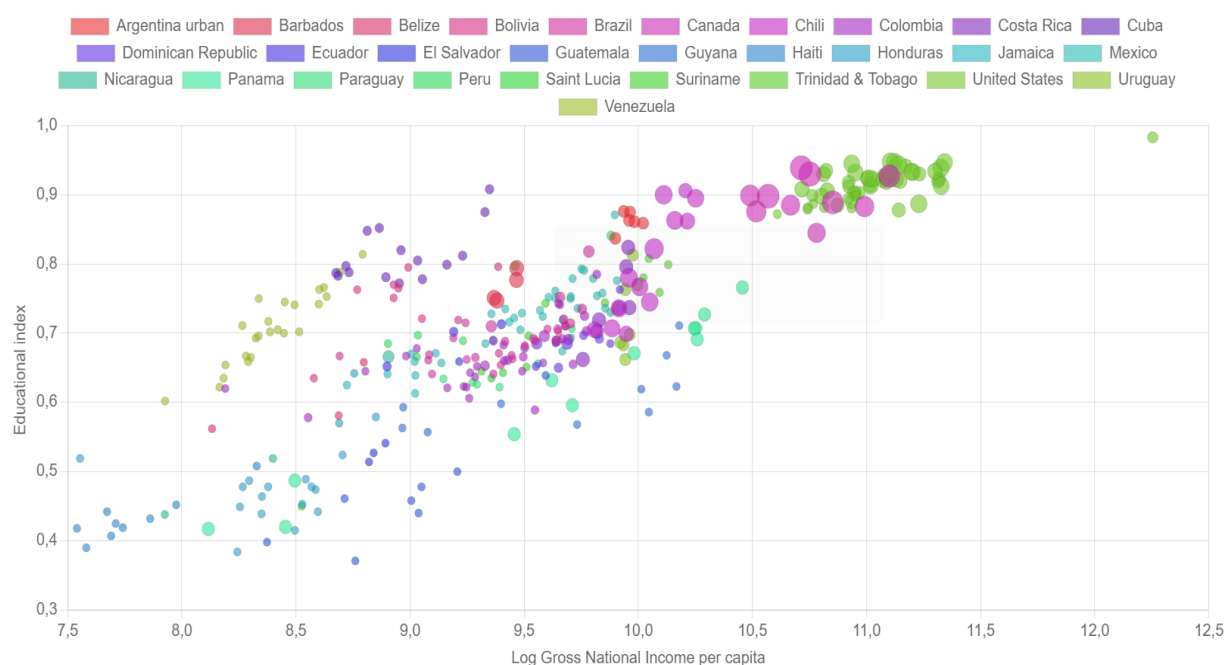
<sup>154</sup>Education index. (accessed 03/20/2023). Available at: <https://globaldatalab.org/shdi/table/2021/edindex+lgnic/>



see efforts to improve educational opportunities, innovate curriculum, and develop strategies to overcome social and economic challenges.

The analysis highlights the need for international support and investment in education in African countries. Public funding plays a key role in the sustainable development of education in this region, but attention to other factors such as social inequality, access to resources and the development of adaptive strategies that take into account the unique circumstances of each country are also required. Improving education in Africa has the potential to significantly improve the quality of life and ensure sustainable socio-economic development in the region through the globalization of the educational system.

The author also conducted a study **of the American region**, the results of which are presented in Figure 2.6.



**Figure 2.6. Dependence of the education index on government funding in the education system of American countries, 2021**

Source:<sup>155</sup>

Analysis of the educational index of the Americas allows us to identify key trends and features in the field of education in this region (Appendix 8). It is important to note that America includes diverse countries with different educational systems and levels of development. For in-depth analysis, individual subregions of the Americas, such as North America and Latin America, should be considered.

In the US and Canada, education plays a key role and they typically score high on the

<sup>155</sup>Education index. (accessed 03/20/2023). Available at: <https://globaldatalab.org/shdi/table/2021/edindex+lgnic/>

education index. High levels of funding, high-quality educational programs, and wide access to educational resources contribute to the formation of an educated population. In Latin America, there are differences in educational systems and indices between different countries. Some countries face challenges such as lack of resources, inequalities in access to education and qualitative differences in curricula.

Overall, America's educational index reflects high overall educational attainment, but also highlights existing differences between countries and regions. Continued attention to funding, the development of effective education policies and the elimination of social inequalities play an important role in ensuring sustainable and high-quality education in this region in the face of globalization.

Based on the general analysis carried out, it became necessary to select a certain experimental sample of countries, which will be subjected to more thorough research in the context of this scientific work. The sample was formed as follows:

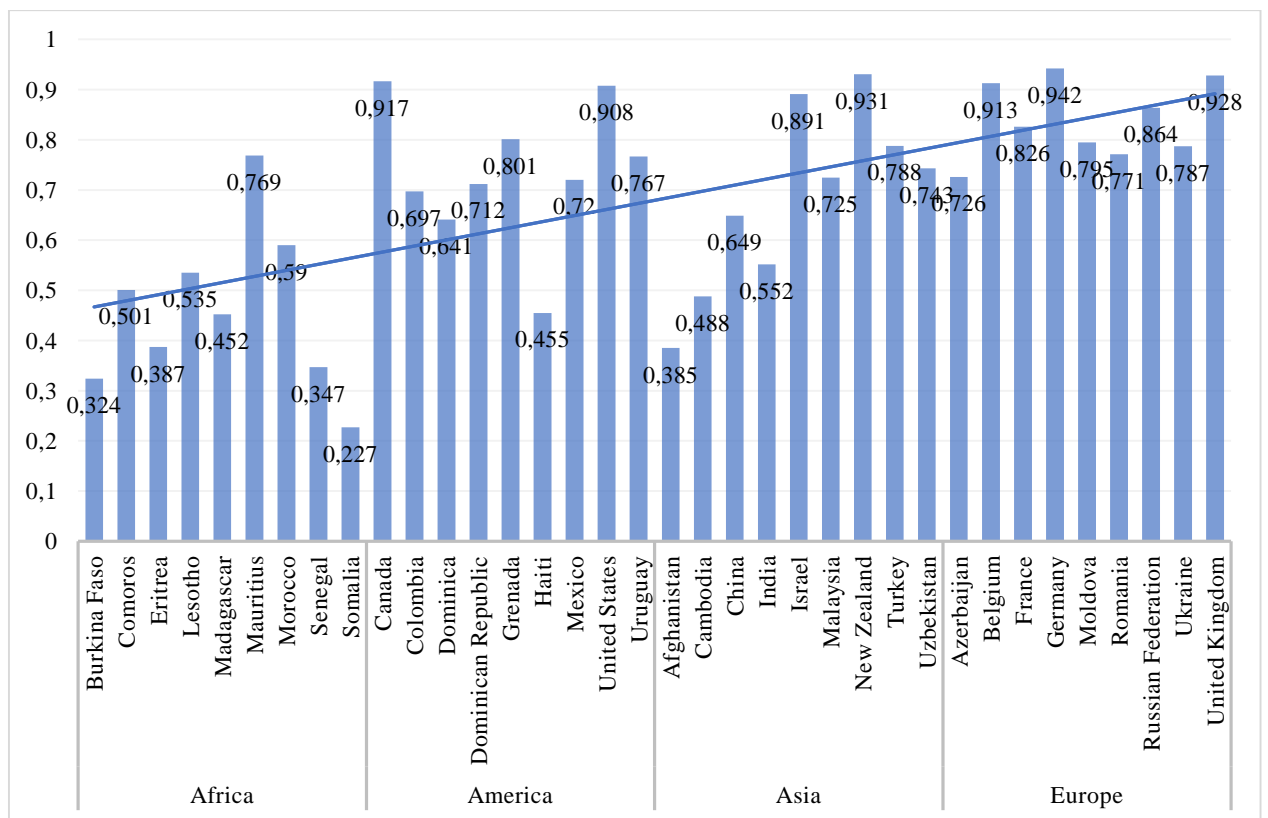
- 1) The countries of each region of the world were divided into three categories:
  - High level of education index – from 0.9 to 0.8;
  - Middle level of education index – from 0.7 to 0.6;
  - Low level of education index – from 0.5 to 0.1.

In the European region there are only High and Middle level of education index (Appendix 9), in the African region there are also only two levels - Middle and Low level of education index (Appendix 10). In other regions (Asia and America) all three levels are present (Appendix 11), (Appendix 12).

- 2) Nine countries were selected from each region with the obligatory condition of selecting the first three, three middle countries and the last three countries, depending on the three levels mentioned above. In the case of regions that do not include all three levels, nine countries were also selected depending on the number of countries at the two levels present.

- 3) Based on the selected countries, a summary table was compiled, including 36 countries (Appendix 13). The generated sample of countries will allow the author to conduct more in-depth studies of each individual country and focus the conclusions drawn on the entire region.

A sample of 36 countries is clearly presented in Figure 2.7.



**Figure 2.7. Structure of the sample of countries in the world regions, according to the education index, 2021**

Source: developed by the author based on<sup>156</sup>

As can be seen from the presented graph, the sample of countries includes countries with different levels of education and economic development, from highly developed to developing countries. From this we can conclude that educational policies will differ and belong to three models (state, market and social-corporate).

Dividing countries According to educational policy models, it is important to consider that these models represent ideal types, and actual education systems usually contain elements of different models. In some countries, the elements of a particular educational policy model may not be as pronounced or formalized as in others in the form of a specific document. For example, in some cases the country is not considered I am a country with an educational policy of a social-corporate model, however, partnerships with corporations may exist, but are not key characteristics of the educational system.

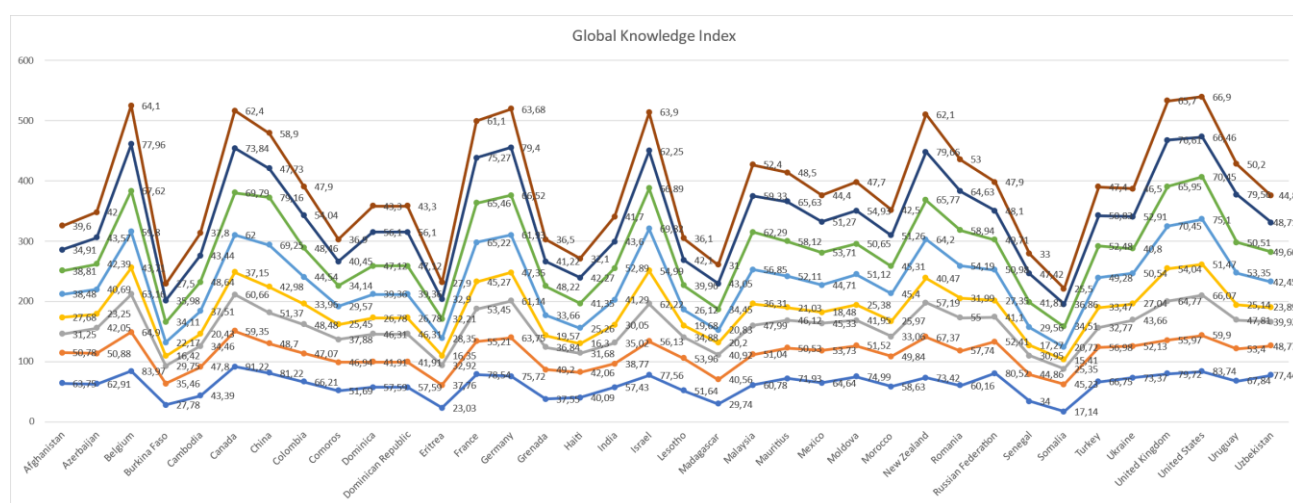
In the lists of countries provided above, the author did not have explicit information about specific models of educational policies. The information that made it possible to compile the table was collected based on a study of various official documents published in the country's education

<sup>156</sup>Education index. (accessed 03/20/2023). Available at: <https://globaldatalab.org/shdi/table/2021/edindex+lgnic/>

system, as well as on the basis of indicators reflecting the knowledge economy and globalization in the educational policies of countries.

To analyze educational policies in a sample of countries, two main components of the trends (globalization and the knowledge economy), which have a significant impact on the structure and content of policies, were taken as a basis.

In order to identify the directions of the knowledge economy in the educational policies of a sample of countries, the author analyzed the Global Knowledge Index, based on seven indicators (pre - university education; research, development and innovation; technical and vocational education and training; research, development and innovation; information and communications technology; economy; enabling environment) (Appendix 14), which is presented in Figure 2.8.



**Figure 2.8. Global Knowledge Index for a selection of countries, 2020**

Source:<sup>157</sup>

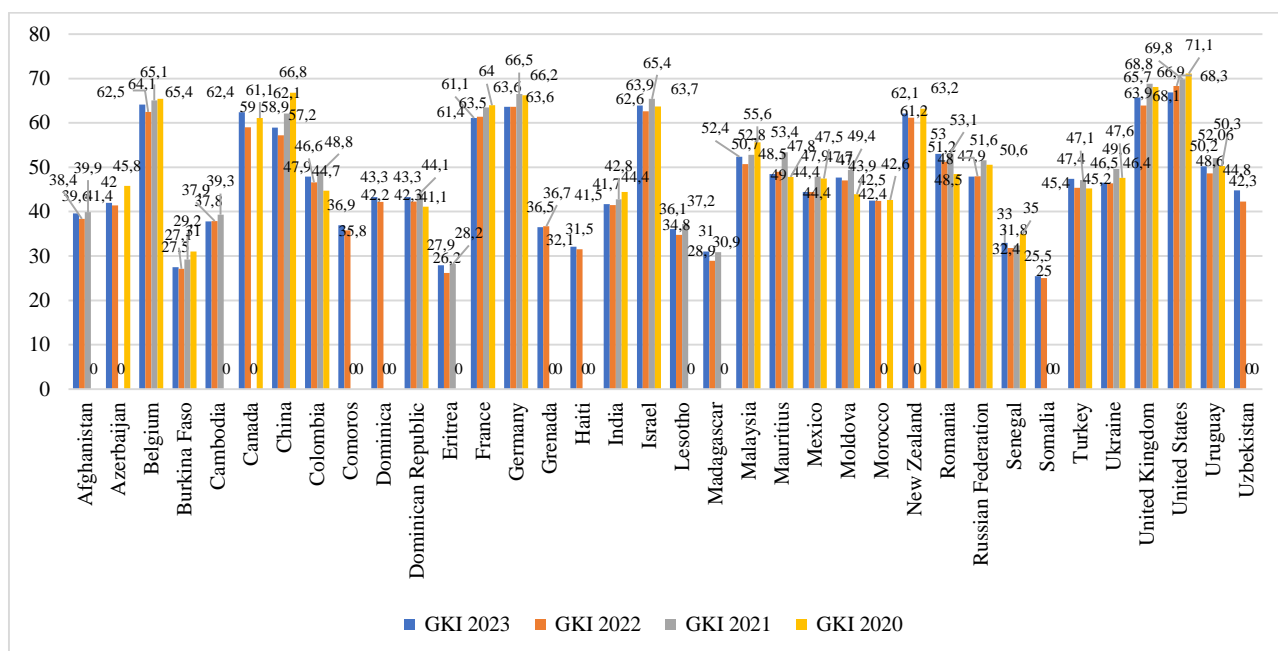
This graph clearly shows that the leading countries are Belgium, Canada, France, Germany, Israel, New Zealand, the UK and the USA. This is because these countries perform well in various aspects of education such as accessibility, quality of education, infrastructure, research capabilities and international cooperation.

The countries following the leaders in this index are the Dominican Republic, Moldova, Malaysia, Romania and others. These countries show a positive trend in the education sector, although they have lower overall performance compared to the leaders.

Countries in the African region lag behind in almost all index indicators due to challenges such as lack of access to education, insufficient resources, economic difficulties, as well as sociocultural and political factors.

<sup>157</sup>Global Knowledge Index. (accessed 08/28/2022). Available at: <https://www.knowledge4all.com/ranking>

It is also important to consider that graphs may change over time, and attention should be paid to changes in educational indicators. Therefore, the author conducted an additional study of the Global Knowledge Index over 4 years, (Appendix 15), as shown in Figure 2.9.



**Figure 2.9. Dynamics of the Global Knowledge Index for a sample of countries, 2020-2023**

Source: <sup>158</sup>

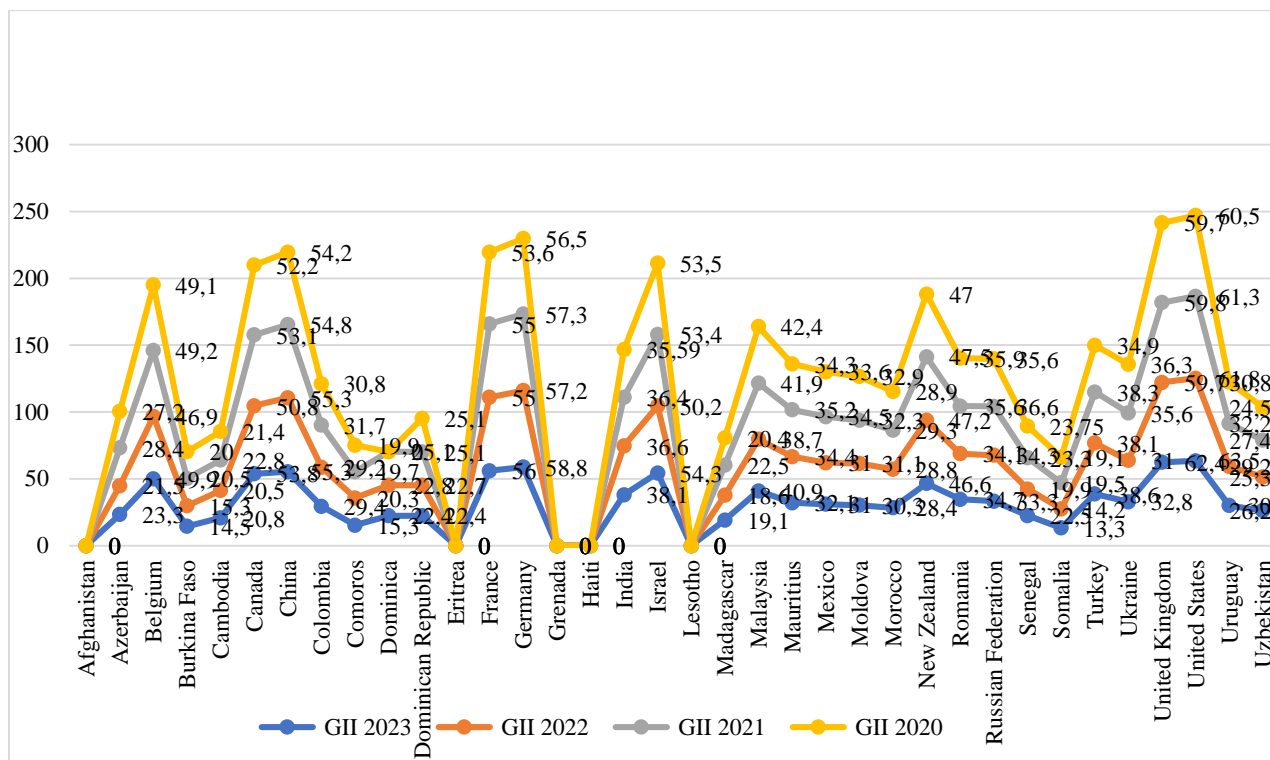
Based on this graph, we can conclude that the dynamics continue - the countries that turned out to be leaders in 2020 are also leaders over the next two years. These countries include Belgium, Great Britain, the USA, Germany, New Zealand, etc. Also for the “purity of the experiment,” it is worth noting that not all data was found, since countries do not always report on indicators for compiling a rating for this index. In this regard, the results of the study may have some error.

Another indicator that is of scientific interest for studying the direction of the knowledge economy in educational policy is the Global Innovation Index.

The Global Innovation Index (GII) is a comprehensive index developed jointly by the World Intellectual Property Organization (WIPO) and Cornell University that measures and evaluates innovation capabilities and performance in countries around the world <sup>159</sup>. The results for a sample of countries on this index are presented in the form of a graph in Figure 2.10.

<sup>158</sup>Global Knowledge Index. (accessed 08/28/2022). Available at: <https://www.knowledge4all.com/ranking>

<sup>159</sup> BRÁS, GR *Pillars of the Global Innovation Index by income level of economies: longitudinal data (2011-2022)* for researchers' use. In: *Data in Brief*. 2023, No. 46, p. 108818. ISSN 23523409.



**Figure 2.10. Global Innovation Index by years, 2020-2023**

Source:<sup>160 161 162 163</sup>

This indicator is of scientific interest for studying the direction of the knowledge economy in educational policy in several key aspects: innovation activity, investment in research, education and skills, interaction between universities and industry, access to education and information (Appendix 16).

Based on the presented graph, a fairly complete analysis can be made. Innovation leaders (USA, UK, New Zealand, Israel, Germany, France, China, Canada, Belgium). The graph reflects the outstanding leadership of these countries in the field of innovation. This is likely due to the high level of investment in scientific research, the development of new technologies, as well as the development of educational systems that contribute to the formation of highly qualified specialists. It is also possible that these countries are actively integrating innovation into their economies, promoting the growth of innovative companies and start-ups.

<sup>160</sup>Global Innovation Index 2023. (accessed 03/20/2023). Available at: <https://www.wipo.int/edocs/pubdocs/en/wipo-pub-2000-2023-en-main-report-global-innovation-index-2023-16th-edition.pdf>

<sup>161</sup> SOUMITRA, D., LANVIN, B., WUNSCH-VINCENT, S. *Global innovation index 2020: who will finance innovation?* WIPO. 2020. (accessed 03/20/2023). Available at: [https://www.wipo.int/edocs/pubdocs/en/wipo\\_pub\\_gii\\_2020.pdf](https://www.wipo.int/edocs/pubdocs/en/wipo_pub_gii_2020.pdf)

<sup>162</sup>DUTTA, S. et al. *Global innovation index 2021: tracking innovation through the covid-19 crisis*. WIPO, 2021. (accessed 20.03.2023). Available at: [https://www.wipo.int/edocs/pubdocs/en/wipo\\_pub\\_gii\\_2021.pdf](https://www.wipo.int/edocs/pubdocs/en/wipo_pub_gii_2021.pdf)

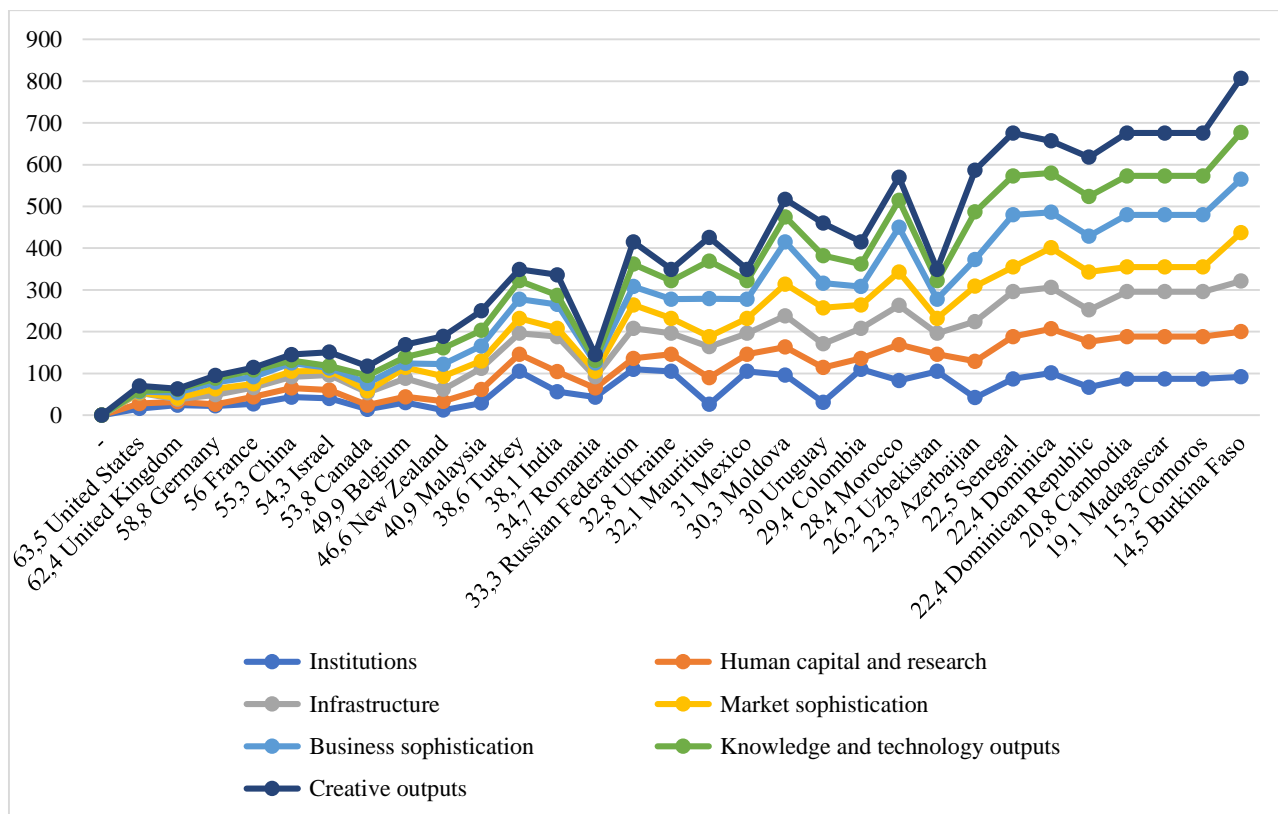
<sup>163</sup>Global Innovation Index 2023. (accessed 03/20/2023). Available at: <https://www.wipo.int/edocs/pubdocs/en/wipo-pub-2000-2023-en-main-report-global-innovation-index-2023-16th-edition.pdf>

Middle position countries (Mexico, Morocco, Republic of Moldova, Colombia, Uzbekistan, Russia, Ukraine, etc.). Countries that rank in the middle on the innovation index may have balanced innovation potential. Perhaps they are actively introducing new ideas and technologies, but have not reached such a high level as leaders. This may be due to differences in investment activity, quality of education, degree of interaction between educational institutions and the business sector, as well as the innovation culture in the country.

Countries lagging behind in the innovation index. The rest of the countries are seriously lagging behind in terms of the innovation index. This may be the result of limited resources, insufficient investment in research and education, and a lack of systemic measures to support innovation. Lagging in this area may mean that these countries have difficulty creating and maintaining competitive innovation, which in turn may affect their economic development and global competitiveness.

The repercussions of this lag extend beyond the innovation sector, potentially hindering overall economic development and global competitiveness. Addressing these shortcomings requires strategic interventions, increased investment in research and education, and the implementation of effective policies to foster a culture of innovation, ensuring long-term sustainability and international relevance.

Detailing this information, presented over four years, attention should be paid specifically to 2023, which is currently the last year in the study for which data is available. The Global Innovation Index by pillar for 2023 is presented in Figure 2.11.



**Figure 2.11. Global Innovation Index by pillar, 2023**

Source:<sup>164</sup>

Analysis of the main pillars that are usually included in The Global Innovation Index is conducted to demonstrate objectivity when conducting research on the innovation potential of a sample of countries. The pillars represent the different aspects of innovation that are measured and ranked in the index (Appendix 17):

**Institutions** - This pillar assesses the effectiveness of institutions that support innovation, such as intellectual property laws, regulatory frameworks, transparency and the effectiveness of government. **Human resources and research capacity** include education, training and research development. **Infrastructure** is the quality of innovation infrastructure, including transport, communications and technological infrastructure. **Business development** is an assessment of the business environment, including the availability of capital, the labor market and the innovative activities of enterprises. **The market** is about the value of international interaction in the field of innovation, including international patents and publications. **Educational technology** - this pillar concerns the level of investment in physical infrastructure and research. **Creativity** means the share of originality, novelty and a creative, creative approach in innovations in the field of education.

<sup>164</sup>Global Innovation Index 2023. (accessed 03/20/2023). Available at: <https://www.wipo.int/edocs/pubdocs/en/wipo-pub-2000-2023-en-main-report-global-innovation-index-2023-16th-edition.pdf>



These pillars provide a comprehensive picture of a country's innovation potential, allowing comparison and analysis of its effectiveness in various aspects of innovation development.

To conduct a qualitative study of the educational policies of a sample of countries, the author formulated qualitative indicators. These indicators help assess the degree of integration of the concept of the knowledge economy into the educational policies of countries and the degree of participation in globalization processes in the educational market. For convenience of analysis, these indicators were combined into groups, which are presented in Table 2.1.

**Table 2.1. Groups of qualitative indicators for assessing the areas of “knowledge economy” and “globalization” of educational policy**

Direction "Globalization"		Direction "Economy of Knowledge"	
Group of indicators	Index	Group of indicators	Index
Vocational education and mobility	- strengthening the differentiation of vocational education	Focus on student needs	- be focused on the demand of consumers of educational services
	- development of international exchange and mobility programs		- ensure continuous updating of knowledge
International research projects	- international research projects		- allow you to build individual educational strategies
	- use of international education standards		- provide mechanisms of social and mental adaptation and mechanisms of personality development
Multinational educational and cultural programs	- multinational educational programs	Flexibility and individualization of education	- be built into the system of students' professional activities
	- cultural diversity in the learning environment		- provide flexibility in choosing the pace, forms and means of training
		Professional development and innovation	- ensure the development of professional competencies
			- presence of an innovation mechanism

Source: developed by the author

This division allows us to see which aspects of the educational system are focused on the needs of students, which are aimed at flexibility and individualization, and which are related to professional development and innovation. The author analyzed three models of educational policy (state, market, social-corporate), which are inherent in the sample of countries. The assignment of a country to a particular policy was carried out through a study of educational documents officially recognized at the state level and currently in force in a sample of 36 countries. From the information studied, the author selected countries depending on the following criteria:

- state model of education policy - the dominant role of the state, state funding, state control;
- market model of education policy - decentralization and autonomy of educational institutions, competition, private financing, variety of educational programs;

- social-corporate model of education policy - partnership between the state and business, as well as between business and society, education with a focus on the labor market, joint financing of the education system.

Based on the above criteria, groups of countries were identified depending on educational policy models, which were analyzed further. This analysis makes it possible to study in more detail the features of policies applied by different countries and analyze the conditions in which this is carried out.

The state model of educational policy in the framework of this study is represented by such countries as Afghanistan, Uzbekistan, New Zealand, Germany, Russian Federation, Ukraine, Azerbaijan, Mauritius, Morocco, Lesotho, Comoros, Madagascar, Eritrea, Canada, Grenada, Uruguay, Haiti, Dominica. The author identified the directions, features of globalization and the knowledge economy in official documents (policies, strategies, activities, plans) in the field of education of a sample of countries, which is presented in Table 2.2.

**Table 2.2. Directions of globalization and the knowledge economy in the state model of educational policy**

	Countries of the state model of EP																
								Mauritius	Morocco	Lesotho	Comoros	Madagascar	Eritrea		Canada		
Qualitative indicators of globalization in educational programs																	
Vocational education and mobility																	
The state sets the goals of the EP																	
International research projects																	
Qualitative indicators of the knowledge economy in educational programs																	
Focus on student needs																	
Flexibility and individualization of education																	
Professional development and innovation																	

The state model of educational policy is characterized by state pressure and the development of specific directions for the development of the education system. Even understanding the need to introduce the concept of a knowledge economy, not every government solution will be adapted to these challenges. Thus, the author noted that state educational policy is characterized by inflexibility and untimely responses to emerging trends in the global education market. The author identified the features of the knowledge economy in the educational policies of countries such as New Zealand, Germany, and Canada. These countries have a developed innovation system, an innovative education infrastructure, and developed ICT. The features of the knowledge economy are only partially traceable in Afghanistan, Uzbekistan, and Azerbaijan. The architecture of the information infrastructure and innovation system is being thought through locally. The market model of educational policy is represented by the following countries: Great Britain, Romania, Republic of Moldova, Turkey, India, Malaysia, Senegal, Burkina Faso, Somalia, Mexico, USA, Dominican Republic. An analysis of the directions of globalization and the knowledge economy in the market model of educational policy is presented in Table 2.3.

**Table 2.3. Directions of globalization and the knowledge economy in the market model of educational policy**

	E											
										o		
Qualitative indicators of globalization in educational programs												
Vocational education and mobility	+	-	+	+	-	+	-	-	-	-	+	+
The state sets the goals of the EP	+	+	+	-	-	+	-	-	-	-	+	+
International research projects	+	-	+	+	+	+	-	-	-	+	+	-
Qualitative indicators of the knowledge economy in educational programs												
Focus on student needs	+	-	-	+	+	-	-	-	-	+	+	-
Flexibility and individualization of education	+	-	-	+	+	-	-	-	-	+	+	-
Professional development and innovation	+	+	+	+	+	+	-	-	-	-	+	+

Education policies vary widely across countries, and the market model of education policy includes a number of common features that are common across countries. First of all, these countries emphasize the market concept. In countries with a market model of educational policy (the most prominent representatives are the UK and the USA), educational institutions, to a large extent, operate in conditions of market competition. This helps stimulate innovation, student choice of educational programs and the development of flexible learning models.

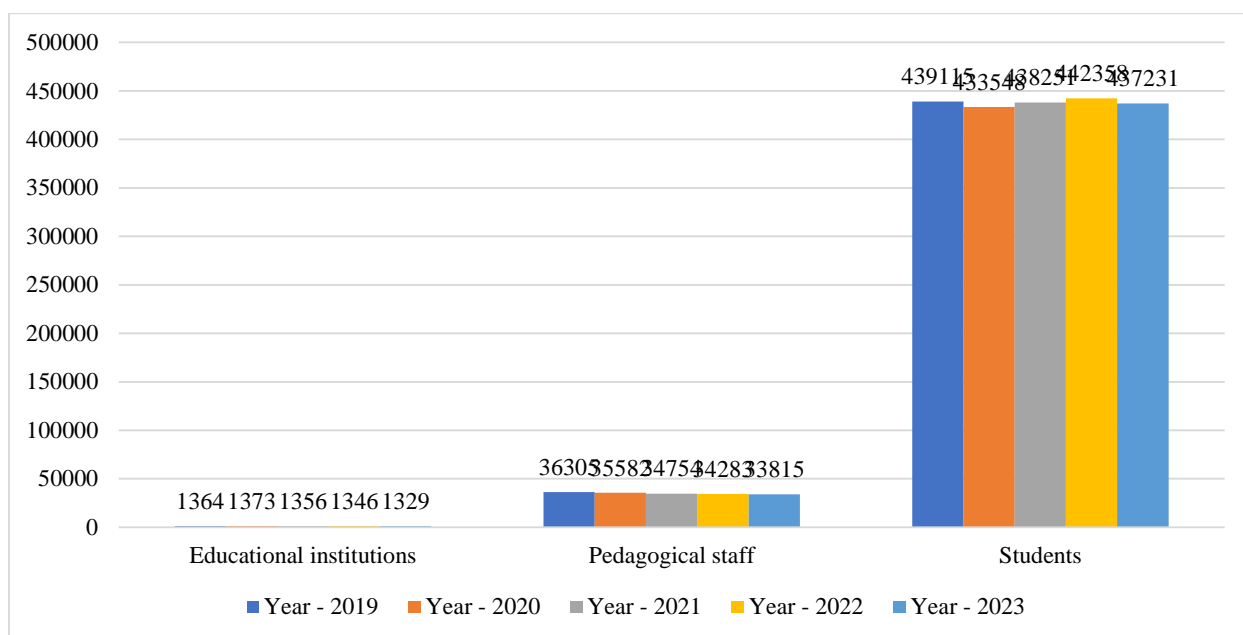
In the market model, a significant role is assigned to the private educational sector. Private schools and universities provide an alternative to public institutions, creating additional educational choices. The market model supports a variety of educational programs, as well as partnerships between educational institutions and enterprises to adapt programs to the needs of the labor market.

Students and their families are often responsible for paying for their education. This may lead to a high degree of emphasis on the quality of education, but also creates accessibility problems for some groups of the population. In countries with a market model, curricula are often updated more quickly in response to market demands and technological changes.

The market model promotes active research in universities and other educational institutions, encouraging innovation and the development of new technologies. However, it is worth noting that such a model may pose challenges to ensuring equal access to education, especially for those who may face financial difficulties.

Overall, the market model of education policy has its advantages in promoting competition, innovation and flexibility, but also raises important questions regarding access and equity of education.

It is also necessary to analyze the education policy of the Republic of Moldova, which also refers to the market model. The country is an important actor in international education policy, and the implementers of this policy are, for example, universities, data for which are presented in Figure 2.12.



**Figure 2.12. Educational institutions by indicators in Republic Moldova, 2019-2023**

Source:<sup>165</sup>

The educational system in the Republic of Moldova covers all levels of education, including primary, basic, secondary, higher and additional education. The structure includes compulsory primary education for 6 years, basic education for 5 years and secondary education for 2-3 years. Higher education is provided at a number of universities and higher education institutions, offering a variety of programs and specializations (Appendix 18).

The official language of instruction is Romanian, but Russian, Ukrainian and Gagauz languages are also used depending on the region and student preferences. The system strives to meet national and international standards by actively participating in the Bologna process.

In addition, there is a vocational education system that provides students with practical skills for successful employment. The educational system provides additional programs, including advanced training courses and postgraduate education programs.

Despite the achievements, the education system faces challenges, such as the need to modernize curricula, update standards and increase the accessibility of quality education for all segments of the population. Addressing these shortcomings requires a comprehensive approach involving government, educational institutions and society as a whole. Education policy reforms, increased funding, and focused efforts to improve the quality of education can help overcome these challenges.

<sup>165</sup> Education and science. Statistics of Moldova. (accessed 03/12/2023). Available at: [https://statistica.gov.md/ru/statistic\\_indicator\\_details/5#data\\_bank](https://statistica.gov.md/ru/statistic_indicator_details/5#data_bank)

The social-corporate model of educational policy is represented by a small number of countries: Cambodia, Israel, China, Colombia, France, Belgium. A qualitative analysis of the directions of globalization and the knowledge economy in the social-corporate model of educational policy is presented in Table 2.4.

**Table 2.4. Directions of globalization and the knowledge economy in the social-corporate model of educational policy**

	E					
Qualitative indicators of globalization in educational programs						
Vocational education and mobility						
The state sets the goals of the EP						
International research projects						
Qualitative indicators of the knowledge economy in educational programs						
Focus on student needs						
Flexibility and individualization of education						
Professional development and innovation						

The social-corporate model of educational policy is focused on the interaction between educational institutions and the corporate sector, as well as on social responsibility. In the context of globalization and the transition to a knowledge economy, this model exhibits several characteristic directions. First of all, it promotes the establishment of partnerships between educational institutions and enterprises in order to develop educational programs that meet the needs of the labor market. This includes joint projects, internship programs and exchange of experience between the educational and corporate sectors.

The social-corporate model inherent in the analyzed countries actively supports the exchange of knowledge and technology between educational institutions and enterprises. This contributes to the development of innovation, adaptation of new technologies and increased competitiveness of both educational and corporate structures.

An important aspect of this model is the focus on developing students' not only professional skills, but also social competencies. This includes an emphasis on communication, leadership, and understanding social and global issues. Globalization in the social-corporate model of educational

policy is also manifested in the desire for international cooperation <sup>166</sup>. Student exchange, joint research projects, as well as participation in global educational initiatives become an integral part of this model. In general, the social-corporate model of educational policy, focused on the interaction of education and business, is actively integrated into the processes of globalization and evolution into the knowledge economy, striving to create a sustainable and socially responsible education system.

The author conducted a comparative analysis of educational policy models of a selected sample of countries around the world. The criteria for comparative analysis are such characteristics of globalization and the knowledge economy as vocational education and mobility, the state sets the goals of educational programs, international research projects, focus on the needs of students, flexibility and individualization of education, professional development and innovation. The result is an assessment of the adaptability and degree of readiness of the educational policy model to the new realities of the global education market. The author also needed to highlight the essential characteristics of educational policy models and reflect in them elements of globalization trends and the knowledge economy.

The analysis shows that although not all educational systems of the countries of the world are international, they are all equally susceptible to the processes of globalization. The problem is the place they occupy in this process, namely whether they are the object or even the victim of these processes, or an active player in the global competition among higher education providers, or the main mediator of globalization.

The transition to a knowledge economy served as an impetus for the development of a new intensive process of international integration in education in most highly developed countries of the world. This process includes not only the exchange of knowledge and best practices, but also active collaboration in scientific research, development of innovations and exchange of best educational practices.

One of the key elements of this integration is the mobility of students and researchers. International exchange programs, joint research projects and training courses provided in cooperation between universities in different countries stimulate cultural exchange and enrichment of knowledge.

In addition, international integration in education contributes to the standardization of higher

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<sup>166</sup>MASHAL, L. *Levels for development of the contemporary economy and society in the world & Israel*. In: Competitiveness and innovation in the knowledge economy. September 25-26, 2020, Chisinau. Chisinau Republic of Moldova: Editorial-Polygraphic Center of ASEM, 2020, p. 400-405. ISBN 978-9975-75-985-4. Available at: [https://ibn.idsi.md/sites/default/files/imag\\_file/400-405\\_0.pdf](https://ibn.idsi.md/sites/default/files/imag_file/400-405_0.pdf).

education, which facilitates the recognition of qualifications and the transfer of students between educational institutions in different countries. This contributes to the creation of a global educational environment where talented students and professionals can realize their maximum potential.

An important aspect of international integration in education is also the joint development of technology and innovation. Joint research centers, exchange of scientific personnel and common project funding allow countries to jointly solve complex scientific and technological problems.

Thus, international integration in education becomes a key factor in the formation of a society capable of effectively competing in the global knowledge economy, ensuring sustainable development and a high level of intellectual capital.

The main modern trends in global development, causing significant changes in the education system, and, consequently, in educational policy, include the following:

- 1) accelerating the pace of development of society and, as a consequence, the need to prepare people for life in rapidly changing conditions;
- 2) the transition to a post-industrial, information society, a significant expansion of the scale of intercultural interaction, in connection with which the factors of sociability and tolerance acquire particular importance;
- 3) the emergence and growth of global problems that can only be solved as a result of cooperation within the international community, which requires the formation of modern thinking among the younger generation;
- 4) democratization of society, expansion of opportunities for political and social choice, which necessitates increasing the level of readiness of citizens for such a choice;
- 5) dynamic development of the economy, increased competition, reduction in the scope of unskilled and low-skilled labor, profound structural changes in the employment sector, which determine the constant need to improve professional qualifications and retraining of workers, and increase their professional mobility;
- 6) the growing importance of human capital, which in developed countries accounts for 70-80% of national wealth, which determines the intensive rapid development of education for both youth and adults.

Educational policy, reflecting national interests in the field of education and presenting them to the world community, at the same time takes into account the general trends in the global development of education systems. In the context of global changes and challenges such as technological innovation, economic globalization and changes in labor market demands, education policy strives to be reactive and predictive.



One of the key trends in global education trends is the bias towards digitalization and online education. With the development of information technology, educational systems are striving to integrate digital tools into the educational process, expanding access to knowledge and providing flexibility in learning.

## **2.2. Study of the educational system and educational policy of Israel**

Israel, being one of the countries actively striving for technological and economic progress, attracts the attention of researchers to the features of the education system and its educational policy. Israel's educational system and educational policy exhibit a unique combination of historical, cultural and social aspects that have a significant impact on the formation of the educational environment in the country. The author analyzed the main aspects of the education system and educational policy of Israel, features, key aspects that determine its structure, goals, challenges and achievements in this area.

Analyzing Israel's educational policies in the context of globalization and the knowledge economy provides a unique opportunity to understand how the country copes with the challenges of the modern global educational landscape. Globalization introduces new dynamics into educational systems, requiring adaptation to changing trends and taking into account the needs of the global labor market.

In this context, studying Israeli education policy allows us to analyze how successfully the country integrates its educational programs into the global context. This includes assessing the degree of openness of culture and education, as well as support for multilingualism, which can be critical in a global economic environment.

Taking into account trends in the knowledge economy, the study of Israeli education policy also assesses how effectively the country invests in scientific research, technology development and innovation projects. A focus on developing the skills needed to successfully adapt to a high-tech environment can be a key element in ensuring competitiveness in the global marketplace.

Such a detailed analysis will reveal the strategies and measures that Israel is implementing to create an educational system that can not only meet the challenges of today, but also build long-term prospects in a rapidly changing world and global competition.

Israel's educational system is multilevel and diverse, reflecting a rich combination of cultural, historical and social influences. The country places special emphasis on education, viewing it as a key element in shaping society and civic identity. An important feature of the Israeli educational system is bilingualism: Hebrew is taught in Jewish schools, while Arabic is used in Arab schools. Education in Israel is compulsory for children between the ages of 3 and 18, and the

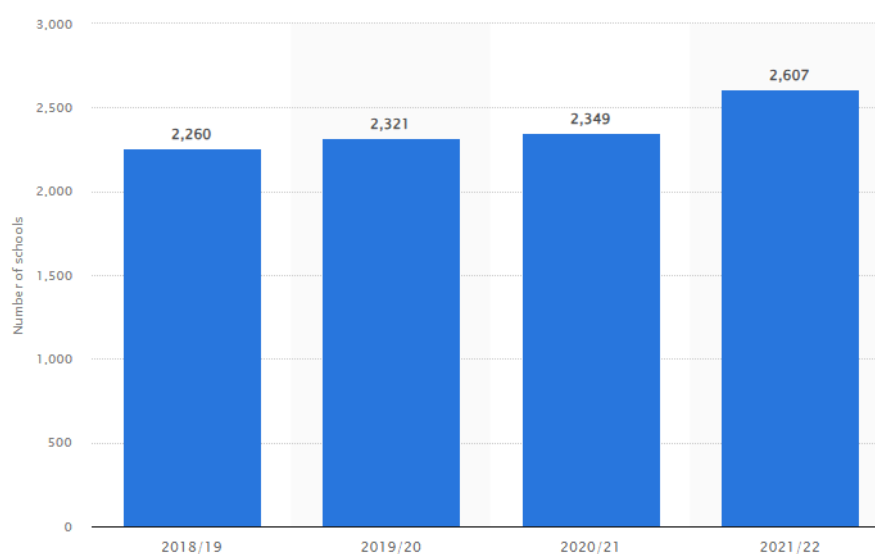
system includes kindergartens, primary and secondary schools, and higher education.

Israel's educational system spans multiple levels, providing a variety of learning opportunities at different stages of a person's life. The Israeli education system includes primary, lower secondary, secondary and higher education<sup>167</sup> (Appendix 19).

In primary school, education begins at age 6 and continues until the end of the 6th grade. After primary school, students move on to secondary school, where education usually spans 3 years from 7th to 9th grade. Vocational education is represented by technical and vocational schools. They offer training in a variety of technical and vocational fields, providing students with practical skills to enter the job market<sup>168</sup>. Additional education is provided in language schools, which have additional programs for studying languages, including Hebrew and Arabic, and for the development of creative abilities there are music and art schools.

Higher education includes universities and colleges. Universities provide education at the bachelor's, master's and doctoral levels, while colleges and technical schools provide practical education in various fields.

Number of schools in Israel for 2018 – 2022 presented in Figure 2.13.



**Figure 2.13. Number of Hebrew primary schools in Israel from 2018/19 to 2021/22**

Source: <sup>169</sup>

In the 2021/22 school year, there were 2,607 Jewish primary schools in Israel, showing a

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<sup>167</sup> Education in Israel - statistics & facts. (accessed 03/20/2023). Available at: <https://www.statista.com/topics/9398/education-in-israel/#topicOverview>

<sup>168</sup> School Education System in Israel. (accessed 03/20/2023). Available at: <https://www.israeleducation.info/k12/school-education-system-in-israel.html>

<sup>169</sup> Education in Israel - statistics & facts. (accessed 06/22/2023). Available at: <https://www.statista.com/statistics/1307186/number-of-hebrew-primary-schools-in-israel/>

slight increase compared to the previous year. During the period under review, there was a gradual increase in the number of Jewish primary schools in the country.

Education in Israel is also characterized by bilingualism and respect for the multicultural nature of society, which is reflected in the country's educational policies. This structure provides a well-rounded education that prepares students for the challenges of the modern world and stimulates the development of innovation and technology.

In Israel, 35% of adolescents aged 15–19 years study in general secondary schools and 24% in senior vocational schools. Another 3% are enrolled in incomplete secondary education programs and 6% are enrolled in higher education programs. By comparison, the OECD average is 37% in general secondary education, 23% in vocational education, 12% in lower secondary education and 12% in tertiary education <sup>170</sup>.

In Israel, 14% of young people aged 25–34 years have a vocational education and training (VET) qualification as their highest level of education: 4% at the upper secondary level and 10% at the short-cycle tertiary level <sup>171</sup>.

Educational policy strives to stimulate critical thinking, creativity and the development of skills necessary for successful integration into a rapidly changing society and global economy <sup>172</sup>. Israel is actively developing programs to include children with special educational needs, striving to ensure equal opportunities for all students. The country's educational system also shows a desire to create a tolerant and multicultural society, which is reflected in the approach to education of various ethnic and religious groups. All these elements together create a unique educational environment that continues to evolve in accordance with the challenges of the modern world.

Educational structure of higher education in Israel between 2020 and 2021, out of a total of 59 higher education institutions, 10 are universities - of which 9 are public research universities and 1 Open University, 31 are academic colleges and 21 are public teacher training colleges.

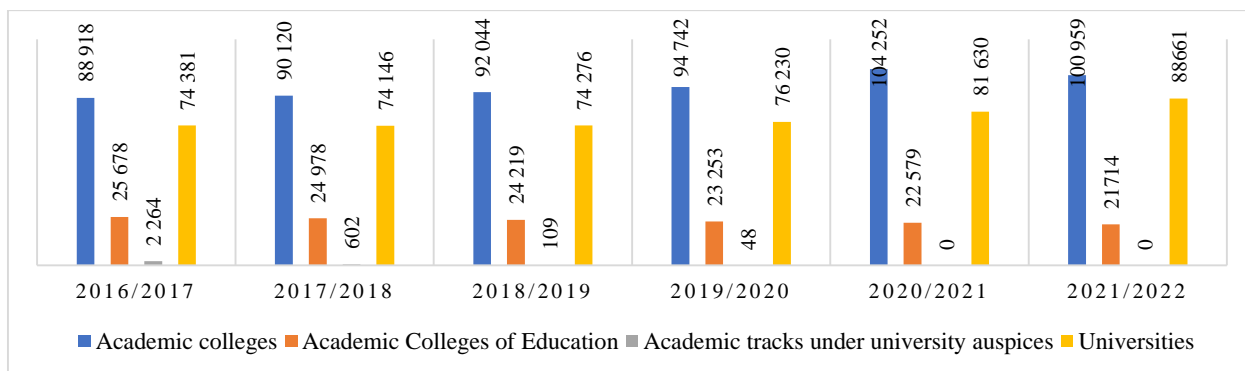
University status in Israel is a matter of prestige, increased government funding for research and teaching, as well as the ability to conduct research, award academic degrees and represent the country's scientific community. The demand for higher education in Israeli society is hardly decreasing, since the number of students is constantly growing, which is reflected in Figure 2.14.

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<sup>170</sup> Israel. Overview of the education system (EAG 2023). (accessed 07/11/2023). Available at: <https://gpseducation.oecd.org/CountryProfile?primaryCountry=ISR&treshold=10&topic=EO>

<sup>171</sup> Israel. Overview of the education system (EAG 2023). (accessed 07/11/2023). Available at: <https://gpseducation.oecd.org/CountryProfile?primaryCountry=ISR&treshold=10&topic=EO>

<sup>172</sup> MASHAL, L., Andreeva, T. Knowledge economy as a developing factor in teacher training. In: *EcoSoEn*. 2021, no. 3-4, pp. 70-74. ISSN 2587-344X. [Category B]. Available at: [https://ibn.idsi.md/sites/default/files/imag\\_file/70-74\\_43.pdf](https://ibn.idsi.md/sites/default/files/imag_file/70-74_43.pdf)



**Figure 2.14. Students in institutions of higher education by type of institution**

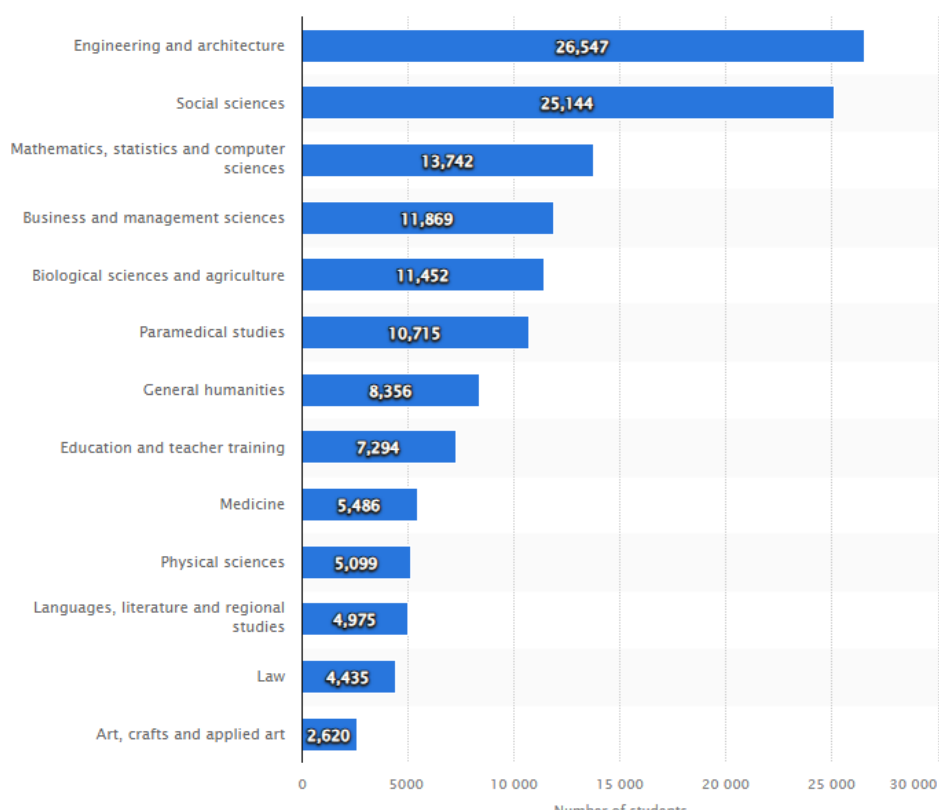
Source: developed by the author based on <sup>173</sup>

In the 2021/2022 academic year, the average annual growth in the number of university students compared to 2020/2021 was 8.61%, and in 2020/21 year compared to 2019/2020 amounted to 5.1%. There was a decrease in the number of students during this period in academic colleges of 3.15% and an increase of 0.6% in the number in academic teacher training colleges.

In Israel, higher education is offered in a variety of fields, including engineering, humanities, medicine, natural sciences, arts and social sciences, providing students with a wide choice of specializations to achieve their academic and professional goals (Figure 2.15).

Entry into higher education (Appendix 20) shows that demand for engineering professions has increased by 2% between 2006/07 and 2021/22. A big jump is observed in the faculties of software engineering, mathematics and computer science (from 4.7% to 8.2%). Demand for legal professions has decreased, but demand for professions such as architecture has increased, and there has been a slight increase in additional faculties such as medicine, management sciences and design. The researcher believes that the problem lies in the decline in the number of other professions that feed the knowledge economy, such as biology and physics, which are the subjects that surround scientific research and form the basis of human capital for knowledge economy professions.

<sup>173</sup>Council for Higher Education. (accessed 08/07/2023). Available at: <https://che.org.il/en/statistical-data/>



**Figure 2.15. Israeli Higher Education Destinations for 2020/21**

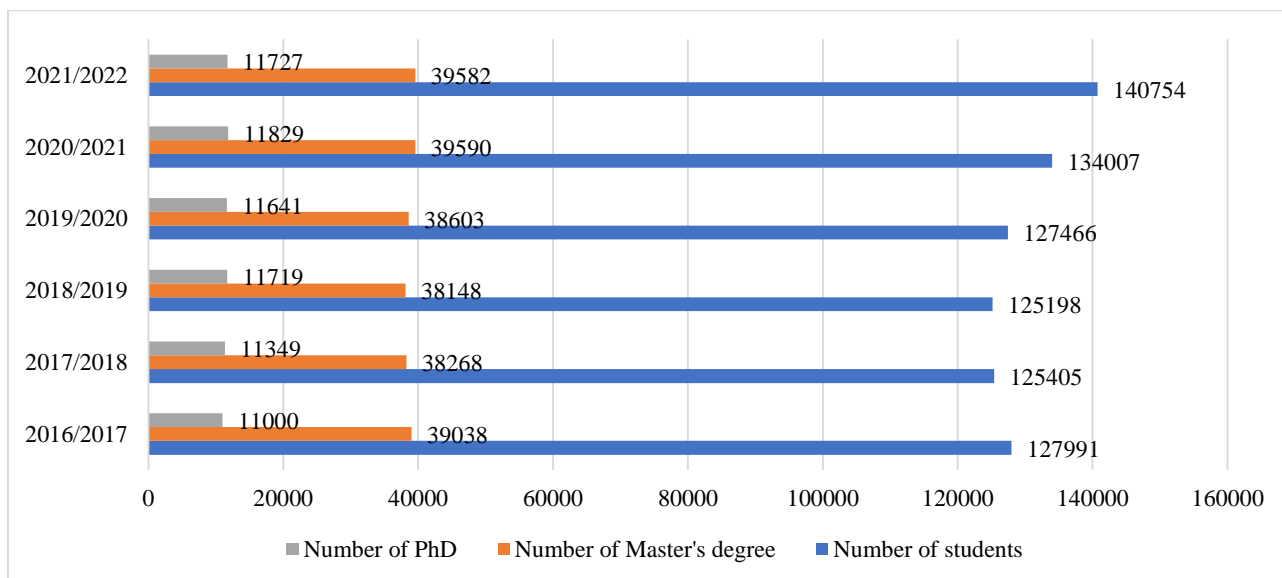
Source:<sup>174</sup>

In the 2020/21 academic year, Israeli university students have chosen engineering and architecture as their main areas of study. More than 26 thousand students are studying this field. The second most popular field was social sciences, attracting about 25 thousand students during the same period. On the other hand, the field of arts, crafts and applied arts was found to be the least in demand, with more than 2,600 students participating. The high standard of education in Israel is supported by an emphasis on science, technology and research.

The occupational market is characterized by a growing demand for highly intelligent professions and new professions that require mental flexibility, creativity and entrepreneurship. These trends also reduce professional safety, on the one hand, and on the other hand, require the education system to take care of the proper training of the next generation of employees (students).

There are three academic degrees in the structure of higher education in Israel: bachelor's (first degree), master's (second degree) and doctorate (third degree). In colleges, students receive a bachelor's degree and, in some cases, a master's degree. Most universities provide a full range of levels of education, including bachelor's, master's and doctoral degrees, as shown in Figure 2.16.

<sup>174</sup> Number of students in universities in Israel as of 2020/21, by field of education. (accessed 08/17/2023). Available at: <https://www.statista.com/statistics/1276510/number-of-students-in-universities-in-israel-by-field-of-education/>



**Figure 2.16. Israeli university students by education level**

Source:<sup>175</sup>

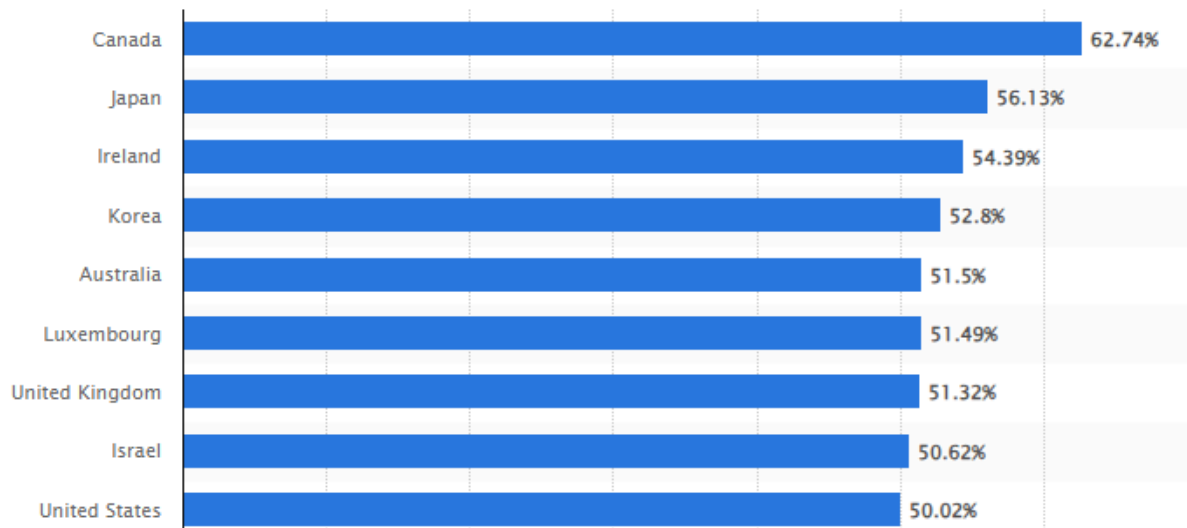
The figure shows an annual increase in the number of students and a slight decrease in the number of masters and doctoral students in the 2021/22 academic year compared to 2020/21.

Although higher secondary education is often the minimum achievement required for successful participation in the labor market, 9% of 25-34 year olds in Israel have not completed higher secondary education, lower than the OECD average of 14%. In Israel 25-34 year old workers with a bachelor's degree earn 94% more than their peers without a college degree, and workers with a master's or doctorate earn 124% more<sup>176</sup>.

Share of Israeli population with higher education in 2022 year among people aged 25–64 years was 50.62%, which is presented in Figure 2. 17.

<sup>175</sup> Statistical data files on higher education in Israel. Council for Higher Education. (accessed 02/23/2022). Available at : <https://che.org.il/en/statistical-data/>

<sup>176</sup> Israel. Overview of the education system (EAG 2023). (accessed 07/11/2023). Available at: <https://gpseducation.oecd.org/CountryProfile?primaryCountry=ISR&treshold=10&topic=EO>



**Figure 2.17. Share of people with tertiary education in OECD countries in 2020**

Source: <sup>177</sup>

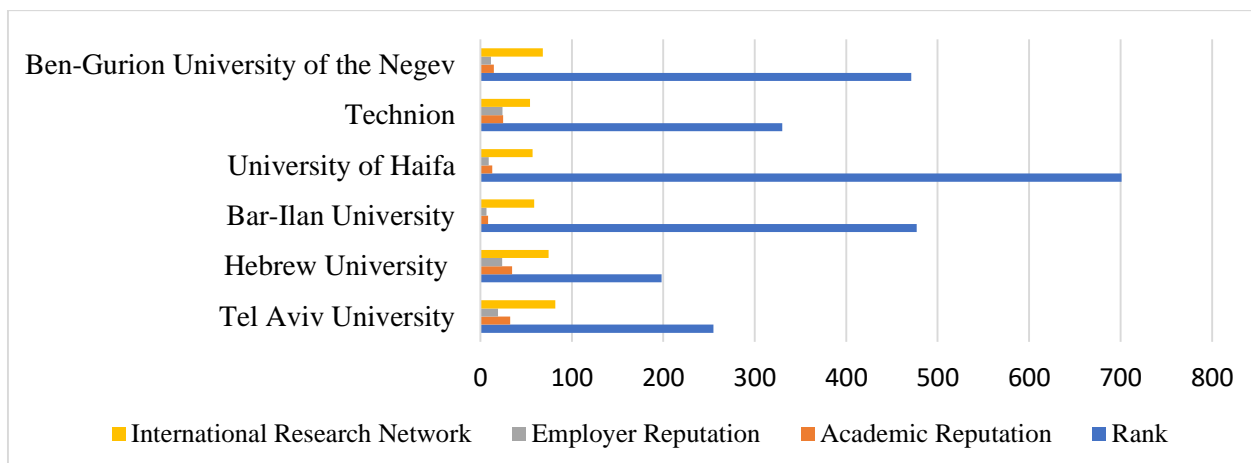
In the ranking of countries in the world according to the educational level index <sup>178</sup>in 2022, Israel took 16th place, and in the Ranking of National Higher Education Systems 2020 <sup>179</sup>– 18th place among 50 countries. These indicators indicate a high assessment of the higher education system, but there is potential for its further improvement and achievement of even higher ranking positions.

University rankings are systematic assessments of higher education institutions based on various criteria. One of the most recognized global ranking tools is the QS World University Rankings. This ranking takes into account factors such as academic reputation, reputation among employers, number of citations and others to assess the overall quality of education and research activity of universities. Rankings play an important role when choosing a university to study and are a tool for assessing the competitiveness of educational institutions on the world stage. To illustrate this, the QS 2022 ranking is used, reflecting the criteria for evaluating universities in Israel, which is presented in Figure 2.18.

<sup>177</sup> Share of people with tertiary education in OECD countries in 2020, by country. Statista 2022. (accessed 08/02/2023). Available at: <https://www.statista.com/statistics/1227287/share-of-people-with-tertiary-education-in-oecd-countries-by-country/>

<sup>178</sup> Education Index 2022. (accessed 07/06/2023). Available at: <https://worldpopulationreview.com/country-rankings/education-index-by-country>

<sup>179</sup> Universitas 21: Ranking of National Higher Education Systems 2019. (accessed 09/07/2022). Available at: <https://gtmarket.ru/ratings/u21-ranking-of-national-higher-education-systems/info> .



**Figure 2.18. Indexes of ranking criteria for Israeli universities in the QS rankings in 2022**

Source: developed by the author based on <sup>180</sup>

The QS ranking uses a variety of indicators of activity, including academic reputation (40%), employer reputation (10%) and academic citations (20%) as measured by the Scopus database. Differences in percentages are due to the peculiarities of the methodology for assessing rating criteria.

The Israeli educational system provides significant advantages, accompanied by certain challenges, and also has certain disadvantages, which are presented in Table 2. 5.

**Table 2.5. Advantages and disadvantages of the Israeli education system**

Advantages	Flaws
<b>Help with adaptation.</b> Preparatory courses and programs at universities will help you get comfortable in a new country. They study Hebrew and Israeli culture.	<b>High requirements for admission.</b> It is necessary to speak Hebrew even for some English-language programs, graduate from school without C grades, prove solvency and pass difficult entrance exams. Also, 11th grade graduates from the CIS must pass Mekhina. This is a preparatory course that lasts 11 months and costs about 10,000 USD.
<b>Flexible learning process.</b> Students choose their own subjects and make their own schedule. In many universities you can study during the summer holidays to reduce the time to obtain a diploma. A bachelor's degree, for example, can be completed not in 3, but in 2.5 years.	<b>There is no free education.</b> Neither local nor foreign applicants can enter an Israeli university on a budget. Scholarships and benefits will not cover tuition completely.
<b>Scholarships.</b> There are more than 30 government and independent scholarships in Israel. They can cover up to 50% of the cost of training.	<b>Cost of education.</b> The cost of higher education in Israel is not always justified by quality. The price is determined by the origin of the applicant and the language of instruction. A program in English will cost on average twice as much as in Hebrew. And even for the same course, a foreign student will pay 25% more than a local resident.

<sup>180</sup> QS World University Rankings 2022. [accessed 09/07/2022 ]. Available at: <https://www.topuniversities.com/university-rankings/world-university-rankings/2022>



<b>High employment rate of graduates.</b> 90% of graduates of Israeli universities find work in their specialty.	<b>Military operations in the region.</b> Israeli universities are located in a relatively safe area. However, political conflicts can cause discomfort for international students who are not accustomed to frequent training evacuations and exercises.
<b>Multinational composition.</b> In 2020, 20,000 people immigrated to Israel. 38% of them are from Russia. So you won't feel lonely. But you can also practice English - in Israel, 85% of the population speaks it.	<b>The climate</b> will be unusual for applicants from the CIS. The average temperature in summer reaches +40 degrees, and in winter it does not drop below +10. However, this will not be a problem for everyone.

Source: developed by the author based on<sup>181</sup>

An important advantage of the Israeli education system is the provision of assistance in the adaptation of students through preparatory courses covering the study of Hebrew and familiarization with the culture of the country. However, students face high entry requirements, such as being able to speak Hebrew, successfully graduating from school without failing grades, proof of financial solvency, and challenging entrance exams. An additional challenge is passing “Mekhina” for 11th grade graduates from the CIS, which requires time and financial costs.

The flexible learning experience provided to students allows them to choose their subjects and schedule, which can significantly reduce the time it takes to complete their degree. However, it should be taken into account that there is no free education in Israel, and admission to an Israeli university on a budget is impossible, regardless of whether the student is a local or foreign applicant. Despite the availability of scholarships, they do not always fully cover the cost of training.

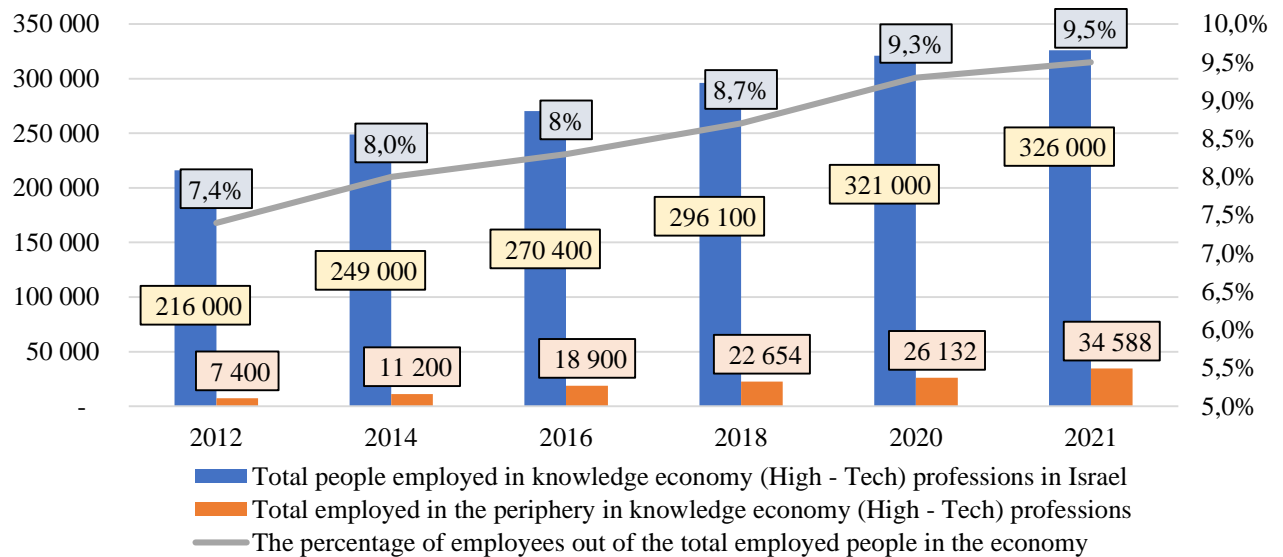
The high employment rate of graduates is a significant plus, highlighting the successful integration of Israeli university graduates into the labor market. However, the cost of higher education in Israel may not always be justified by quality, and it depends on the background of the applicant and the language of instruction.

The presence of military operations in the region, despite the relative safety of educational institutions, can cause discomfort among foreign students. At the same time, the multinational composition of society and the high percentage of the English-speaking population create conditions for a diverse sociocultural experience. The climate, with typical high temperatures in summer and mild winters, is also a factor that may require accommodation for applicants from the CIS.

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<sup>181</sup> The output of educational institutions and the impact of learning. (accessed 08/15/2023). Available at: <https://www.oecd-ilibrary.org/sites/52901ef0-en/index.html?itemId=/content/component/52901ef0-en#section-d1e10856>

In Israel in 2022, there are quite complex economic and professional gaps between the center and the periphery. The country's economic gaps are visible in the differences in income levels, job availability, and enterprise development opportunities between the central region, such as Tel Aviv, and distant peripheral areas. These inequalities can have an impact on the social structure, educational opportunities and overall economic growth in different parts of the country, as shown in Figure 2.19.



**Figure 2.19. The number of people employed in technological (High Tech) professions compared to the number of people employed in the periphery (north and south of Israel), years 2012- 2021**

Source: developed by the author based on<sup>182</sup>

The data image shows a steady increase in the proportion of people working in technology occupations, but this highlights the inequality of opportunities for these people. This is a gap of almost 300,000 employed people between the central regions and the periphery. Lack of investment in the centers of occupation, gaps in the level of education, lack of investment in civil infrastructure (transport, social security) and, of course, in the education system are the main reasons hindering the integration of the knowledge economy in Israel.

Labor force participation rates in the periphery (northern region and Beersheba area) are lower than the national average, and unemployment rates are high. Average wages in the periphery are lower than the national average, and the proportion of workers whose wages are below the minimum wage is high. Based on data on high-tech occupations and the knowledge economy, the

<sup>182</sup> Israel Central Bureau of Statistics. (accessed 09.09.2022). Available at: <https://www.cbs.gov.il/en/Pages/default.aspx>

share of R&D employees, R&D spending, and start-ups in the periphery is significantly lower than in the core. Accordingly, per capita R&D expenditures and average wages in start-up companies are higher in the center than in the periphery. The share of people employed in this industry in the periphery is higher than the national average. However, in the Beersheba region (northern region), the industry's gross value added is higher than the national average, as is the weight of jobs in elite and elite-mixed industries. However, the figures for the northern region are lower than the national average. Analysis of the employment and wage gap shows that about 50% of the wage gap between the center and the periphery is due to differences in employment and wages in the high-tech, banking and finance industries. One of the reasons for high wages and productivity in the center is the high presence of the high-tech industry in areas of large metropolitan areas, where capital for investment is concentrated.

One of the important aspects of the education system is its financing. The education system in Israel is financed both from government funds and through contributions from other sources. Government investments in education are aimed at developing higher and secondary education, as well as supporting research projects at universities and funding colleges (Appendix 21).

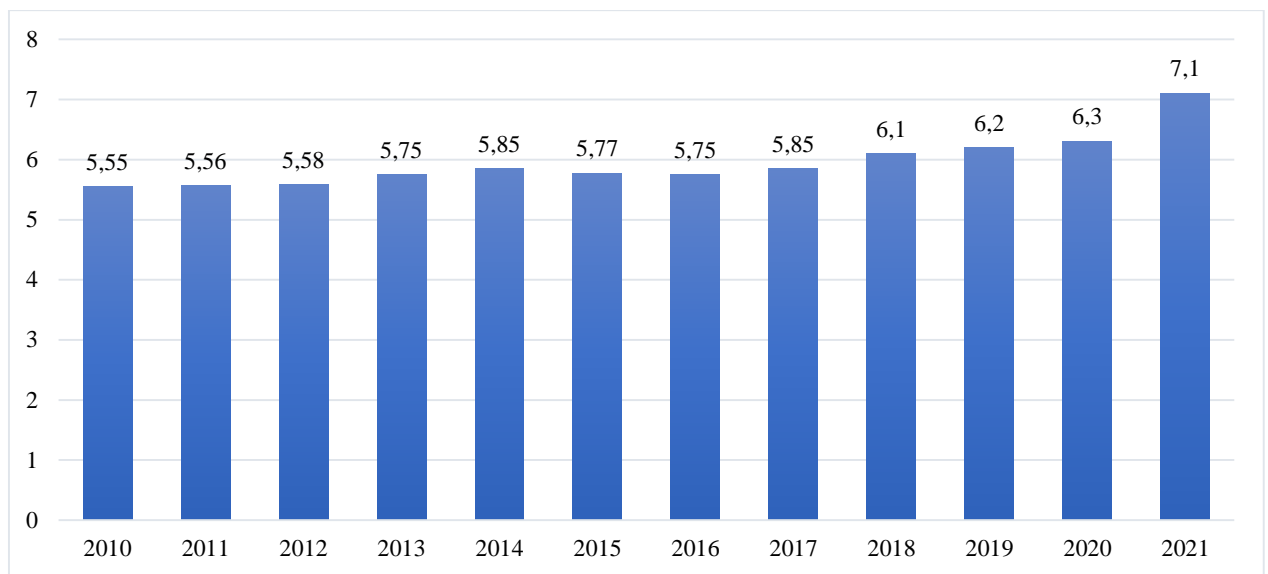
The government budget is the main tool used by the Israeli government to implement its priorities and determine the level of government spending. The budget of the Ministry of Education and the Council of Higher Education (Academic Education) is the largest social budget in the Israeli government budget. In Israel, spending on primary and higher education institutions as a percentage of GDP is among the highest among OECD and partner countries (6.4%, rank 3/39, 2020) <sup>183</sup>. However, annual expenditure per pupil at the pre-primary level is among the lowest among OECD and partner countries (equivalent to US\$4,960, rank 29/30, 2020). Also, annual spending per student in higher education is among the lowest among OECD and partner countries (equivalent to US\$8,731, ranked 29/34, 2020) <sup>184</sup>.

In Israel, funds are allocated for education, which are growing annually, as the graph in Figure 2.20 shows.

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<sup>183</sup> Israel. Overview of the education system (EAG 2023). (accessed 07/11/2023). Available at: <https://gpseducation.oecd.org/CountryProfile?primaryCountry=ISR&treshold=10&topic=EO>

<sup>184</sup> Ibid. Israel. Overview of the education system (EAG 2023). (accessed 07/11/2023). Available at: <https://gpseducation.oecd.org/CountryProfile?primaryCountry=ISR&treshold=10&topic=EO>



**Figure 2.20. Public expenditure on education in Israel for 2013-2021 (% of GDP)**

Source:<sup>185</sup>

In 2020, public spending on education in Israel amounted to more than 99.12 billion Israeli shekels, which is approximately equal to 30.97 billion US dollars <sup>186</sup>. This figure marks a slight decrease compared to the previous year. Between 2013 and 2019, government spending on education gradually increased. Projections also indicate a gradual increase in education sector revenue by 2024. The largest amount of spending on education was observed in 2021. Financing of education expenses by type in 2020 is presented in (Appendix 22).

Israel's national education budgets from 2018 to 2021 can be presented in terms of data such as education budgets, economic innovation, and teachers' college budgets.

**Table 2.6. The national Israeli budget Annual – education (In Millions USD) 2018 – 2021**

Budget section / Year	2018	2019	2020	2021
Annual National Budget	359,719	376,721	397.471	412,019
Education Budget	52.7	54.8	59.57	59.61
Economic & Innovation Budget	1.12	1.05	0.925	0.844
Teacher Training Process	0.535	0.543	0.539	0.493

Source: developed by the author based on <sup>187</sup>

The table data shows that despite the increase in budget amounts in general, there is a decrease in budget allocations for sections of education (including higher education). There is a

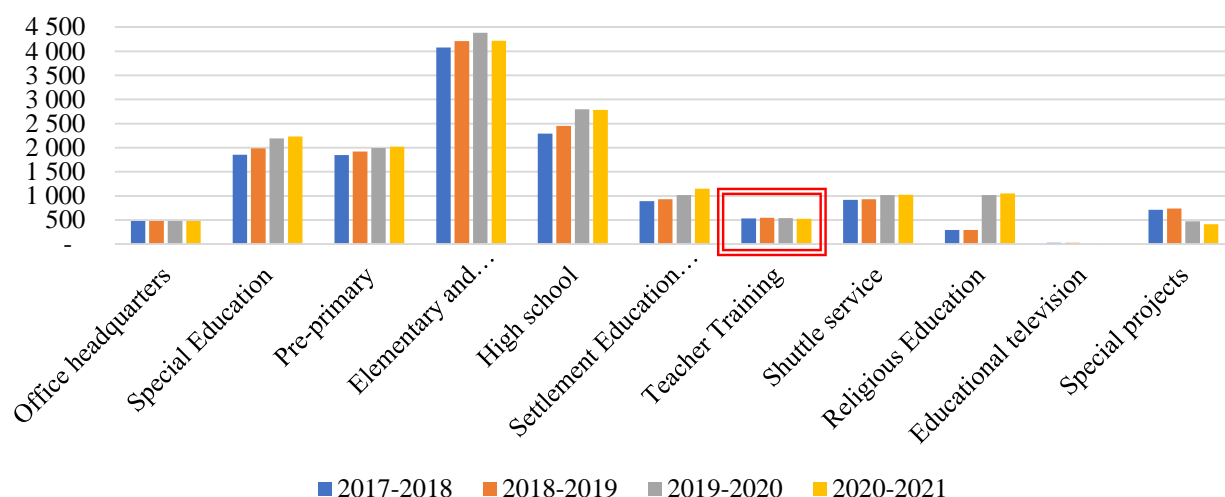
<sup>185</sup> *Trading Economics*. Israel - Public Spending On Education, Total (% Of GDP). [accessed 6.04.2023] Available at: <https://tradingeconomics.com/israel/public-spending-on-education-total-percent-of-gdp-wb-data.html>

<sup>186</sup> Government expenditure on education in Israel from 2013 to 2020. (accessed 08/15/2023). Available at: <https://www.statista.com/statistics/1291208/government-expenditure-on-education-in-israel/>

<sup>187</sup> Israel. Ministry of Finance . (accessed 08/15/2023). Available at: [https://www.gov.il/en/departments/ministry\\_of\\_finance/govil-landing-page](https://www.gov.il/en/departments/ministry_of_finance/govil-landing-page)

downward trend in investments in technological progress and innovative development, and investments in teacher training.

The following figure 2.21. presents the main budget sections (in millions of US dollars) that are integrated into the annual report for the 4 academic years 2017–2021.



**Figure 2.21. The sub-sections education budget in the academic years 2017 – 2021 (by thousand USD)**

Source: developed by the author based on <sup>188</sup>

Analysis of the graph shows that overall the education budget is growing or balancing between years, although there have been many demographic changes between the years presented. The author mainly notes budget cuts (marked square) in the budgeting of teacher training (teacher colleges). Despite the growth of the education system, there is no suitable budgeting for investment in education and training, teacher training (teacher colleges). The author finds more than 6% reduction over the years.

Human resources are a central part of the higher education budget. However, there is a significant salary gap among teachers in Israel and professionals in the field of knowledge economy stand out against the background of the current situation. Compared to the average salary in professions related to innovation and knowledge, the income of teachers is often lower. This imbalance may reflect an imbalance in the assessment of the importance and role of teaching in the context of the knowledge economy. Increasing teachers' salaries can be an important step towards recognizing their contribution to the formation and development of knowledge in society.

<sup>188</sup> Israel Central Bureau of Statistics. (accessed 09.09.2022). Available at: <https://www.cbs.gov.il/en/Pages/default.aspx>

**Table 2.7. Average wage in knowledge economy professionals occupational in Israel  
2018 -2021 (by €)**

<b>Knowledge economy professionals</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>
Pharmaceutical Manufacturing	5,074	5,208	5,510	5,635
Manufacture of computers and software	5,559	5,670	6,133	6,278
Advanced industry	4,806	4,998	5,352	5,466
Information services	5,050	5,265	5,535	5,535
Software programming	6,008	6,167	6,472	7,780
Research and development	6,881	6,948	7,105	7,100
Average wage in Israel	2,791	2,765	2,947	3,363
Number of employees in knowledge economics professions	314,000	319,000	322,000	341,850

Source: developed by the author based on <sup>189</sup>

The table data shows that there is a constantly increasing gap over the years between the average wages earned in classical professions and those earned in professions related to the knowledge economy. Over the years, the average salary in classic professions has suffered from burnout due to rising living standards as well as the cost of living in Israel, and is therefore considered less relevant. Of all the professions classified as knowledge economy professions, the most prominent are those related to computerization, programming and information.

Despite the key role of the education sector in Israel, teachers' unions in the country often protest against their wages and benefits. In the 2019/2020 academic year, teachers at Israeli universities received an average monthly salary of almost 11.3 thousand Israeli shekels, which is approximately equal to 3.3 thousand US dollars. This period was characterized by the highest payments to university teachers of any educational institution in the country. Budgetary academic institutions follow with an average salary of 8.6 thousand Israeli shekels (approximately 2.5 thousand US dollars), while non-budgetary academic institutions provide an average salary at 8.2 thousand Israeli shekels (approximately 2.4 thousand dollars USA) <sup>190</sup>.

Israel's educational policy was formed in two stages. The first stage was the reform of 1968, the main goal of which was to transform the structure of the education system and the need to solve the country's social problem with the “ethnic gap”. The education policy reform of 2004

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<sup>189</sup> *High Tech Employee in Israel*. (accessed 09.09.2022). Available at: <https://www.sarona.vc/post/israeli-high-tech-industry-report-q1-2023>

<sup>190</sup> *Average monthly salary of teaching staff in academic institutions in Israel as of 2019/2020, by type of institution*. (accessed 05/16/2023). Available at: <https://www.statista.com/statistics/1306728/average-monthly-wage-of-academic-teaching-staff-in-israel-by-type/>

shifted the regulatory regime of the education system from a bureaucratic to a post-bureaucratic management regime. The reform included elements such as decentralization, cost-benefit search for efficiency, school autonomy, parental choice, introduction of a managerial approach and increased accountability. in schools, and assessment and assessment of student achievement. The driving force behind both reforms was to improve Israel's economy. Comparative characteristics of Israeli educational policy reforms of 1968 and 2004 is displayed in table 2.8.

**Table 2.8. Comparative characteristics of Israeli educational policy reforms of 1968 and 2004**

<b>Criteria</b>	<b>Educational policy reform 1968</b>	<b>Education policy reform 2004</b>
and aspects of reform	"ethnic gap" and "inequality of opportunity"	"interstate inequality in achievement"
d dynamics of reforms	from an emphasis on social problems (inequality of opportunity); democratization of the education system by enhancing equality of educational opportunities	highlighting economic competence between countries and the need for effective educational management
nature of social goals and objects	comprehensive schools, stream schools, school zoning maps and curricula for lower secondary education, as well as advisory and guidance services aimed at ensuring access to secondary education for the general population	social goals include decentralization, accountability, efficiency, parental choice and school autonomy, based in schools of education and departments of economics and public policy.
disciplinary changes	education and social research, and primarily the sociology of education	Public Policy and Management Studies
composition of structural networks	politicians and knowledge producers	politicians, knowledge producers, participants in promoting management reforms NGOs, philanthropic entrepreneurs
age of compulsory education	up to 16 or even 18 years old	
levels of the education system	primary and secondary education	primary education, lower secondary and higher secondary education
o Controls	Ministry of Education and educational institutions themselves (dual system)	Ministry of Education, Regional Education Authorities (REA) and educational institutions themselves (three-tier system)

Source: developed by the author based on<sup>191</sup>

The social challenges and rationale for reform in Israel took different directions. In 1968 the focus was on "ethnic gaps" and "inequality of opportunity", while in the proposed 2004 reform the focus shifted to "cross-country inequalities in achievement". Social issues reflect a shift in priorities from social issues in 1968 to economic competence and effective educational

<sup>191</sup> RESNIK, J. The Transformation of Education Policy in Israel. In: *Policy Borrowing and Lending in Education*. Florian Waldow: Gita Steiner-Khamsi, 2012. 264-290 p. ISBN 9781138021662

management in 2004. The social objects supporting each reform are of a different nature. In 1968, the focus was on comprehensive schools, zone mapping, and advisory services to ensure access to secondary education. The proposed 2004 reform shifted the focus to decentralization, accountability, efficiency, parental choice and school autonomy, drawing on schools of education and departments of economics and public policy. At this time, the main social object became "evaluation, standards and measurement." The nature of these social entities reflects disciplinary changes as education and social studies, especially the sociology of education, were excluded from the reformist structuring of discourse and replaced by public policy and management studies. Another key change brought about by this juxtaposition is the nature of reformist networks. In the past, structural reform networks included politicians, public figures and knowledge professionals. Although knowledge producers and political allies remain important participants in reform networks, nonprofit organizations and philanthropic entrepreneurs are playing an increasingly important role in promoting governance reforms. This evolution highlights new dynamics in the political influence and influence of philanthropic entrepreneurs in education. On the other hand, the increasing role of these entrepreneurs reflects the growing weakening of the state in the development of educational policy.

The 1968 reform, known as the integration reform, extended compulsory education to 16 years and replaced the two-tier system with a three-tier system. Entrance examinations and the National Secondary School Entrance Test were cancelled, allowing all students to continue their education in junior high schools. The placement of students into different streams was done by school counselors based on their past records. The Counseling and Guidance Service determined the direction (academic, vocational, or agricultural) that students would pursue in senior high school. The reform sought to democratize the education system, increasing equality of educational opportunity and encouraging longer periods of study, which would promote economic growth. In 1968, the Knesset approved recommendations for structural reform of the primary and secondary education system in Israel.

The 2004 reform proposed decentralization and reorganization of Israel's education system, dividing the Ministry of Education into three levels of government: the ministry, regional education departments and educational institutions. The Ministry of Education was responsible for policy development, budgeting, and evaluating the effectiveness of the system. Regional directorates managed schools in their region, giving schools and their directors pedagogical, administrative and budgetary autonomy. Public education became the backbone of the system, guaranteeing government funding for all schools teaching the minimum national curriculum. Parents and children were given the opportunity to choose an educational institution within certain



limits. The goals of the reform included improving the quality of education and improving the country's global competitiveness.

The political stability of the 1960s allowed the 1968 reform to be finally implemented, while the political instability of the 2000s prevented the reform. Both reforms were the result of complex dynamics that could not be simplified into the decisions of a few local political figures. The theoretical framework, which considers the role of knowledge producers and the influence of educational networks at local and global levels, highlights the multiple actors in each reform and the profound implications, including long-term impacts on educational policy arrangements. In both cases, Israel sought to improve education: structural reform aims to expand education for all, which represents quantitative improvement, while managerial reform seeks qualitative improvement through raising educational levels.

The main difference between the two reforms is their implementation. The first reform was approved by the Knesset in 1968 and was successfully implemented into the education system. The second reform, on the contrary, was not implemented due to political changes and opposition from teachers' unions. During the first stage of structural reform, its implementation was slowed down due to resistance from some local authorities, such as parental opposition to integration. Some areas, particularly the Orthodox Jewish and partly Arab sectors, still run their schools according to the old structure. On the other hand, despite the formal rejection of management reform, one can observe the gradual penetration of management discourse and the creation of social objects in the context of globalization processes in the educational market <sup>192</sup>.

Although both reforms sought to increase the level of education, the structural reform intended to achieve this by expanding education to the entire population, which represented a quantitative improvement. On the other hand, management reform aims to improve the level of education through quality improvements.

Educational policy towards the Arab population of Israel is aimed at ensuring equal educational opportunities. The state is taking steps to eliminate discrimination and ensure equal access to educational resources <sup>193</sup>. Some schools with predominantly Arab students provide bilingual education in Arabic and Hebrew. Work is also underway to develop support programs,

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<sup>192</sup>MASHAL, L. Knowledge economics and education policy in Israel in the context of globalization. In: *Scientific conference "Science and innovation: domestic and world experience"*, VI International Round Table May 13, 2020, Cherkasy. pp. 54-58. Available at: <https://cdu.edu.ua/mij-universitet/naukova-j-inovatsijna-diyalnist/rada-molodykh-uchenykh/kruhlyi-stil-nauka-ta-innovatyka-vitchyzniani-i-zarubizhnyi-dosvid/kruhlyi-stil-nauka-ta-innovatyka-vitchyzniani-i-zarubizhnyi-dosvid-2020.html>

<sup>193</sup> ARAR, K. Israeli education policy since 1948 and the state of Arab education in Israel. In: *Italian Journal of Sociology of Education*, 4 (Italian Journal of Sociology of Education 4/1), 2012, pp. 113-145. ISSN 2035-4983

including additional lessons and social support. The participation of Arab students in higher education is encouraged, scholarships and support are provided for admission to universities. Partnerships are being established with Arab educational and cultural organizations to work together. Research and activities are also being carried out to reduce inequalities in the education system. All of these efforts are aimed at creating an educational environment that provides equal opportunities for all students, regardless of their ethnicity.

Currently, Israel's educational focus is on guaranteeing universal access to all levels of education, from preschool to higher education<sup>194</sup>. Education is seen as a key factor for social mobility and economic growth, playing a central role in the formation of a strong and democratic society.

The Ministry of Education controls the Israeli education system, setting policies, standards and providing funding and support to educational institutions. The Council of Higher Education (CHE) is the official body of higher education in Israel and determines policy in this area. Established under the Council of Higher Education Act 1958<sup>195</sup>, CHE operates as an independent corporation and is not subject to affiliation. Its creation was intended to separate Israel's political system from its higher education system in order to protect academic freedom and prevent political interference.

The CHE Act embodies two key principles. The first of these emphasizes the need to maintain the autonomy of higher education institutions in managing their finances for academic and administrative needs within established budgets. The second principle specifies that at least two-thirds of the board members must be elected on the basis of their academic status in educational institutions. In this regard, the author examined, as an example, higher educational institutions in Israel and the directions of their development strategies, which are based on the educational policy of Israel (Appendix 23).

Compulsory education extends from three to 18 years, and the state provides free education in public schools. The education system in Israel is highly centralized, with a unified curriculum focusing on core subjects including mathematics, science, language arts, and social studies. The official languages are Hebrew and Arabic, and the curriculum emphasizes cultural and historical aspects, especially in the context of Jewish and Israeli history.

In addition to public schools, Israel has a thriving private education sector, including religious, secular and alternative schools. The country is also famous for its world-class

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<sup>194</sup> DHAR, A. *What is Israel's policy on education?* (accessed 09/24/2023). Available at: <https://www.quora.com/What-is-Israel's-policy-on-education>

<sup>195</sup> *The Council for Higher Education*. (accessed 05/11/2023). Available at: <https://che.org.il/en/about-us/>

universities, supported by the government in the field of research and development.

Israel's education policy focuses on several key aspects. Israel is known for its innovative approach to technology, and the education system is no exception. Integration of technology in education, online learning and use of digital resources are some of the key aspects of education policy. The development of the education system to train qualified personnel occurs in accordance with the needs of the labor market. A focus on more flexible teaching methods, including curriculum, takes into account the needs of diverse learners. The desire to improve the quality of education in general includes measures to improve the level of teaching and learning standards. Educational policy also includes preparation for current global challenges, such as climate change, technological transformation, etc.

### **2.3. Influence of factors on the implementation of the concept of the knowledge economy in Israeli educational policy**

In modern society, where information and knowledge have become key resources, countries are actively seeking to adapt their educational policies to the challenges of the global knowledge economy. One of the most outstanding models reflecting the relatively successful integration of the concept of the knowledge economy into the education system is Israel. This country is attracting attention with its innovative approach to technology and active use of digital resources in the educational process. In this context, it is especially interesting from a scientific point of view to consider what factors have a significant impact on the successful implementation of the concept of the knowledge economy in Israeli educational policy, forming a unique dynamic in the field of education and science. The author drew attention to the key aspects of this influence, analyzing them in the context of modern trends in the external environment of Israeli education.

One tool that is widely used for such analysis is PEST analysis. It seems very interesting to consider the Israeli education system using this method in order to identify key external factors that determine the current state and prospects for the development of the educational system of this country. Analysis of PEST factors is not only a tool for systematizing data, but also an opportunity for a deeper understanding of the dynamics of educational policy in the context of global trends and challenges<sup>196</sup>. The author conducts a study of external factors influencing the Israeli education system, focusing on political, economic, sociocultural and technological aspects, in order to better understand its strengths and challenges facing it in the modern global context.

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<sup>196</sup> HO, JKK Formulation of a systematic PEST analysis for strategic analysis. In: *European academic research*, 2014, No. 2 (5), p. 6478-6492. ISSN 2286-4822.

The author identified factors influencing the Israeli education system, which are divided according to PEST analysis into four blocks: political, economic, social and technological, as presented in Table 2.9.

**Table 2.9. Factors influencing the Israeli education system**

<b>Political factors</b> <ul style="list-style-type: none"> <li>- Stability of the political situation</li> <li>- Public investment in education</li> <li>- Science and Technology Policy</li> <li>- Legislative acts in the field of education</li> <li>- Foreign policy, including international relations</li> </ul>	<b>Economic forces</b> <ul style="list-style-type: none"> <li>- Level of economic development</li> <li>- Unemployment rate and labor market</li> <li>- Inflation and interest rates</li> <li>- State budget and financial policy</li> <li>- Investment in research and innovation</li> <li>- International trade and globalization</li> </ul>
<b>Social factors</b> <ul style="list-style-type: none"> <li>- Cultural values and traditions</li> <li>- Social mobility and inequality</li> <li>- Family structure and lifestyle</li> <li>- Technological literacy and digitalization of society</li> <li>- Educational traditions and preferences</li> </ul>	<b>Technological factors</b> <ul style="list-style-type: none"> <li>- Innovations in education</li> <li>- Digital educational platforms and technologies</li> <li>- Interactive educational resources and applications</li> <li>- Artificial intelligence in education</li> <li>- Cloud technologies in education</li> <li>- Technological training of teachers</li> </ul>

Source: developed by the author

Based on the analysis, we can conclude that the following factors have a critical negative impact on the Israeli education system (Appendix 24):

- Social inequality in the education system sometimes becomes apparent, but this is not systematic. It is a significant barrier to entry into the international educational space. Globally, this can lead to an uneven distribution of educational resources and opportunities.

- Economic difficulties that may lead to a reduction in education funding, which in turn may affect the quality of educational services and the availability of resources.

- Instability in Politics. Political instability can have a negative impact on the education system, including through issues of funding and strategic changes in education policy.

Positive effects were noted regarding the following factors:

- Flexible methods of teacher training in the Israeli education system represent an important aspect that is aimed at increasing their professional competence and adapting to modern educational requirements.

- Technological innovation. Israel is favored by the positive impact of technological innovation on the education system. The integration of digital technologies and online resources improves the accessibility of education, improves its quality and stimulates innovative teaching methods.

- The relevance of the education system to the labor market, both domestic and global, is a fundamental factor that has a significant impact on the Israeli educational system. This aspect of

interaction plays an important role in ensuring a close connection between the learning process and the needs of the labor market in the country.

As an example of **a social factor** influencing the Israeli education system, the author examined **the process of teacher training in Israel**. The professional status of the teaching profession is a concept that denotes the social and professional prestige of teachers, both as independent professionals and in comparison with other professionals <sup>197</sup>. The status of a teacher and the teaching profession are influenced by many variables, including prerequisites for entry into the profession, education, and the skills required to be a teacher <sup>198</sup>.

In addition, the influence of this factor on educational systems and civil society covers not only the allocated economic resources, such as wages, working conditions and benefits, but also affects the target audience of education and society as a whole. This includes the degree of independence and participation in decision making, the formation of professional personnel, and the recognition by society of the importance and necessity of various professions. Various aspects, such as the perception of education in society and the influence of the population, have a significant impact on the dynamics of the educational system and its role in shaping the cultural and social context. The professional status of the teacher has attracted policymakers in Israel and around the world for many years, amid economic, social and technological advances that have undermined the teacher's status as a source of knowledge and authority and impaired his ability to compete in other professions, both in terms of the profession's attractiveness and in terms of economic rewards.

The analysis of the situation in Israel highlights the importance of the relationship and the inevitable dependence between the education system, especially the training colleges, and the optimal integration of the knowledge economy into the Israeli educational system. Teacher training in Israel There are several courses that provide basic training for teaching:

Academic teacher training colleges specialize in training teachers for school and university education. In addition to basic training, various training courses are provided for teachers, covering specific academic subjects and aimed at their continuous professional development <sup>199</sup>. However, not a single stage of education and not a single educational institution is focused on training future

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<sup>197</sup> NACHMANI, L., HORINE, LB, BEN HORINE, L. Learning about learning: reflections on EFL teacher training in Israel in 2018. In: *European Proceedings of Social and Behavioral Sciences*, No. 63. ISSN 2357-1330. DOI: [10.15405/epsbs.2019.06.18](https://doi.org/10.15405/epsbs.2019.06.18)

<sup>198</sup> MARSANO, Y. Comparative analysis of teacher training profession in Israel and in the world. In: *The contemporary issues of the socio-humanistic science*. 2015, p. 238-242. ISBN 978-9975-3371-7-5.

<sup>199</sup> Israel. Colleges of Education/Teacher Colleges. (accessed 11/17/2022). Available at: <https://che.org.il/en/institutions-higher-education-2/colleges-education-teacher-colleges/>

teachers in the context of the knowledge economy. Instead of studying subjects with an interdisciplinary approach, each profession is viewed in isolation without considering the future reality of the students.

Creating a high-quality teaching workforce requires that education systems devote resources to attract qualified educators and provide training to effectively carry out their professional activities. The introduction of rigorous training requirements, including high standards, licensure and vocational examinations, is an approach taken by many countries to ensure the quality of teaching staff, which in turn enhances the prestige and status of the teaching profession. However, in the context of teacher shortages, there is concern that the level of requirements may not meet the needs of the system, and as a result, teachers may need to be instructed who do not meet these standards.

According to a CBS report, there were approximately 179,000 teachers throughout <sup>200</sup>the education system in the 20/21 school year, up from 175,000 in the 201/8/19 school year (an increase of 2.3%). The level of recruitment of new teaching staff into the Israeli education system is increasing : from an average of 7,500 people in 2008–2010 to approximately 11,500 people on average in 2010–2021. Over the years, what could have been explained as a convenient solution turned into the growing integration of Arab teachers into Jewish schools, as illustrated in Table 2.10.

**Table 2.10. Numerical and statistical characteristics of teachers in Israel (Jewish Education Sector, 2021)**

GENERAL	Higher education	Primary and secondary school	General	Elementary education	General
	Teaching Staff				
State	25 426	21,748	47 174	35 111	82 285
State-religious	10 415	8065	18 480	14 106	32,586
Ultra -Orthodox	6435	-	6435	15 800	22 235
<b>DISTRICT</b>					
Jerusalem	8,583	4321	12,904	13,949	26,853
Northern	5012	3948	8960	6902	15,862
Haifa	4240	3332	7,572	6371	13,943
Central	10,997	8 502	19,499	17,761	37 260
Tel Aviv	6402	3984	10,386	9846	20 232
Southern	7010	5693	12,703	9942	22 645
<b>TOTAL ABSOLUTE</b>	42 276	29,839	72 115	65 017	137 132

<sup>200</sup>Israel Central Bureau of Statistics. Number of teaching staff in Israel as of 2020/21, by level of education. (accessed 10/12/2022). Available at: <https://www.statista.com/statistics/1306455/number-of-teaching-staff-in-israel-by-level-of-education/>

<b>NUMBERS</b>					
Women	73%	79%	76%	85%	81%
Up to 29 years old	75%	83%	81%	eleven%	10%
Age - 50 and older	37%	33%	35%	25%	thirty%
Academic salary grade	92%	97%	94%	89%	91%
II category and higher salary category	45%	48%	46%	thirty%	37%
Average number of working hours per week	26%	22%	thirty%	26%	thirty%
Average recognized teaching experience	18%	16%	18%	15%	16%

Source: <sup>201</sup>

Next, the author presents similar statistics on Arabic education in the 2021 academic year in Table 2.11.

**Table 2.11. Numerical and statistical characteristics of teachers in Israel (Arab education sector, 2021)**

GENERAL	Higher education	Primary and secondary school	General	Elementary education	General
	<b>FULL TIME - EQUIVALENT JOBS</b>				
	8981	7278	16,259	17,517	33,776
	<b>TEACHING STAFF</b>				
<b>TOTAL - ABSOLUTE NUMBERS</b>	10,803	8786	18,985	20,982	38,912
Women	57.7%	71.4%	64.2%	78.4%	71.9%
Up to 29 years old	16.7%	11.8%	14.5%	13.3%	13.9%
Age - 50 and older	20.1%	17.7%	19%	16.4%	17.7%
Academic salary grade	93.6%	98.6%	95.8%	93.9%	95%
II category and higher salary category	37.8%	38%	37.7%	27.2%	32.2%
Average number of working hours per week	32.07%	29.7%	32.6%	29.36%	32.1%
Average recognized teaching experience	13.51%	15.12%	14.2%	14.75%	14.5%

Source: <sup>202</sup>

Analyzing both tables, the author concludes that there is a budgetary preference for members of the religious sector. They are given permission to open educational institutions in larger numbers than the state-Jewish sector and the Arab sector. We acknowledge the high percentage of scientists (more than 91%), and the author of the dissertation also points out old age and a

<sup>201</sup> Israel Central Bureau of Statistics. (accessed 10/12/2022). Available at: <https://www.cbs.gov.il/en/Pages/default.aspx>

<sup>202</sup> Israel Central Bureau of Statistics. (accessed 10/12/2022). Available at: <https://www.cbs.gov.il/en/Pages/default.aspx>

profession that is almost “dominated” by women. At a school in the Arab sector, the author sees that there are more men in the team, and the average age is younger. These findings help the author understand the importance of providing training and economic education and its place in the knowledge economy of an organization.

Teachers who can provide the intellectual foundation for a thriving knowledge economy in Israeli educational institutions. To increase the positive impact of teacher training centers on the knowledge economy in the education system, the Israeli Ministry of Education has launched several national programs:

**Technion program " From industrial enterprises to teacher training - economics of science, program "Sight" <sup>203</sup>.** In 2016, the Technion program launched the View program. The program includes a teaching certificate for elementary schools and colleges of technicians and engineers. The program initially enrolled 57 students in 2016. When surveying students under the “Vzglyad” program, training in which began in 2016, all respondents indicated that they wanted to integrate into the education system.

**National Academic Transformation<sup>204</sup> Programme.** There are currently 19 programs in Israel for transferring scientists to professions related to the knowledge economy. Various programs are carried out at universities, teacher training colleges and educational organizations accredited by the Israeli Ministry of Education. It is important to train high-tech workers as teachers in schools. In practice, there are teachers who are well versed in the field of teaching and have extensive experience in its implementation.

**The Israeli academic conversion process** is a unique model that includes a number of features and stages <sup>205</sup>:

1. Determining the direction towards conversion. The academic process begins with a clear definition of the direction of conversion, that is, reorientation from one area of employment or education to another. This may include changing professional field or moving from one study program to another.
2. Assessment of transferable competencies. An important part of the process is assessing competencies that can be transferred from previous experience. This allows you to

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<sup>203</sup>ANAT, OHEHM, JUDY, EZTTY Application of Management Theories for STEM Education. 2022. (accessed 10/12/2022). Available at: [https://edu.technion.ac.il/wp-content/uploads/2016/08/Views-ManagementPerspective\\_OritHazzan.pdf](https://edu.technion.ac.il/wp-content/uploads/2016/08/Views-ManagementPerspective_OritHazzan.pdf)

<sup>204</sup>Academic Training Programs. (accessed 10/12/2022). Available at: <https://5f94901ccb588.site123.me/>

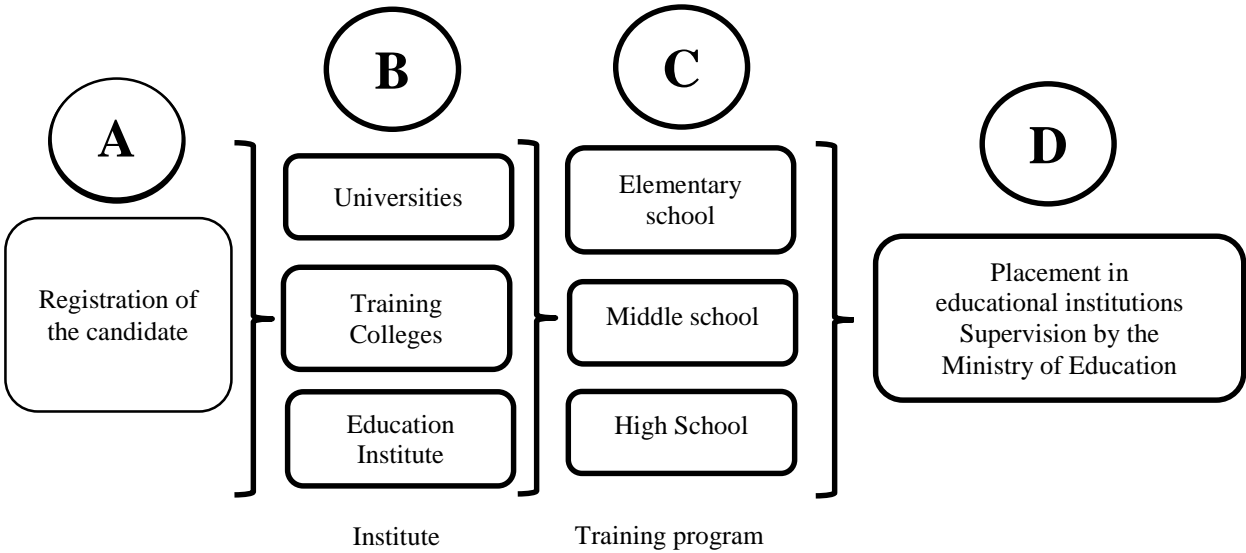
<sup>205</sup> The Conversion Authority. (accessed 02/10/2023). Available at: <https://www.gov.il/en/departments/about/aboutconversion>



identify what skills and knowledge are already possessed and how they can be used in a new context.

- 3. Individualized curriculum. Each conversion student develops an individualized curriculum that reflects their unique needs and goals. This includes both new academic subjects and the use of already completed courses.
- 4. Specialized programs and courses. The model includes specialized programs and courses aimed at supporting the conversion process. These programs provide additional knowledge and skills necessary to successfully adapt to a new field.
- 5. Support and consultation. The system provides support and advice to students at every stage of conversion. This includes resources to resolve potential difficulties and facilitate adaptation.
- 6. Evaluation and confirmation. At the end of the academic conversion process, an assessment is carried out to confirm the successful completion of the conversion and the issuance of the relevant documents.

This model allows for a personalized educational experience, providing flexibility and support for students seeking to change their career or educational trajectory, as illustrated in Figure 2.22.



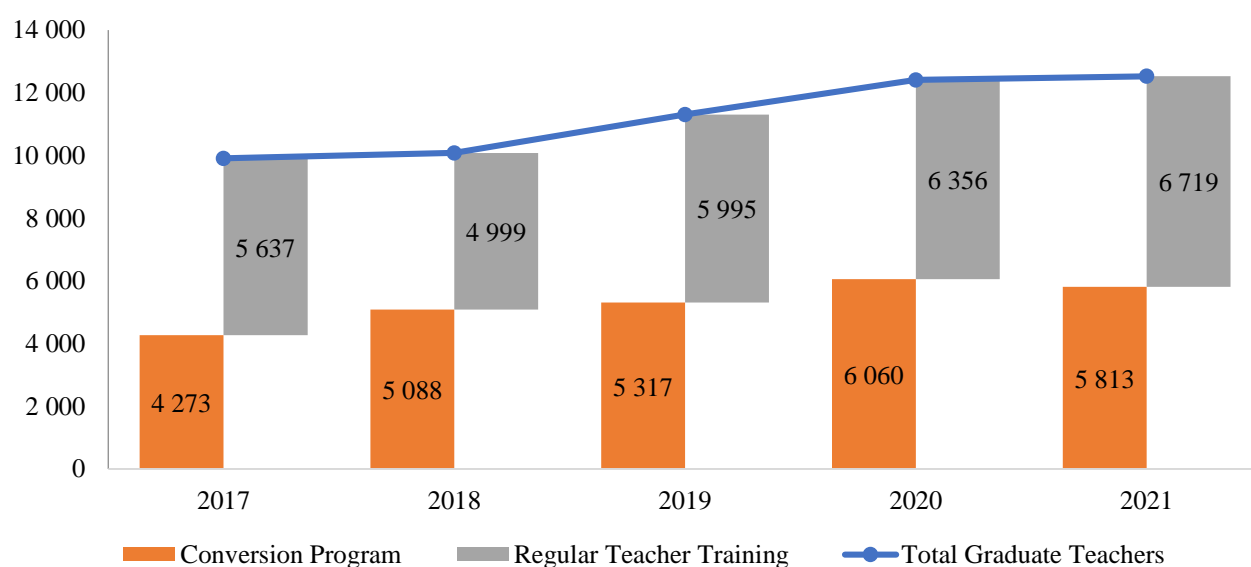
**Figure 2.22. Model of the Israeli academic conversion process**

Source: developed by the author based on<sup>206</sup>

Graduates of these programs receive a master's degree and a teaching certificate for junior

<sup>206</sup> The Conversion Authority. (accessed 02/10/2023). Available at: <https://www.gov.il/en/departments/about/aboutconversion>

high and primary schools, as well as a license to enroll students in the matriculation examination. In all conversion academic and general students do not undergo basic training in the knowledge economy, global enterprise and business management strategy, improve their interpersonal skills (such as decision making, time management, teamwork, interpersonal communication, economic planning) for economic and/or organizational management, as well as content related to business or social entrepreneurship. To understand the impact of these programs, the author presents the number of teacher certificate graduates from 2017-2021 and the number of teacher graduates from these programs, which is shown in Figure 2.23.



**Figure 2.23. Teachers who completed teacher training and retraining programs in Israel 2017-2021**

Source: developed by the author based on<sup>207</sup>

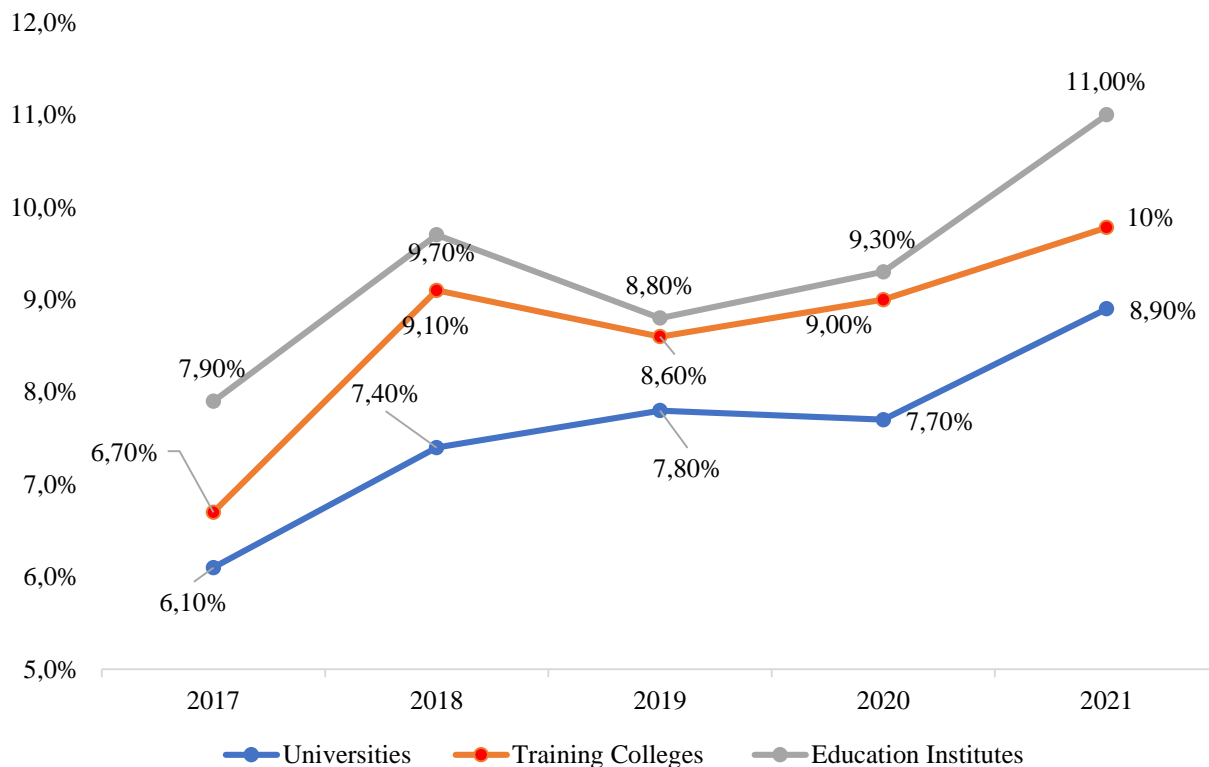
It can be noted that there is an increasing demand for conversion programs. Every year, starting from 2017, the number of students studying in this area has increased. One of the main reasons is the desire and understanding of stable work, compared to an employee. The data obtained only contradict what was written in the previous sections about the percentage of teachers who want to leave the education system.

This growing trend is evident in the rising demand for conversion programs, with a consistent annual increase in the number of students pursuing studies in this domain since 2017. The surge can be attributed to the aspiration for stable employment, a factor that contrasts with the reported percentage of teachers contemplating departure from the education system, as highlighted in

<sup>207</sup> Israel Central Bureau of Statistics. (accessed 10/12/2022). Available at: [https://statistica.gov.md/ru/statistic\\_indicator\\_details/5#data\\_bank](https://statistica.gov.md/ru/statistic_indicator_details/5#data_bank)

earlier sections. The discrepancy in these trends underscores the complexity of factors influencing career choices in education, prompting the need for a comprehensive examination of the motivations driving both students and educators in their professional paths.

The trend of teachers leaving the Israeli education system is shown in Figure 2.24.



**Figure 2.24. Percentage of teachers leaving the education system in Israel, 2017-2021**

Source: developed by the author based on<sup>208</sup>

As you can see, the percentage of care is quite constant and growing. This data shows withdrawal rates ranging from 6.1% to 11%. The author notes that a high percentage of student expulsions occurs in pedagogical institutes and less in universities.

In summary, the author highlights government efforts and national investments aimed at producing the best teachers from education. The national education system invests effort and training in pedagogical knowledge, but actually neglects the economic-social knowledge of teachers. They leave the process with knowledge in their field of study, but are unable to help and guide students in economic areas such as employment and a basic understanding of economics.

**Economic factors** play a key role in the formation and implementation of educational policy, since they have a significant impact on the most important resource - education financing

<sup>208</sup> Israel Central Bureau of Statistics. (accessed 10/12/2022). Available at: [https://statistica.gov.md/ru/statistic\\_indicator\\_details/5#data\\_bank](https://statistica.gov.md/ru/statistic_indicator_details/5#data_bank)

(Appendix 25). These factors include a number of aspects that form the overall economic context that influences the capabilities and strategies of educational systems (Appendix 26).

An example of **an economic factor** influencing the Israeli education system is **the economic factor influencing the Israeli education system associated with institutional structures**. This factor provides incentives for entrepreneurship and the effective use of knowledge <sup>209</sup>. The essence of this factor can be broken down into several key aspects from an economic point of view:

1. Support for innovation. Israel is actively investing in creating institutional mechanisms that stimulate innovation and technology transfer. Universities, research institutes and enterprises collaborate to develop new technologies, which requires qualified specialists.
2. Close connection with the business sector. Institutional structures provide a close link between the educational system and the business sector. This allows you to quickly adapt to changes in the economy, providing students with relevant knowledge and skills that meet the requirements of the labor market.
3. Formation of a business environment. Institutional structures create conditions for the formation of a business environment. This includes the creation of business incubators, start-up support programs, entrepreneurial skills training and exchange of experience between education and enterprises.
4. Stimulating cooperation. Creating mechanisms that encourage collaboration between educational institutions, research institutes and enterprises helps to effectively exchange knowledge and experience. This contributes to the creation of innovative solutions and improved quality of education.
5. Financial support. Institutional structures provide financial support and encourage investment in education, especially in areas directly related to innovation and knowledge development. This may include grants, scholarships and other financial support.

The economic factor, represented by institutional structures that provide incentives for entrepreneurship and the use of knowledge, has a significant impact on the Israeli education system. In the concept of the knowledge economy institutional mechanisms aimed at supporting entrepreneurship and the use of knowledge shape the image of sustainable development of education.

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<sup>209</sup> BEN DAVID, D., KIMHI, A. Economics of education in Israel: Inputs, outputs and performance. 2017. (accessed 12/22/2021). Available at: [https://economics.agri.huji.ac.il/sites/default/files/agri\\_economics/files/falk\\_education\\_chapter\\_-\\_eng\\_18\\_1\\_3\\_ak.pdf](https://economics.agri.huji.ac.il/sites/default/files/agri_economics/files/falk_education_chapter_-_eng_18_1_3_ak.pdf)

Supporting entrepreneurship in education helps create conditions for the development of start-ups, innovative projects and research initiatives<sup>210</sup>. This not only enhances opportunities for students and educational institutions, but also creates an ecosystem that facilitates the transfer of knowledge from academia to practice.

Incentives for the use of knowledge in the economy are aimed at integrating academic achievements into business processes and industrial innovation. This creates interaction between educational institutions and enterprises, contributing to the formation of personnel with relevant competencies and maintaining the competitiveness of the labor market.

Thus, the economic factor, represented by institutional structures, creates a favorable environment for the symbiosis between education and business, which contributes to innovative development and training of personnel that meets the requirements of the modern knowledge economy.

An example of a **technological factor** influencing the Israeli education system is **access to information and communications technology (ICT) infrastructure**. Access to ICT infrastructure is indeed a key technological factor that has a significant impact on the Israeli education system<sup>211</sup>. Advanced technologies are actively integrated into the curriculum, enriching the educational experience of students. This includes the use of interactive whiteboards, online resources and e-textbooks to promote effective learning. The Israeli education system has also successfully implemented distance learning and online platforms, which provide scheduling flexibility and access to education for a variety of audiences.

Interactive learning environments, including virtual laboratories and simulators, provide opportunities for hands-on student experience. Effective management of educational processes becomes possible through the use of information systems that automate administrative processes.

Israel's education system aims to prepare students for rapidly changing technological trends, including teaching information literacy and digital skills. Technological access stimulates the development of innovative projects and startups in the field of education, promoting the formation of entrepreneurial thinking among students. Thus, access to ICT in Israel is intrinsically linked to a modern and technology-oriented approach to education, ensuring active innovation and preparing students for a digital future.

The technological factor, in this case represented by access to information and

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<sup>210</sup> The Israel Innovation Authority. (accessed 12/22/2021). Available at: <https://innovationisrael.org.il/en/sites/default/files/Israel%20Innovation%20Authority%202020.pdf>

<sup>211</sup> Israel's information and communication technology. (accessed 12/22/2021). Available at: <https://www.trade.gov/country-commercial-guides/israel-information-communication-technology-ict>

communications technology infrastructure, has a profound and transformative impact on the education system. This factor becomes a key catalyst for change, opening up new horizons for learning, collaboration and innovation.

Access to ICT in education is redefining traditional teaching methods, providing students with richer and more interactive learning opportunities<sup>212</sup>. Electronic resources, online platforms and digital tools improve the educational experience by making it more accessible and flexible.

The benefits of the technology factor include increased learning efficiency, individualization of the educational process, and the development of skills necessary to successfully adapt to the digital age. Access to ICT promotes global connectivity and knowledge sharing, creating a learning community without geographical limitations.

However, challenges such as the digital divide, data security and preparing teachers to effectively use technology must also be taken into account. Overall, the technological factor in the education system contributes to the evolution of learning, supports innovation and stimulates the development of competencies necessary for successful adaptation to the demands of the modern world.

An example of **a political factor** influencing Israel's education system is **the vibrant innovation landscape that includes academia, the private sector, and civil society**.

The political factor, represented in Israel in the form of an innovative landscape that brings together academia, the private sector and civil society, plays an important role in the formation and development of the country's education system<sup>213</sup>.

The emergence and maintenance of such an innovation landscape is largely determined by policy strategies aimed at promoting educational development. Partnerships with academia allow us to integrate current research and advanced techniques into the educational process, making it more modern and effective.

Collaboration with the private sector involves not only funding innovation, but also creating practical links between educational institutions and businesses. This contributes to the formation of educational programs focused on the real needs of the labor market and the development of technological solutions in the field of education.

The participation of civil society in the formation of educational policy demonstrates openness to public opinion and supports the creation of an educational environment focused on

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<sup>212</sup> SOLEMAN, H. A., DANAIATA, D. The Factors that Affect the Process of Integration and Application of the ICT Program in the Arab Education System in Israel. In: *Revista de Management Comparat International*. 2018, No. 19(2), p. 145-153. ISSN 2601-0968.

<sup>213</sup> YUE, C. Themulti-Level perspective in Analysis of the Irrigation Innovations in Israel. In: *The Frontiers of Society, Science and Technology*. 2020, No. 2(18), p. 127-133. ISSN 2616-7433.

the needs of students and society as a whole.

This policy approach contributes to the dynamic and adaptive development of the education system, making it more flexible, innovative and future-oriented, as well as ensuring sustainable interaction between education, science, business and society.

In general, the political factor manifested in the innovative landscape of education in Israel is becoming a key driver of the development of the education system in the country. The combination of academia, the private sector and civil society, supported by policy strategies, forms a unique partnership aimed at integrating cutting-edge ideas and technologies into the educational environment. This innovative landscape fosters a learning environment that is responsive to today's challenges and supports students in developing key skills to successfully adapt to a rapidly changing world. Political support for such collaboration not only stimulates creative ideas, but also ensures the long-term sustainability of the education system, making Israel a leader in innovative education.

To form a complete picture, the author was A SWOT analysis was made, which shows the effects of factors on the implementation of the concept of the knowledge economy in Israeli educational policy. A SWOT analysis identifies strengths and opportunities that can be maximized, as well as weaknesses and threats that require attention and a strategic approach to successfully implement the concept of the knowledge economy in Israeli education policy. The results of this study are shown in Table 2.12.

**Table 2.12. SWOT analysis of the influence of factors on the implementation of the concept of the knowledge economy in Israeli education policy**

	<b>Strengths</b> - innovative landscape - international partnerships	<b>Weak sides</b> -insufficient training of teachers -digital divide
<b>Possibilities</b> - stimulation of innovation - building global partnerships	<b>strengths + opportunities</b> - The innovative landscape and government support stimulate the development of advanced educational practices - Opportunity to stimulate new innovations in education	<b>weaknesses+opportunities</b> - Digital inequality can be mitigated through targeted programs and access to technology for all groups of the population - Gaps in teacher training can be overcome through innovative training programs
<b>Threats</b> - growing digital divide -lack of resources (financial, human, etc.)	<b>strong+threats</b> - The innovation landscape can serve as protection against the negative impact of threats - Government support can mitigate the impact of limited resources	<b>weak+threats</b> - The digital divide may be exacerbated by threats, creating additional barriers to participation in education - Inadequate training of teachers may be exacerbated by threats if

		necessary measures are not taken
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Source: developed by the author

As a result of the SWOT analysis of the influence of factors on the implementation of the concept of the knowledge economy in Israeli education policy, key aspects were identified that can determine the success of this strategic direction. The country's strengths, such as its innovation landscape and government support, provide excellent opportunities to develop best educational practices. These strengths, combined with opportunities such as stimulating innovation and global partnerships, can form the basis for educational system development.

While weaknesses such as lack of teacher training and the digital divide pose challenges to the implementation of new educational methods, existing opportunities can overcome them. Training programs and targeted efforts to mitigate the digital divide can address these weaknesses, turning them into opportunities to improve the educational environment.

Given threats such as limited resources and the possible widening of the digital divide, government strategy in the form of government support and the innovation landscape becomes critical. These strengths, combined with opportunities, can serve as a defense against threats and ensure the sustainability of the educational system.

Overall, taking into account the identified aspects, Israel has the opportunity to improve its educational system, building on its strengths and capabilities, while taking the necessary measures to overcome weaknesses and minimize threats. Such an integrated approach can make the implementation of the knowledge economy concept successful and contribute to the long-term development of education in Israel.

An integral sign of the success of state educational policy is its practical orientation and implementation. However, this is precisely the vulnerable feature of the current state of Israeli educational policy. According to the author, the process of implementing educational policy is influenced by factors such as institutional structures that provide incentives for entrepreneurship and the use of knowledge; availability of a qualified workforce and a good education system; access to information and communications technology (ICT) infrastructure; a vibrant innovation landscape including academia, the private sector and civil society.

One of the significant problems in the current practice of forming and implementing state education policy in Israel is that there is no clear mechanism for introducing the concept of the knowledge economy into the policy structure. However, Israeli educational policy has directions related to this concept. According to the author, it is necessary to develop an effective model for introducing the concept of the knowledge economy into the policy structure, which is possible with the help of clear instruments of legal, economic, financial, organizational, information,



educational and other nature. Thus, at the moment, an instrument of state education policy is understood as the specific means by which policy, as a response to a problem, is introduced into practical activities.

## **2.4. Conclusions to Chapter 2**

1. Thanks to globalization, the world economy has become increasingly knowledge-based, which brings important changes to the educational policies of every country, including Israel. This global trend emphasizes the need to introduce the concept of the knowledge economy into educational policy so that the country can effectively meet the challenges of the modern world.

2. The European educational space, represented by three models (social-corporate, liberal and state-paternalistic), is uniformly standardized through the institutional model of the Bologna process. The social-corporate model shows greater adaptability due to the expansion of powers of subjects, especially in the field of public-private partnerships and the management of civil organizations in education.

3. The adaptability of the market (liberal) model is ensured due to its inherent principle of necessary diversity. However, diversity in the liberal model is often limited to the list of private actors in the educational system. The adaptability of the social-corporate and state-paternalistic model is based on the involvement, along with the state, of new entities involved in decision-making on education issues. However, it is the historical role of civil organizations and the principle of public-private partnership in the financing of education that makes the social-corporate model one of the most adaptive in the context of market globalization and taking into account the peculiarities of the knowledge economy.

4. Analyzing the implementation of the ideas of the knowledge economy within the educational policy of a sample of countries, the author identified a number of problems caused by the discrepancy between the declared goals of the knowledge economy and the main processes in education policy. The unfolding of the above contradictions leads to important socio-economic consequences: in response to the process of globalization of education, the integration of national education systems is accelerating, a global market for educational services is being formed due to increased migration of students and specialists; addressing employment issues necessitates a reassessment of the role of lifelong learning in the modern international economy; The transition to a knowledge economy served as an impetus for the development of a new intensive process of international integration in education.

5. An analysis of the experience of a number of countries shows that the practical implementation of educational reforms in the context of the international education market in the

vast majority of countries encounters two obstacles: lack of resources and the absence of mechanisms capable of putting reforms into action. Additional financial opportunities and adequate mechanisms for implementing educational reforms appear only as a result of large-scale socio-economic transformations, without which serious changes in the field of education are doomed to remain good intentions.

6. Globalization provides Israel with a unique opportunity to learn from the experiences of other countries and adapt advanced teaching methods and approaches to education. It also opens the door to international partnerships, which can play a key role in sharing knowledge and developing educational programs that meet global standards.

7. Despite the benefits of globalization of education, it is important to remember that the successful implementation of the concept of the knowledge economy in the Israeli education system will require taking into account the unique characteristics and needs of the country. A country must carefully adapt global practices to its context, paying attention to cultural, linguistic and social characteristics to ensure the effective and sustainable integration of these innovations into its educational system.

8. Globalization provides Israel with opportunities to enrich its educational policies through teaching methods and practices that have proven effective in a global context. The key is to leverage this global experience to reflect Israel's unique educational needs and goals.

9. The process of adaptation and implementation of the concept of the knowledge economy in Israeli education policy is influenced by a number of factors of a political, economic, social and technological nature. In particular, these factors include: teacher training, institutional structures that provide incentives for entrepreneurship and knowledge use, access to information and communications technology (ICT) infrastructure, and a vibrant innovation landscape that includes academia, the private sector, and civil society.

### **3. IMPROVING ISRAEL'S EDUCATIONAL POLICY IN THE CONTEXT OF ISRAEL'S KNOWLEDGE ECONOMY AND GLOBALIZATION CONDITIONS**

#### **3.1. Improving Israeli educational policy based on the model of integrating the concept of the knowledge economy**

In the modern world, the concept of the knowledge economy acts as a central core that determines the trajectory of the country's social and economic development. In this context, the revision of educational policy (EP) becomes an integral part of the state's strategic response to the challenges of the time. In the case of Israel, as well as on a global scale, the conditions of globalization are turning into drivers of the evolution of educational systems, building a framework for the transformation of educational institutions at the state and institutional levels.

An analysis of the global educational market demonstrates that traditional education models face challenges that are incompatible with the dynamics of the modern world. Globalization not only emphasizes competition between educational institutions, but also increases the need to adapt to the rapidly changing demands of the labor market. In this context, Israel, which has a unique educational potential to apply the concept of economics and knowledge in the context of globalization, should strive to harmoniously combine its educational system with the requirements of the modern economy, labor market and educational trends.

An analysis of Israel's national education system highlights a number of problems that represent starting points for revising existing educational policies. Some universities and educational institutions in Israel do not show readiness for reforms and prefer to maintain traditional approaches and principles for the formation of educational strategies, plans, and activities. However, most educational institutions in the country are aware of the urgency of adaptation and strive to build educational practices that correspond to global trends, which simultaneously corresponds to the essence of the concept of the knowledge economy.

The current stage of socio-economic development is marked by the formation of a knowledge economy and is characterized by knowledge intensity, increased investment in scientific research, comprehensive intellectualization of social production, and intellectual resources play a decisive role in it<sup>214</sup>. The knowledge economy not only increases production efficiency, but also poses new problems and tasks that need to be addressed when building the state's educational policy.

In the modern world, the importance of education as the most important factor in the

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<sup>214</sup> YARISH, O. et al. Intellectual capital of institutions of higher education in the knowledge economy. In: *Journal of Optimization*, 2021, Special issue, p. 159-166. ISSN 1348-9151. DOI: 10.22094/JOIE.2020.677844

formation of a new quality of society and economy increases along with the growing influence of human capital <sup>215</sup>. Therefore, the need for significant changes in the Israeli education system is due to the following trends in global development:

- transition to a post-industrial, information society and a knowledge-based society;
- dynamic economic development;
- increased competition in the global market;
- reduction in the scope of use of unskilled and semi-skilled labor;
- deep structural changes in the sphere of employment, determining the need for continuous training and retraining of workers, and an increase in their professional mobility.

Under these conditions, a deep and comprehensive transformation of Israeli education policy is necessary, with the allocation of targeted resources and the creation of a model for their effective use <sup>216</sup>. The direction of this transformation is determined by the transition of society to a new, innovative phase of development, characterized by the emergence of a knowledge economy. A distinctive feature of this phase is the increased attention to knowledge, as it increasingly manifests itself in the form of direct productive force. Today, knowledge has become the most important resource for production growth, a source of increasing labor productivity and economic growth of national economies as a whole. The transition from an industrial economy to a knowledge-based economy is the essence of the economic changes of the present time. Therefore, further transformational changes in the Israeli education system must be carried out on the basis of improving educational policy.

Transformation towards the knowledge economy and adaptation to the global educational market involves the following important aspects on which educational policy should be based, according to the author <sup>217</sup>:

- creating a favorable investment climate and encouraging investment, especially in high-tech industries;
- development of institutions of science and technology as the most important resources fueling economic growth;
- creation and support of competitive conditions for all economic agents in order to

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<sup>215</sup> MOUSAVI, Z., MOEINFAR, Z., AMOUZESH, N. The role of intellectual capital in knowledge-based economy. In: *Life Science Journal*. 2013, No. 10(6), p. 56-60. ISSN 1097-8135.

<sup>216</sup> SAGIE, N., Yemini M. Institutional Entrepreneurship in Education Policy: Societal Transformation in Israel. In: *Institutional Entrepreneurship and Policy Change: Theoretical and Empirical Explorations*. 2018, p. 163-190. (accessed 04/06/2023). Available at: <http://ndl.ethernet.edu.et/bitstream/123456789/60161/1/173.pdf.pdf#page=176>

<sup>217</sup> MASHAL, L., USHAKOV, SIGIDOV, Y., GRIBINCEA, A., BIRCA, I. Governance efficiency in conditions of the world economy globalization and digitalization. In: *Journal of Advanced Research in Law and Economics*. 2019, no. 8(10), pp. 2566-2573. ISSN 2068-696X. Available at: [https://ibn.idsi.md/ro/vizualizare\\_articol/112047/](https://ibn.idsi.md/ro/vizualizare_articol/112047/)

encourage innovation and increase productivity;

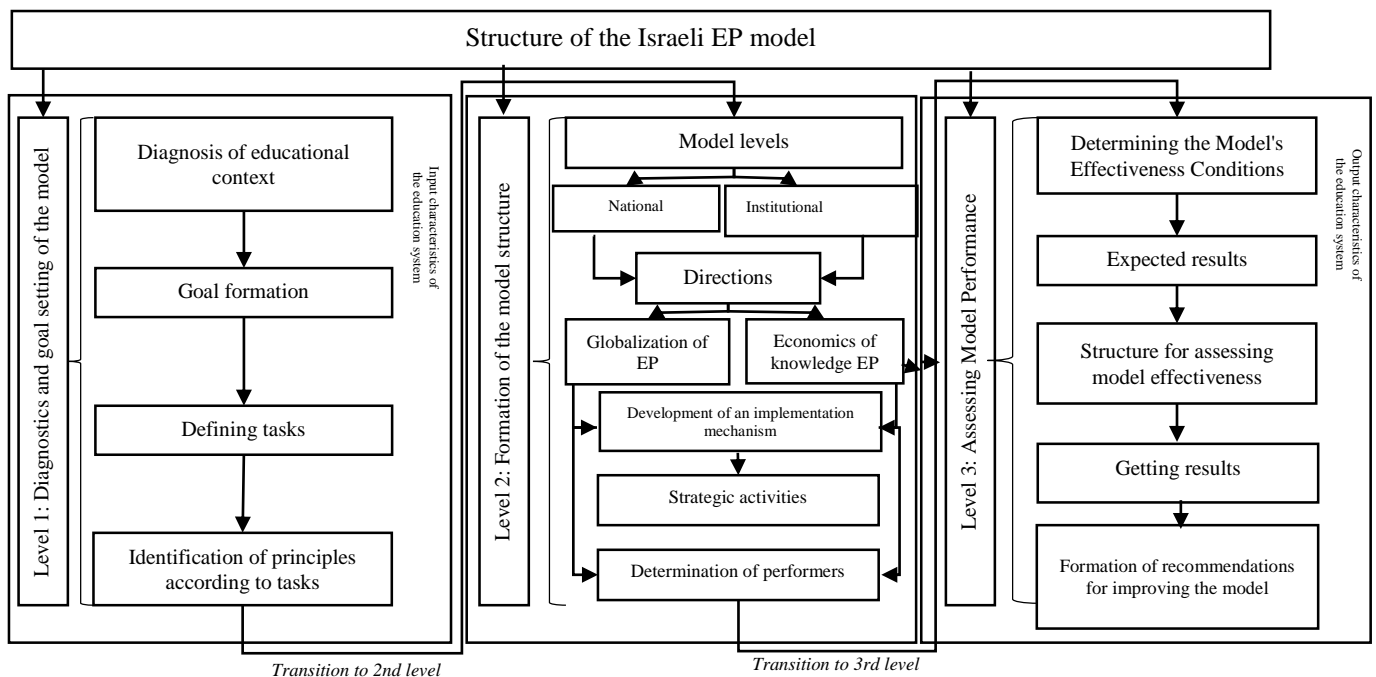
- formation of labor resources capable of adapting to rapidly changing conditions and having the skills to manage emerging risks;
- stimulation of a flexible institutional environment, primarily in the field of public administration.

In the context of the need to improve Israel's educational policy, the author has developed a model for introducing the concept of the knowledge economy into the country's educational policy, taking into account globalization processes in the global education market (hereinafter referred to as the model). The proposed model involves not only an emphasis on advanced technologies and innovations in the educational field, but also active interaction with the global educational community in various areas, meeting a number of mandatory conditions. The implementation of this model will not only create a more flexible and dynamically developing education system, but also strengthen Israel's position in the world educational arena. The proactive development of a model to integrate the knowledge economy concept into Israel's educational policy underscores the author's commitment to addressing contemporary challenges. This model's unique focus on advanced technologies, innovations, and global collaboration positions it as a multifaceted approach.

The structure of the model developed by the author includes an innovative approach to improving Israel's educational policy in the context of integrating the concept of the knowledge economy, taking into account trends in the globalization of education<sup>218</sup>. It is a diagram that clearly demonstrates the structural elements and algorithm of actions in the event of achieving certain results in the process of improving the existing practice of applying educational policy. The diagram clearly demonstrates the key components of the model proposed by the author, identifying logical relationships and the influence of each component on the overall result, which is presented in Figure 3.1.

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<sup>218</sup>MASHAL, L. Models for improving the educational system in Israel in terms of reducing the gaps of inequality. In: *International Scientific and Practical Conference "EXPERIMENTAL AND THEORETICAL RESEARCH IN MODERN SCIENCE"* No. 35(2), pp. 144 -150. 16-18.11.2020, Chişinău, Moldova: Hiperion Editura, 2020. ISBN 978-5-368-01372-5. Available at: [https://ibn.idsi.md/ro/vizualizare\\_articol/121454](https://ibn.idsi.md/ro/vizualizare_articol/121454).



**Figure 3.1. The structure of the model for introducing the concept of the knowledge economy into Israeli educational policy, taking into account globalization processes in the global education market**

Source: developed by the author

When creating this model, the main goal was to solve current problems in the Israeli education system. This involved identifying the essential characteristics of the system, articulating key assumptions, and modeling to create an improved model with practical value for higher education. The final result of the practical application of the model should be the gradual integration of the Israeli education system into the global educational space, presenting it as an effective tool for improving the practice of adapting the country's educational policy.

The developed model includes three levels:

- diagnostics and goal setting of the model;
- formation of the model structure;
- assessment of the model's effectiveness.

Next, it is necessary to provide a more detailed description of each level of the presented model. Each level is described by the author from the point of view of practical application and can be changed depending on the data identified during the study of the Israeli education system.

**The first level is “Diagnostics and goal setting of the model.”** At the first level of the proposed model, the main focus is on diagnosing the educational context of application of the model and goal setting, which will become the main guideline that must be achieved based on the results of applying the model. This stage represents a systematic analysis of the current state of the

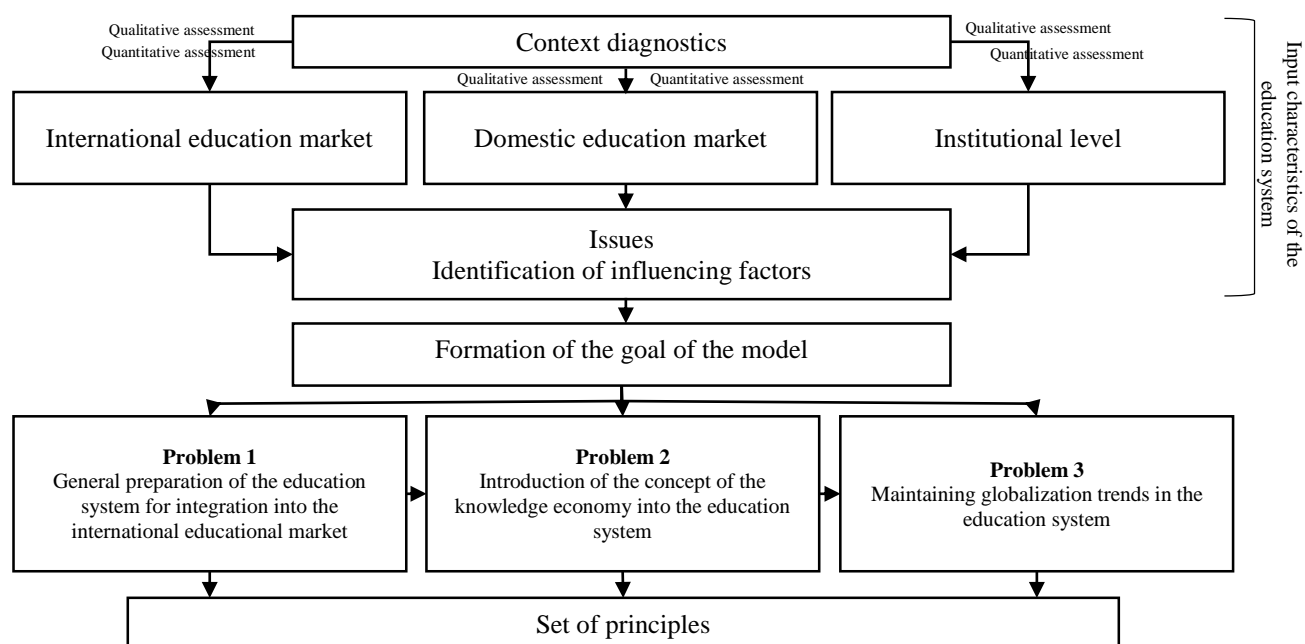
Israeli educational system in the context of the global education market, allowing us to identify its strengths and weaknesses, as well as the potential for innovation, which is an integral feature of the concept of the knowledge economy. Diagnostic tools include collecting data on educational structure, curricula, staffing and resources. Diagnostics generally includes the following areas:

- determination of the current needs of the national education system in the global market;
- assessment of the competitiveness of the Israeli educational system in the context of the educational market;
- identification of weaknesses and potential for improving the efficiency of the Israeli education system.

Goal setting at this level is to define a clear, measurable and achievable goal for improving educational policy and shaping its readiness to adapt and compete in the global educational market. Determining strategic directions of development, identifying key tasks arising from the main goal, and elaborating the principles for achieving them are an integral part of this stage. The result of the first level of the model's structure is a clear vision of what changes are needed and what specific objectives, based on appropriate principles, must be achieved as part of improving Israel's educational policy.

Within the framework of the model for integrating the knowledge economy into Israeli educational policy, diagnostics and goal setting play a key role in determining the success of the educational system's adaptation to the challenges of globalization. Interconnected processes of diagnosis and goal setting provide a strategic approach to the development of education, building it taking into account the needs of the knowledge economy and the requirements of the global educational community.

In the context of integrating the knowledge economy into Israeli educational policy, the model underscores the pivotal role of diagnostics and goal setting. These interconnected processes serve as strategic drivers, guiding the educational system's adaptation to the challenges posed by globalization. By aligning diagnostics with the specific needs of the knowledge economy and the expectations of the global educational community, the model ensures a targeted and responsive approach to education development. A detailed diagram of the first level is presented in Figure 3.2.



**Figure 3.2. Structural diagram of the first level of the model “Diagnostics and goal setting of the model”**

Source: developed by the author

Revealing the essence of each of the components of this scheme, it should be noted that the most important component is the diagnosis of the educational context. It represents a systematic and exploratory process aimed at analyzing and evaluating various aspects of the educational environment. The purpose of this process is to understand the current state of the educational system in the national market, identify its key characteristics, as well as identify problems and potential, as well as analyze its position and place in the global education market. Understanding the current state of the educational system is impossible without conducting research at the institutional level, that is, at the level of educational institutions in the country.

The author recommends diagnosing the educational context at the level of qualitative and quantitative assessment using two main approaches to studying the education system <sup>219</sup>:

1) cumulative approach - a methodological approach or process in which the accumulation and combination of experience, knowledge, or factors leads to gradual increase and enrichment.

2) integrative approach - a method in which various elements, components or methods are combined or interact to create a more holistic and complex phenomenon or system.

It is obvious that the cumulative approach to the study of the education system (hierarchy

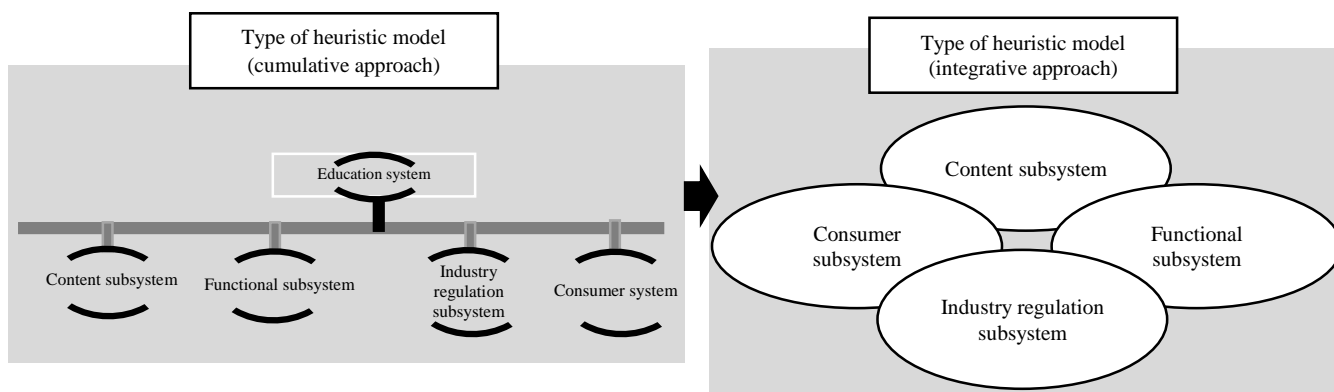
<sup>219</sup> HALSETH, G. R. et al. Cumulative effects and impacts: The need for a more inclusive, integrative, regional approach. In: *The Integration Imperative: Cumulative Environmental, Community and Health Effects of Multiple Natural Resource Developments*. 2016, p. 3-20. ISBN 978-3-319-22122-9.



supersystem - system - subsystems and their components, summing up their results) allows for a more descriptive analysis of facts and, to a lesser extent, a correlational one, aimed at searching for factors determining changes and identifying patterns that allow the formation results of scientific research of three main types:

- 1) explaining the possibility of borrowing features of educational policy models, processes, phenomena (explanatory);
- 2) identifying opportunities for adaptation of educational policy, processes, phenomena (adaptation);
- 3) revealing the conditions for the design of certain models, processes, phenomena (projection).

By a scheme has been developed for the transition from a cumulative (traditionally used in context analysis) to an integrative approach to diagnosing the educational context when constructing a heuristic model of a system for conducting a comprehensive study to identify cause-and-effect relationships, determining factors, patterns, prospects, problems in the Israeli education system in the context of globalization. This diagram is a demonstration of the structural elements of diagnostics, as shown in Figure 3.3.



**Figure 3.3. Transition from a cumulative approach to an integrative approach when constructing a heuristic model of a system for conducting a comprehensive study of the educational context**

Source: developed by the author based on<sup>220</sup>

The transition from a cumulative approach to an integrative approach when constructing a heuristic model of a system for conducting a comprehensive study of the educational context will help optimize the understanding and solution of complex problems in the field of education in

<sup>220</sup> WICKRAMA, KAS, O'NEAL, CW, HOLMES, C. Towards a heuristic research model linking early socioeconomic adversity and youth cumulative disease risk: An integrative review. In: *Adolescent Research Review*. 2017, No. 2, p. 161-179. ISSN 23638354.

Israel in the context of globalization. Moving from a cumulative approach, focused on the accumulation of fragmented data, to an integrative approach, promoting a holistic view of the system, will provide a deep understanding of the relationships and influences between different aspects of the educational context.

The heuristic model presented in the figure will provide an opportunity not only to identify cause-and-effect relationships, determining factors and patterns, but also to develop strategies for solving identified problems. An integrative approach will provide a holistic perception of the education system, taking into account the interaction between international and domestic factors, as well as the characteristics of educational institutions at the institutional level. Such a comprehensive analysis will identify prospects for the development of education, focus attention on key issues, and propose effective strategies and solutions to improve the Israeli education system in the context of modern global dynamics.

Using this heuristic model, **analysis is carried out at three levels:**

- analysis of the international education market. International education market analysis is the study and assessment of educational trends, structures, and competition and the effects of globalization at the world level. This type of analysis in the context of this model includes the study of international educational programs, requirements for qualifications of teaching staff, student mobility, as well as the interaction of educational systems of different countries.

- analysis of the internal education market. This analysis involves research into the internal education market of the country. First of all, the educational policy of Israel, the system of providing educational services and the analysis of processes within the country directly related to education are studied. This analysis includes a reflection of Israeli education statistics. Analysis of the domestic education market usually covers such aspects as the availability of educational services, the quality of educational programs, and issues of social justice in the provision of education, features of the education system's response to globalization trends and the need to develop a knowledge economy.

- analysis of the institutional level of provision of educational services (level of educational institutions). Institutional level in the context of education refers to the analysis and evaluation of the performance of individual educational institutions such as schools, colleges and universities. This level includes the study of the internal organization of educational institutions, their personnel composition, the quality of educational programs, as well as the ability to adapt to modern requirements of educational policy and the labor market. Institutional analysis is usually aimed at improving the efficiency and quality of the educational process at the level of specific educational organizations.

Diagnosis of the educational context is an important tool for identifying problems, planning development and making effective management decisions in the field of education. It provides the collection of extensive information and its critical assessment necessary to determine the research problem.

Based on the analysis of the global, national and institutional levels, **the problems are formulated** based on the identification of factors influencing the education system, which was identified in the process of carrying out three areas of analytical work. This analysis process takes the form of three main areas of analytical work, which include the study of global educational trends, analysis of national contextual influences, and assessment of the internal characteristics of educational institutions.

The diagnostic process and the problems identified on its basis are the initial data (input characteristics of the education system) from which one should build, that is, on the basis of which further work will be built to improve educational policy to adapt it to the international educational market. Input characteristics are a foundation that can only be partially influenced and must be strictly taken into account when formulating practical proposals for improving Israel's educational policy.

The problems identified during the study provide the basis for drawing up the purpose of the model. The goal is always the same. It must accurately and completely reflect the general vector of development and the end point to which the Israeli education system needs to reach through educational policy. The author formulated **the goal** for the model as follows: the creation of an adaptive and innovative education system capable of effectively responding to the global challenges of the knowledge economy and ensuring the competitiveness of both the Israeli education system and its educational institutions in the global educational environment.

The stated goal represents an ambitious desire to create an adaptive and innovative education system in Israel. The implementation of this goal is aimed at ensuring an effective response to global challenges associated with the knowledge economy and guaranteeing the high competitiveness of both the Israeli education system itself and its educational institutions in the global educational environment.

Key aspects of this goal, in the author's opinion, should include the following:

- Adaptability is the need to create an education system that can quickly respond to changes in the global economy, technological progress and sociocultural dynamics. This includes flexibility in educational programs, teaching methods and the structure of educational institutions.
- Innovation - refers to the introduction of advanced educational methods, technologies and approaches aimed at stimulating creative thinking, developing problem-solving skills and

preparing students for the dynamic demands of modern society.

- Global competitiveness - the goal is not only to create a successful education system within the country, but also to ensure its high competitiveness on the world stage. This includes active participation in international educational research, attracting talented students and faculty, and participation in global educational initiatives.
- Collaboration between educational institutions - the goal involves integration and cooperation between various educational institutions in Israel to create a unified educational landscape that facilitates the exchange of knowledge and resources to achieve common goals.
- Resilience to the challenges of the knowledge economy - the goal is not only to create a successful education system in the current context, but also to ensure that it is resilient and adaptable to future challenges and changes in the knowledge economy.

The overall idea is to make Israel's education system not just prepare students for current demands, but also inspire innovation (knowledge economy) and be ready for change and global competition in the long term (globalization).

According to the author, the goal should not be formulated as an ideal, but not as a practical determination of priorities in the education of Israel. Building a logical sequence from goals to objectives and means of achieving them requires special art. But in the context of educational policy, the most important thing is not so much the connection between goals and means, but rather the connection between goals and problems, which will be identified in the course of research at the three previously identified levels.

arise from the purpose of the model:

- General preparation of the education system for integration into the international educational market. This task includes the development of strategies and mechanisms aimed at adapting the Israeli educational system to international standards and requirements. The task includes assessing and improving the quality of educational programs, adapting educational materials to global standards, as well as developing international partnerships and exchanges, internationalizing education to enrich the educational experience of students and teachers. Thus, the overall task of preparing the education system for integration into the international educational market requires an integrated and systematic approach, covering various aspects of adaptation, internationalization and improving the quality of education. An integrated approach to the integration of the education system into the international educational market ensures not only its compliance with global standards, but also active participation in shaping the future global educational landscape.

- Introduction of the concept of the knowledge economy into the education system. This task

focuses on reorienting educational practices in accordance with the concept of the knowledge economy. This includes the development and implementation of innovative educational methods, support for research and innovation projects, as well as the active use of advanced technologies in the educational process. The main goal of this task is to prepare graduates who can successfully compete in a knowledge-based economy. Thus, the task of introducing the concept of the knowledge economy into the education system is aimed at creating in graduates comprehensively trained professionals who are able to function effectively in a modern knowledge-based economy.

- Maintaining the trend of globalization in the education system. This task is aimed at creating conditions for continuous development and interaction with the global educational community. This includes stimulating international research projects, participating in global educational initiatives, and actively participating in international educational networks. The task is to ensure that the Israeli educational system not only follows global trends, but also actively contributes to their formation and development. Thus, the task of maintaining the trend of globalization in the education system includes a wide range of activities aimed at strengthening interaction with the global educational community and active participation in global educational processes.

The model's objectives generate a set of principles on which the model is based. **A set of principles** is a system of basic attitudes and guiding ideas that provide fundamental guidelines for the development and implementation of the model. In the context of this model, the set of principles represents a holistic set of principles focused on achieving goals and solving problems arising from the challenges of globalization and the changing educational context in connection with the knowledge economy. Each principle reflects a guideline for adapting the educational system to modern requirements and is aimed at ensuring the efficiency, innovation and sustainability of the system in the context of the global dynamics of the educational market, which is presented in Table 3.1.

**Table 3.1. A set of principles for the model for introducing the concept of the knowledge economy into Israeli educational policy in the context of globalization**

Principle	Content	Model level
adaptability to international standards	development of flexible mechanisms to quickly adapt to changes in global educational trends; promoting international exchange and partnerships to ensure a diverse educational experience	Diagnostics and goal setting
development of innovative activities in educational methods	introduction of advanced pedagogical and methodological approaches that contribute to the active implementation of the concept of the knowledge economy; support for research and innovation activities	

resilience to globalization	the formation of an open educational environment that promotes the mutual exchange of experience and knowledge at the global level; participation in international educational projects that support the implementation of world practices in the educational system	
global competitiveness	support for educational programs that provide a high level of training for graduates to successfully compete in the global labor market; development of international quality standards and accreditations to ensure recognition of diplomas in the world	Formation of the model structure
international interaction	forming a network of international partnerships and cooperation to exchange best practices and resources; support for international internships and training for students and teachers to enhance their experience	
innovative educational methods	development of interactive and inquiry-based teaching methods that promote active student participation and the development of their critical thinking; supporting the use of advanced technologies in the educational process to improve the effectiveness of educational programs	Assessing the effectiveness of the model
stimulation of research activities	creating conditions for the development of research centers and projects focused on key aspects of the knowledge economy; support and encouragement of teachers and students to participate in research programs and projects	

Source: developed by the author

This list of principles is a dynamic and evolving guide created by the author as a starting point for discussion and reflection. It is not intended to be final or true and can evolve as technology, social values and community needs evolve.

It is important to emphasize that this list is not exhaustive, and new principles may be added as discussions and research lead to new understandings and findings. This approach reflects flexibility and openness to innovation, encouraging the introduction of new ideas and adjustments to improve the relevance and effectiveness of the principles.

At the same time, the need to revise the principles should not be considered as a disadvantage, but, on the contrary, as a manifestation of readiness to adapt to changing circumstances and requirements. This approach contributes to the creation of more flexible and sustainable levels of models that can effectively meet the modern challenges of global education.

Thus, the first level of the model is an important and comprehensive starting point in the development of the model, and the effectiveness of the entire developed model depends on the quality of the research and the thoughtfulness and argumentation of the goal. The first level of the model represents a key stage in model development, focusing not only on data collection and formulation of research questions, but also on the broader context that encompasses all aspects of the modeling. At this stage, it is important not only to identify key parameters and variables, but

also to establish a clear research methodology that will be used to collect, analyze and interpret data.

The quality of research at the first level of the model directly affects further stages of development. The efficiency of data collection and processing, as well as the depth of analysis of research results, will determine the accuracy and reliability of the model as a whole. A well-designed first level provides a solid foundation for building subsequent stages of the model.

Argumentation of the goal also plays a key role at this stage. A clear definition of the purpose of the model and a critical look at it allows you to better structure the research, allocate the necessary resources and determine the criteria for success. A reasoned goal provides a clear idea of how the model will be used and what results are expected from its application.

Thus, high-quality execution of the first level of the model requires not only technical competence in collecting and analyzing data, but also strategic thinking in terms of defining the goals and target direction of the modeling. This, in turn, sets the stage for subsequent development phases, determining the overall effectiveness and suitability of the model for end use.

**The second level, “Formation of the structure of the model”,** is a strategically significant stage at which the organizational and logical structure of the entire model for introducing the concept of the knowledge economy into Israeli educational policy is determined. At this level, firstly, the problem of identifying the key components of the model is solved. The main elements that will be included in the model are identified. This may include educational institutions, legislation, evaluation and monitoring methods, financial mechanisms, and other elements that directly affect the Israeli education system.

Secondly, relationships between components are established. Developing a model involves determining how the various components interact with each other. This includes defining the flows of information, communications, and interactions between educational institutions, government agencies, and other participants and actors in the system.

Thirdly, the formation of a logical sequence is extremely important at this level, which means determining the order and sequence of actions to implement the concept of the knowledge economy. This involves developing steps and milestones that will ensure gradual and systematic implementation of changes in the educational system.

At the second level of the model, the basis is formed for the implementation and testing of the model in the practical conditions of the educational environment in the domestic Israeli market, as well as in the context of the global educational space. This level is key because it provides a clear and structured basis for introducing changes to the educational system in accordance with the principles of the knowledge economy.

Within this level, a detailed specification of how the model will be implemented in practice is carried out. The process begins with a clear definition of the levels at which the model will operate (national and institutional). This includes the specific educational sublevels, institutions and levels of education that will be involved within the model system.

Further, the model's actions will be directed in two key directions, which are conventionally designated as "globalization of educational policy" and "knowledge economy of educational policy." As part of globalization, the model takes into account the impact of global educational trends, standards and practices on the local system. At the same time, the "knowledge economy" aspect is focused on creating mechanisms that promote the sustainable development of the educational system as a key player in the knowledge economy. Taken together, they provide an ideal foundation for Israeli educational policy.

However, the key element of the second level of the model is the development of a mechanism for implementing the model, the identification of performers at each stage of implementation and the formation of appropriate strategic activities that will form a complete picture of the model from two points of view - globalization and the knowledge economy. This includes the following:

1. Determination of implementers - identification of specific institutions, governing bodies and other participants responsible for implementing the model at each stage.
2. Formation of strategic activities - development of detailed steps and actions that must be taken to successfully implement the model. These strategic activities cover the organization of educational programs, financial planning, changes in management and other areas.
3. Development of measurable indicators of success - identification of key performance indicators that will be used to evaluate the results of implementing the model. This may include quality standards, student performance statistics, levels of international competitiveness and other criteria.
4. Adaptation to the context of the global educational ecosystem - taking into account the specifics of global trends and needs of the global educational community for the effective implementation of the model.

Thus, at this stage, a clear action plan is formed that covers all aspects of the model in the context of globalization and the knowledge economy, and provides for the successful implementation of changes in the education system. The second level of the model is described in more detail by the author in paragraph 3.2.

**The third level, "Evaluation of the effectiveness of the model",** is intended to provide a systematic assessment of how successfully the model is being implemented and achieving its goals



and objectives in the Israeli education system, which can subsequently be used to adjust the strategy and increase efficiency in the educational system.

The third level of the model, focused on assessing the effectiveness of the model, includes a detailed definition of the conditions under which the success of introducing the concept of the knowledge economy into Israeli educational policy in the context of globalization will be assessed. These conditions are formed on the basis of the directions highlighted in the model and depend on the level at which the model is implemented (national or institutional).

Each direction of the model requires specific conditions for successful implementation. These conditions may include, for example, the preparedness of educational institutions, government support, the involvement of international partners and other factors associated with globalization and the knowledge economy.

These conditions are further transformed into specific indicators and performance indicators of the model. For example, if one of the conditions is the preparedness of educational institutions, the corresponding indicator (quantitative and qualitative indicator) could be the level of successful adaptation of training programs to the requirements of the knowledge economy.

Next, a detailed definition of the expected results of the model is carried out. This may include both qualitative and quantitative changes in the education system, such as improving the quality of education, increasing the level of competitiveness of graduates, etc. An assessment is made of the degree of achievement of the designated goals and fulfillment of the assigned tasks of the model. This may include comparing actual results with pre-established goals and assessing progress.

The assessment results become the output characteristics of the education system, allowing conclusions to be drawn about its effectiveness and potential ability to adapt to the challenges of globalization and the knowledge economy.

The essential core of this level is the performance assessment structure developed by the author, presented in detail in paragraph 3.3. This framework provides a basis for systematically analyzing and measuring the model's output in the context of globalization and the knowledge economy.

The objective tendency towards globalization inherent in the knowledge economy entails the inevitable globalization of markets for the provision of educational services, which turns the field of higher education into a fundamental component of the knowledge economy. This served as the main starting point in developing a model for introducing the concept of the knowledge economy into Israeli educational policy, taking into account globalization processes in the global education market.

Today, there is not only a theoretical, but also a practical need to create a model for introducing the concept of the knowledge economy into Israeli educational policy, taking into account globalization processes in the global education market, which will not only reveal the theoretical foundations of changes in the field of educational services, but also provide a practical tool for adaptation this area to the growing influence of the knowledge economy in the global educational market. The model developed by the author should not only analyze the economic context of these changes, but also reflect the real importance of educational services as an important element of the knowledge economy system in the context of globalization.

The author has developed and justified the structure of three successive levels of the model for introducing the concept of the knowledge economy into the educational policy of Israel, taking into account globalization processes in the global education market: diagnostics and goal setting of the model, formation of the structure of the model, assessment of the effectiveness of the model. The model developed by the author for introducing the concept of the knowledge economy into Israeli educational policy is a system of three successive levels, each of which has its own unique task and specificity. This development by the author can serve as instructions for creating measures to improve future educational policies in Israel.

### **3.2. Development of structural components of a model for integrating the concept of the knowledge economy into Israeli educational policy**

The knowledge economy requires special approaches in the development and implementation of measures aimed at ensuring its development due to its inherent characteristics and risks. The main way to overcome them is the creation of incentives designed to create conditions that ensure the intensification of innovative activity, increasing the commercial attractiveness of innovative projects and innovative products introduced into economic circulation. stimulating innovation involves a variety of methods and tools.

However, despite the significance of the identified steps, their description in general terms is not enough to fully illuminate the process of integrating the concept of the knowledge economy into Israeli educational policy <sup>221</sup>. In this context, the need for additional structuring of actions aimed at the successful adaptation of this concept into the unique educational landscape of the country becomes clear. This structuring process is an integral part of model development.

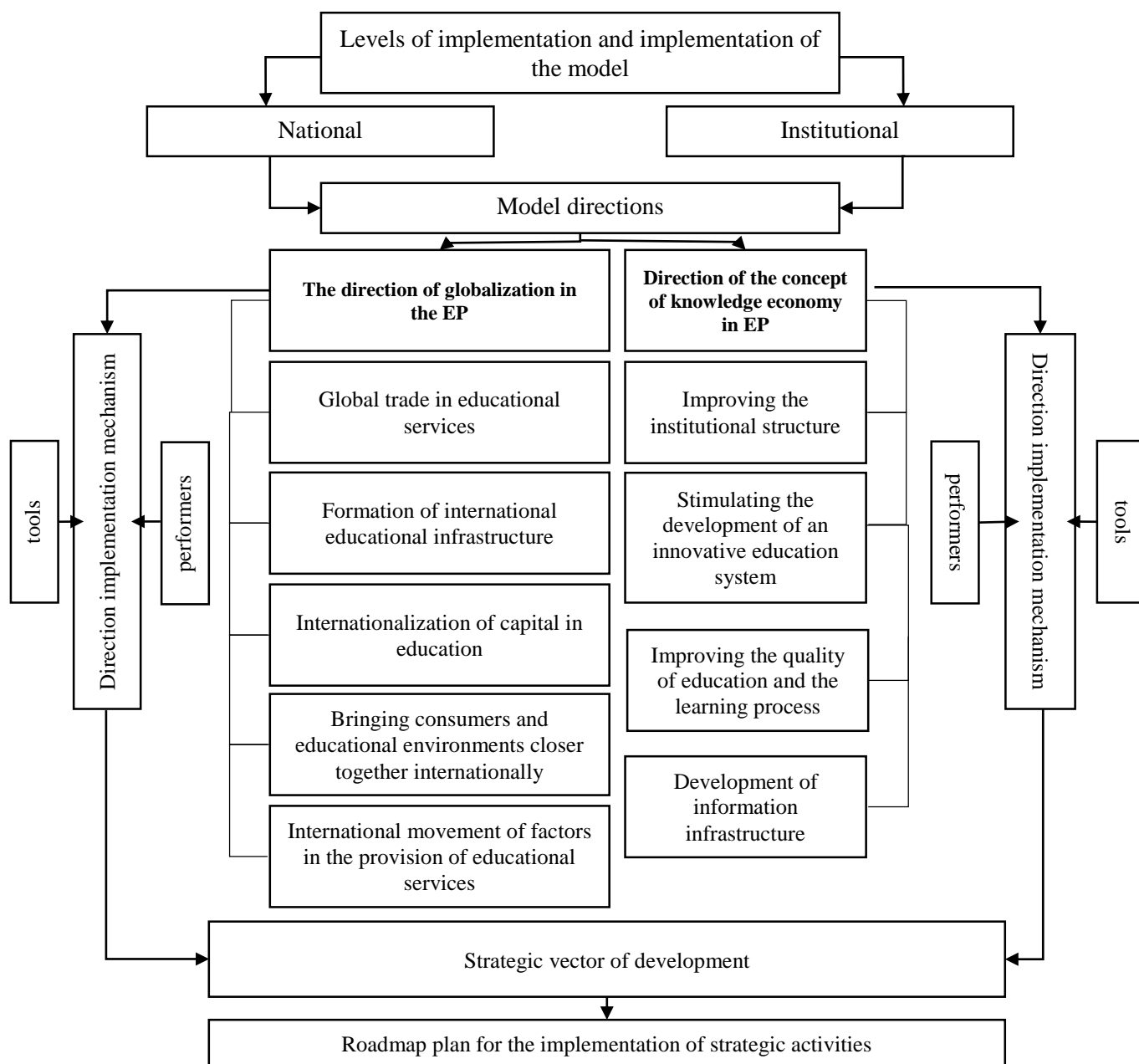
Thus, according to the author, a significant stage in developing a model for introducing the

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<sup>221</sup> AMIEL, M., Yemini M. Who takes initiative? The rise of education policy networks and the shifting balance of initiative-taking among education stakeholders in Israel. In: *Journal of Education Policy*. 2023, No. 38(4), p. 586-606. ISSN 02680939.

concept of the knowledge economy into Israeli educational policy involves a detailed consideration of the structural components that form the foundation of this model. The author was tasked with developing specific elements that determine the functioning of the model and the interaction between various segments of the Israeli educational system. The development of structural components becomes a key step in ensuring the effective integration of the concept of the knowledge economy, taking into account the characteristics of the Israeli educational context and the challenges of globalization.

The author provides a visual representation in Figure 3.4, illustrating the intricate connections and impact of each structural component on the overarching objectives of educational policy modernization. This diagram serves as a roadmap, facilitating a clear understanding of the model's dynamics in achieving transformative goals in education. Navigating through the model's intricacies outlined in the diagram empowers stakeholders with valuable insights, fostering informed decision-making and collaborative efforts to propel the envisioned transformation in education.



**Figure 3.4. Block diagram of the second stage of the model “Formation of the model structure”**

Source: developed by the author

The diagram representing the second stage of the model “Formation of the structure of the model” shows a clear systematization and organization of the process aimed at establishing the levels at which the model will be implemented, as well as identifying key areas of activity for the implementation and implementation of the model. This stage is critical to ensure the successful implementation of the model for introducing the concept of the knowledge economy into Israeli educational policy in the context of globalization.

The first step in this phase is to clearly define the levels of **implementation and realisation**

of the model. This includes not only distinguishing between the national and institutional levels, but also clarifying the context of their interaction. The definition of specific levels plays a key role in adapting the model to the characteristics of the Israeli educational system.

At the national level of implementation of the model, it is implied that its basic principles and strategies will be implemented and applied at the level of the entire country, in this case, Israel. This includes national strategies and approaches for introducing the concept of the knowledge economy into education policy, as well as the creation of structures and tools that contribute to the achievement of set goals. The implementers of educational policy measures at the national level in the context of the implementation of the model are a number of actors in the national educational market and organizations (Israeli Ministry of Education, stakeholders, organizations in the field of education).

The institutional level of implementation of the model assumes that the principles and activities of the model will be adapted and implemented at the level of specific educational institutions, higher education institutions, colleges, schools and educational organizations in Israel. In this case, areas of activity may include changes in the strategies and plans of educational institutions, training programs and methods of providing educational services, as well as the introduction of innovations in the educational process and organizational structures.

Thus, the national level focuses on broad-based strategies and policies at the State of Israel level affecting the entire educational system in the country, while the institutional level includes specific actions and adaptations at the level of specific educational institutions. Both levels are interconnected and strive for a common goal - the effective integration of the concept of the knowledge economy into the Israeli educational system.

Regardless of the level of implementation and implementation of the model, it develops in two **directions**, structured by the author:

- the direction of globalization in educational policy, focused on the integration of the national education system into the global educational space by stimulating international exchanges, developing international partnerships, strengthening interdisciplinarity and adapting educational standards to global requirements to prepare for competition at the global level;

- the direction of the knowledge economy in educational policy, focusing on the reorientation of the educational system in order to prepare graduates who can successfully compete in a knowledge-based economy, which includes the development and implementation of innovative educational methods, support for research projects, active use of advanced technologies in educational process and creating conditions to stimulate innovation in education.

Regarding the process of globalization and its role in educational policy, the model takes

into account global trends and standards in the field of education. This includes the analysis and adoption of best practices and methodologies that can be successfully adapted into the Israeli national educational system. Global aspects include cooperation with international educational organizations, exchange of experience with other countries and educational institutions, and the involvement of world experts to enrich the educational experience.

As primary actions in the **direction of "globalisation in EP"**, the author proposes the following:

1) World trade in educational services. This step involves the development and stimulation of the global market for educational services. Specific actions in this area could include:

- ✓ Organization of international educational fairs and exhibitions to present educational programs of different countries;
- ✓ Support for student and teacher exchange programs between universities from different countries;
- ✓ Conclusion of international agreements on the recognition of diplomas and loans.

The executors of these activities may be government agencies in the field of education in Israel (Israeli Ministry of Education). Their participation will be expressed in concluding international agreements and developing policies on global trade in educational services with stakeholders in the international market.

Also, international educational agencies can become partly executors of these events to coordinate and assist in organizing events aimed at promoting educational services outside the country of Israel.

The structure of actions in this area is presented in Table 3.2.

**Table 3.2. Structure of the action "Global trade in educational services"**

Action	Tool	Expected Result
Organization of international educational fairs and exhibitions to present educational programs of different countries	-promotion and advertising -international partnerships -informational resources -presentations -language and network support	Establishing an effective platform for international exchange of experience, drawing attention to educational programs of different countries and creating an enabling environment for future international educational research and partnership initiatives
Support for student and teacher exchange programs between universities from different countries	-electronic platforms - online resources and databases -virtual educational environment - language support -mobile applications	Increasing the number of successful student and faculty exchanges between universities in different countries, improving the quality of education through international experience, and strengthening academic and cultural ties between educational institutions
Conclusion of international agreements on the recognition of	-standardized documents -lobbying -communication means	effective and simplified recognition of educational documents, increasing international mobility of students and teachers, strengthening

diplomas and loans		the reputation of universities, expanding global opportunities for professional development.
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Source: developed by the author

Global trade in educational services <sup>222</sup>in the context of the model includes the creation of international partnerships and agreements between educational institutions in different countries. Such agreements allow students, teachers and researchers to move and exchange knowledge more easily, facilitating global integration in education.

2) Formation of international educational infrastructure. Creating an international educational infrastructure involves developing standards and platforms for learning that can be applied globally <sup>223</sup>. This includes developing common assessment criteria, adapting programs to different cultural contexts and providing access to educational resources from different countries.

Specific actions in this area could include:

- ✓ Development of educational platforms that provide access to courses and resources from different parts of the world;
- ✓ Creation of international scientific journals and conferences for the exchange of knowledge and research results;
- ✓ Development of general standards for assessing the quality of educational programs.

The implementers in this area will be International scientific and educational organizations that develop standards, organize conferences and create platforms for knowledge exchange. On the external market side - international funds and organizations that can finance projects aimed at creating international educational structures.

The structure of actions in this area is presented in Table 3.3.

**Table 3.3. Structure of the action “Formation of international educational infrastructure”**

Action	Tool	Expected Result
Development of educational platforms that provide access to courses and resources from different parts of the world	-international educational portals -multilingual educational resources -global virtual universities	reducing barriers to education by providing students with a variety of educational opportunities and contributing to the formation of a global educational community
Creation of international scientific journals and conferences for the exchange of knowledge and research results	-international scientific journals -global web conferences -international scientific networks	raising the level of scientific exchange and collaboration between scientists from around the world, stimulating innovative research and providing greater visibility for scientific achievements

<sup>222</sup> ROBERTSON, SL Making education markets through global trade agreements. In: *Globalisation, Societies and Education*. 2017, No. 15(3), p. 296-308. ISSN 1476-7724.

<sup>223</sup> LINGARD, B. The global education industry, data infrastructures, and the restructuring of government school systems. In: *Researching the global education industry: Commodification, the market and business involvement*. 2019, p. 135-155. ISBN 978-3030042356.

Development of general standards for assessing the quality of educational programs	-international educational agencies -educational certified organizations -expert working groups	improving the quality of education, increasing the recognition of diplomas on the world stage and creating sustainable international expert structures that contribute to the constant improvement of standards in the field of education.
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Source: developed by the author

The formation of an international educational infrastructure will help the Israeli education system to successfully adapt to various global educational contexts. This infrastructure improves the effectiveness of learning, expands equal opportunities for acquiring knowledge and forms the basis for international cooperation in the field of education.

**3) Internationalization of capital in education.** This aspect is aimed at attracting international investment in the field of education <sup>224</sup>. A specific list of activities in this area are:

- ✓ Attracting international investors to finance strategic projects in the educational field;
- ✓ Creation of international educational funds and grant programs to support innovation in education;
- ✓ Establishment of tax incentive mechanisms for investors investing in educational projects.

Participants in these events can be the Ministries of Education and Finance of states, which develop and implement measures to attract international investment in education. As well as business structures and investment funds investing in educational projects. This collaborative engagement extends beyond the educational realm, drawing in key stakeholders, alongside business entities and investment funds committed to injecting resources into innovative educational projects.

The structure of actions in this area is presented in the form of Table 3.4.

**Table 3.4. Structure of the action “Internationalization of capital in education”**

Action	Tool	Expected Result
Attracting international investors to finance strategic projects in the educational sector	-international conferences -educational investment portfolios -investment roadmaps -startups in education - partnerships	activation of investment flow in the educational sector, ensuring the development of innovative projects, improving educational infrastructure and improving the quality of education
Creation of international educational funds and grant programs to support innovation in education	-international grant programs - innovation competition	supporting numerous educational projects around the world, stimulating innovation in education, creating a favorable climate for research and developing a global educational community
Establishment of tax incentive	-investment associations	attracting investors by creating

<sup>224</sup> FINARDI, K., ROJO, R. Globalization, internationalization and education: what is the connection? In: *International e-journal of Advances in Education*. 2015, No. 1(1), p. 18-25. ISSN 2411-1821.



mechanisms for investors investing in educational projects	- agreements with investors	incentives, which helps improve the financial sustainability of educational institutions and promote innovation in education
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Source: developed by the author

This action includes funding educational projects, infrastructure development, educational start-ups and other forms of investment that contribute to improving the quality of education and its global competitiveness, which will allow the Israeli education system to become more competitive in the international market.

4) Bringing consumers and the educational environment closer together at the international level. This item of measures towards globalization in educational policy includes the creation of conditions for international interaction of students, teachers and researchers <sup>225</sup>. Therefore, activities under this item will be implemented within the framework of the following activities:

- ✓ Support for student exchanges and double degree programs between universities in different countries;
- ✓ Organization of international student conferences and forums;
- ✓ Development of virtual educational platforms for teaching students remotely in international groups.

As for the implementers, they can be universities and educational institutions that develop and implement exchange and cooperation programs. Speaking about the international education market, these could be international student organizations involved in organizing student events and forums in their countries and at the international level.

The structure of actions in this area is presented in the form of Table 3.5.

**Table 3.5. Structure of the action “Bringing consumers and the educational environment closer together at the international level”**

Action	Tool	Expected Result
Support for student exchanges and double degree programs between universities in different countries	- mobility of teachers -educational technologies -educational clusters	deepening international connections, enriching students' educational experience, and increasing intercultural understanding, which contributes to their readiness for global competition
Organization of international student conferences and forums	-international consortia -social media -mentor programs -webinars, round tables	creating a dynamic international educational community where students actively exchange ideas, stimulate intellectual growth and form international connections
Development of virtual educational platforms for	-online courses -multimedia resources	ensuring flexibility and accessibility of education for students anywhere in the

<sup>225</sup> PAYNE, M., ASKELAND, GA *Globalization and international social work: Postmodern change and challenge*. Milton Park: Routledge. 2016. 208 p. ISBN 9781138245747.

teaching students remotely in international groups	-group projects	world, promoting the development of digital competencies and increasing the effectiveness of learning.
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Source: developed by the author

Of all the actions towards globalization in educational policy, this is the most comprehensive and complex, and also quite time-consuming.

5) International movement of factors in the provision of educational services. This step in the list of directions recommended by the author for the globalization of educational policy is aimed at facilitating the movement of educational resources and personnel between countries. This may include facilitating procedures for international teachers and researchers, encouraging the exchange of experience and knowledge, and joint educational projects bringing together institutions from different countries <sup>226</sup>. It will be embodied in the following events:

- ✓ Simplification of visa procedures and other administrative barriers for teachers and researchers from other countries;
- ✓ Establishment of exchange programs for administrative staff and educational workers;
- ✓ Support and development of training programs in foreign languages and the introduction of multilingual approaches in educational institutions.

Obviously, the executors in this case will be the Ministries of Education and Foreign Affairs of the countries that develop and implement policies to simplify visa and administrative procedures. At the institutional level, these will be universities and research centers engaged in attracting foreign teachers and researchers through exchange and collaboration programs.

The structure of actions in this area is presented in Table 3.6.

**Table 3.6. Structure of the action “International movement of factors in the provision of educational services”**

Action	Tool	Expected Result
Simplification of visa procedures and other administrative barriers for teachers and researchers from other countries;	- support centers for advice and assistance -information campaigns -online platforms for document processing	attracting outstanding teachers and researchers, improving the quality of education through diversity of experience and expertise, and fostering an open and welcoming educational environment
Establishment of exchange programs for administrative staff and educational workers;	-training missions -courses and training for workers in the field of education	increasing the professional competence of administrative staff, sharing experience in managing educational institutions
Support and development of training programs in foreign languages and the introduction of multilingual	-language centers -linguistic programs	expanding opportunities for learning in foreign languages, improving communication between students of different cultures, and preparing graduates

<sup>226</sup> RIUSALA, K., SMALE, A. Predicting stickiness factors in the international transfer of knowledge through expatriates. In: *International studies of management & organization*. 2007, No.37(3), p. 16-43. ISSN 1558-0911.

approaches in educational institutions.		for successful careers in a global world
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Source: developed by the author

A characteristic feature of the direction of globalization in educational policy and the list of corresponding measures proposed by the author is the integrative and interconnected nature of actions. This means that the proposed measures are not isolated, but interact with each other, forming an integrated approach to globalization in education policy. This approach allows us to more effectively respond to the challenges of globalization and create sustainable mechanisms for introducing change.

An important aspect of such an integrative approach is taking into account the various factors influencing the educational system. For example, international trade in educational services can only be successful if there is a developed international educational infrastructure and the convergence of consumers and the educational environment. Thus, the interaction of activities creates sustainable connections, ensuring more effective adaptation of educational policy to global challenges.

Another important aspect is the emphasis on creating an enabling environment for international cooperation and knowledge sharing. It is interaction and exchange of experience that can become the driving force for maintaining the global competitiveness of the educational system. This approach contributes to the creation of an educational environment in which diversity and inclusion contribute to the development and enrichment of all participants in the educational process.

**In the direction of the knowledge economy in educational policy**, the model is focused on the effective use of knowledge and intellectual capital to support economic growth and development. This includes introducing innovative teaching methods, stimulating scientific research, and developing programs aimed at developing key skills and competencies in demand in the knowledge economy. This direction is focused on creating conditions in which education becomes a key tool for the formation of intellectual capital that can effectively interact with the modern knowledge economy.

The direction of the concept of the knowledge economy in educational policy includes the following components of action derived from the structural elements of the concept:

- improving the institutional structure ;
- stimulating the development of an innovative education system ;
- improving the quality of education and the learning process ;
- development of information infrastructure.

1) The first action, “Improving the institutional structure,” is aimed at changing and modernizing the structural elements of the educational system to ensure more efficient functioning, adaptation to modern requirements and the creation of a favorable environment for the development of innovation and quality education<sup>227</sup>. Improving the institutional structure in the Israeli educational system solves the problem of rigidity and inefficiency of the current organizational model.

A set of actions to improve the institutional structure will be implemented within the framework of the following activities:

- ✓ Introduction of flexible management models. This implies the introduction of flexible and adaptive management models for educational institutions, as well as the creation of mechanisms for quickly responding to changes in the educational environment.

- ✓ Development and deepening of forms of partnership and cooperation. Forming partnerships between educational institutions, the business sector and society, as well as strengthening cooperation with innovation centers, laboratories and start-ups will create the basis for the effective development and deepening of partnerships between educational institutions, the business sector and society, as well as for strengthening interaction with innovation centers, laboratories and startups;

- ✓ Stimulating the internal innovative activity of an educational institution by encouraging teachers and staff to introduce innovative teaching methods and creating structures to support and implement educational projects<sup>228</sup>.

- ✓ Effective use of resources in the field of education and consolidation of the corresponding principle in educational policy at the national level. This event involves the rational distribution of financial and material resources. As well as the introduction of modern methods and technologies to optimize the educational process.

As a result of this action, it is expected to achieve greater flexibility and adaptability of educational institutions to changes in connection with the application of the concept of the knowledge economy at the national level, as well as at the institutional level. The development of an innovative environment within educational institutions will entail improving the quality of the educational process through modern methods and technologies.

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<sup>227</sup> GRAHAM, C.R., WOODFIELD, W., HARRISON, J.B. A framework for institutional adoption and implementation of blended learning in higher education. In: *The internet and higher education*, 2013, No. 18, p. 4-14. ISSN 1873-5525.

<sup>228</sup>MASHAL, L. Employment in the 21st century – the digital turning point. In: *Revistă științifico-practică Vector European*, Chisinau. Chisinau Republic of Moldova, Nr. 1, 2023, pp. 127-132. ISSN 2345-1106. Available at: [https://ibn.idsi.md/ro/vizualizare\\_articol/179220](https://ibn.idsi.md/ro/vizualizare_articol/179220)

The implementers of these activities within the framework of the first action can be heads of educational institutions responsible for the implementation of new management models, representatives and heads of innovation departments who develop and support innovative projects. At the institutional level, this may include faculty and staff who are actively involved in implementing innovations in the educational process. The business sector and society can have a large and productive impact through interaction and support of educational institutions. It is the business sector that can facilitate and become a catalyst for the process of introducing the concept of the knowledge economy into Israeli educational policy.

The structure of actions in this area is presented in Table 3.7.

**Table 3.7. Structure of the action “Improving the institutional structure”**

Action	Tool	Expected Result
Introduction of flexible management models	- digital platforms -innovative management models	increasing the efficiency of managing educational processes, adapting to modern challenges of the knowledge economy and increasing the efficiency of resource use
Development and deepening of forms of partnership and cooperation	-project activities - partnerships with industry representatives	creating innovative educational solutions that go beyond educational institutions, as well as improving the preparation of students for the real needs of the labor market
Stimulating the innovative activity of an educational institution	-innovation centers - rewards and incentive programs -educational laboratories	creating an educational environment that promotes the active implementation of innovative teaching methods, which will improve the quality of the educational process and the competitiveness of the educational institution
Effective use of resources in education	-financial mechanisms -digital infrastructures	optimizing costs, increasing the transparency of financial mechanisms, improving the quality of educational services, and creating a sustainable and efficient resource management system

Source: developed by the author

Thus, this action is aimed at creating a more flexible and adaptive management system for educational institutions, which helps to increase their efficiency, as well as improve the system's ability to adapt to modern challenges and the needs of students, both domestic and foreign.

2) The second action “Stimulating the development of an innovative education system” is aimed at supporting and developing innovations in the educational system, creating conditions for the introduction of advanced technologies and teaching methods, as well as the formation of an innovative culture in the educational process. Some of the main activities of this action include:

- ✓ Formation of innovation infrastructure through the creation of innovation centers and laboratories for the development and testing of new educational technologies. In parallel with this, it is necessary to develop partnerships with innovative companies and start-ups.

- ✓ Stimulating and supporting research activities, which means obtaining financial support for research projects in the field of education, for which it is necessary to participate in relevant

competitions, projects, etc. Also within the framework of this event, scientific conferences and forums are organized for the exchange of experience and knowledge.

✓ Integration of modern technologies into the educational process, which means providing educational institutions with modern equipment and software and the development of online education, the use of electronic platforms for learning.

✓ Training and support for teachers - conducting training programs and courses for teachers on integrating innovations into the educational process, as well as creating mechanisms for the exchange of experience and mutual support among teachers.

As a result of the implementation of these activities, the following results are expected:

- formation of an innovative ecosystem in the field of education;
- increasing the quantity and quality of scientific research in the field of education;
- integration of advanced technologies into the educational process;
- promoting an innovative culture among teachers and students.

Performers of the activities proposed by the author can be:

- innovation centers and laboratories that develop and test new educational technologies;
- public authorities in Israeli education, providing financial support and creating favorable conditions for the development of innovation;
- teachers who actively implement innovative teaching methods;
- startups and innovative companies that can provide new technologies and solutions for the education sector.

The structure of actions in this area is presented in Table 3.8.

**Table 3.8. Structure of the action “Stimulating the development of an innovative education system”**

Action	Tool	Expected Result
Formation of innovation infrastructure	-innovation centers -online platforms for exchanging ideas	creating educational innovations, improving the quality of education and developing advanced educational technologies for successful adaptation to the requirements of the knowledge economy
Stimulating and supporting research activities	-crowdfunding -sponsorship -competitions, projects	development of research initiatives, increasing the level of innovation in education
Integration of modern technologies into the educational process	-technology partnerships	effective use of modern technologies to increase the accessibility of education, improve the quality of the educational process and prepare students for the requirements of the digital era.
Teacher training and support	-collaborations - partnerships with industry -experience exchange	integration of innovations into the educational process and creation of a stimulating environment for teachers

Source: developed by the author

Stimulating the development of an innovative education system in Israel solves the problem of lagging behind modern teaching methods and the ineffective use of advanced technologies in the educational process. This action is aimed at creating a more dynamic and modern educational environment, which helps improve the quality of education and students' readiness for the challenges of the modern world.

3) The third action “Improving the quality of education and the learning process” is aimed at improving the educational environment, increasing the efficiency of the educational process and ensuring high quality knowledge among students. Action to improve the quality of education and the learning process in the Israeli educational system addresses the problem of insufficient educational standards and ineffective teaching methods. The main activities in the context of improving the quality of education and the learning process include the following:

- ✓ Development and implementation of quality standards, such as the creation and implementation of educational standards that reflect modern requirements and educational standards. In this case, it is also important to regularly update standards taking into account the dynamics of development of educational technologies and methods.
- ✓ Assessment and monitoring of the quality of education, which requires the development of systems for assessing and monitoring the quality of education using modern methods of analysis and evaluation.
- ✓ Professional development of teachers through the organization of training programs and courses to improve the qualifications of teachers.
- ✓ Innovative teaching methods, implying the introduction of new teaching methods and technologies that promote better learning of the material and the development of critical thinking. As part of this event, supporting and stimulating teachers in using innovative approaches in the educational process plays an important role.

Thus, the implementation of these activities will help increase the overall level of knowledge and competencies of students, reduce the dropout rate and increase the success of training, develop a system of feedback and interaction between teachers and students, and improve the position in the ranking of educational institutions and programs.

The role of implementers should be the Israeli Ministry of Education and educational institutions at all levels, which develop and implement standards and monitor their compliance. Educational agencies and expert organizations that can conduct audits and evaluate the quality of educational programs. Faculty actively involved in professional development and the introduction of innovations in the educational process.

The structure of actions in this area is presented in Table 3.9.

**Table 3.9. Structure of the action “Improving the quality of education and the learning process”**

Action	Tool	Expected Result
Development and implementation of quality standards	-standardization of educational programs without loss of individuality -teacher certification -assessment standards	improving the quality of education and its compliance with modern standards, providing graduates with the necessary knowledge and skills for successful adaptation in modern society
Assessment and monitoring of education quality	-electronic monitoring systems -methods of online data collection and analysis	establishing effective monitoring mechanisms that will allow you to quickly respond to changes in the educational environment and continuously improve the quality of educational services
Teacher professional development	-joint interactive scientific research	increasing the professional competence of teachers, more effective teaching and stimulating innovation in the educational process
Innovative teaching methods	- VR, AR technology -interactive online platforms	creating a modern and adaptive education system that promotes the active participation of students and the formation of critical thinking

Source: developed by the author

A focused commitment to improving the quality of education helps to provide students with deeper knowledge, the development of critical thinking and the formation of skills necessary for successful adaptation to the rapidly changing educational conditions in the market.

4) The fourth action “Development of information infrastructure” sets the main task of creating and developing an information base, technologies and infrastructure in the educational environment to increase the efficiency of learning and management of educational processes <sup>229</sup>. The main activities of this action are the following:

- ✓ Digitalization of educational materials and resources through the introduction of electronic and interactive educational materials, development of electronic libraries and databases in the Israeli education system.

- ✓ Improving the use of online education by developing our own platforms for remote access to educational resources within individual educational institutions.

- ✓ Development of infrastructure for data collection and analysis, which implies the creation of systems for collecting and analyzing data about the educational process, as well as the implementation of a learning analytics management system to improve the efficiency and quality of learning.

- ✓ Development of digital skills of students and teachers - training students and teachers in the use of modern information technologies, as well as the integration of digital skills into

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<sup>229</sup>MASHAL, L. Integrating digital knowledge in teaching systems as grounds for developing knowledge economy. In: *Revistă științifică co-practică Relații Internaționale Plus*, Chisinau. Chisinau Republic of Moldova, Nr. 2(22), 2022, pp. 49-55. ISSN 1857-4440. Available at: [https://iap.gov.md/images/publicatii/revista\\_ri/2\\_2022.pdf](https://iap.gov.md/images/publicatii/revista_ri/2_2022.pdf)



educational programs.

The expected results are significant and include: accessibility and ease of use of digital educational resources; increasing opportunities for independent learning for students; effective use of data to improve the educational process; development of a learning environment focused on modern information technologies.

The following stakeholders can act as performers: technical specialists and IT specialists in educational institutions, responsible for the development and maintenance of infrastructure; Ministry of Education and educational organizations that develop strategies and policies in the field of digitalization of education; manufacturers of educational technologies and software products that provide tools and resources for digital learning.

The structure of actions in this area is presented in Table 3.10.

**Table 3.10. Structure of the action “Development of information infrastructure”**

Action	Tool	Expected Result
Digitalization of educational materials and resources	-electronic and interactive educational materials -development of electronic libraries and databases in the education system -educational games	increasing the availability of educational materials, stimulating interactive learning and improving the quality of education through modern electronic resources
Improving the use of online education by developing our own platforms for remote access to educational resources	-virtual audiences - distance learning platforms	effective use of online education to ensure flexibility and accessibility of learning, as well as the creation of innovative formats of educational interaction
Development of infrastructure for data collection and analysis	-learning analytics management systems -use of artificial intelligence	improving data-driven decision making in education, increasing the efficiency of the educational process and personalized learning approaches
Developing digital skills of students and teachers	-courses on digital technologies -integration of digital skills into educational programs	creating an educational environment that promotes the development of digital competencies of students and teachers, which will ensure successful adaptation to the digital environment

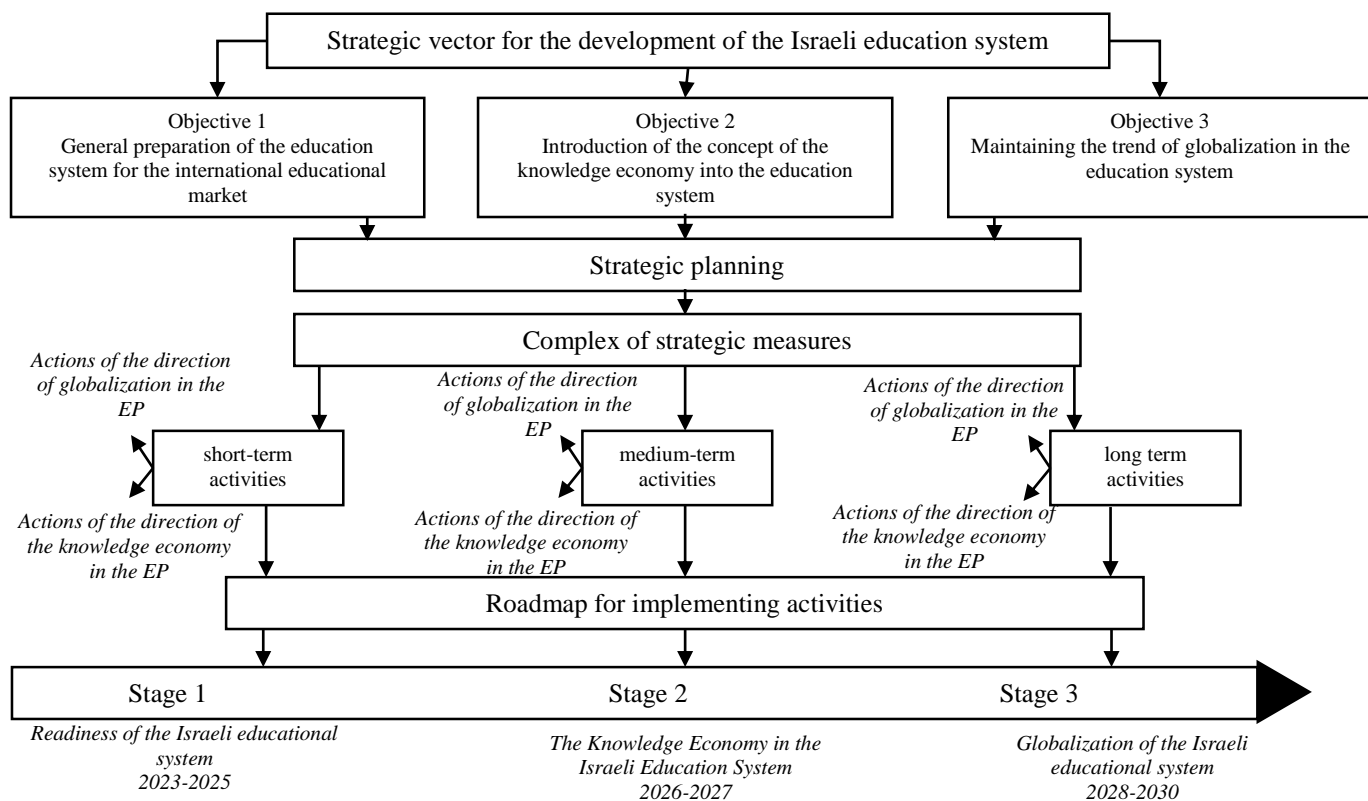
Source: developed by the author

This action addresses the problem of limited access to modern educational technologies and resources. The events themselves are aimed at providing students and teachers with more effective use of innovative teaching methods, digitalization of educational materials and improved access to educational resources, which ultimately contributes to a modern and high-quality educational process <sup>230</sup>. Thus, both directions are interconnected and aimed at creating a balanced system that

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<sup>230</sup> MASHAL, L. Teacher training in globalization world. In: *Vector European*. Chisinau, 2019, no. 3. pp. 79-82. ISSN 2345-1106. Available at: [https://ibn.idsi.md/ro/vizualizare\\_numar\\_revista/116/4270](https://ibn.idsi.md/ro/vizualizare_numar_revista/116/4270)

takes into account both global and Israeli-specific aspects in the field of education and the knowledge economy. The emphasis on globalization and the knowledge economy in education policy allows the model to remain relevant and competitive in a changing global educational and economic landscape. The actions of the model are limited to **the strategic vector of development of the model**, which includes strategic Events. Strategy in the context of this model is a type of plan that allows you to achieve a position in the market and achieve a set goal. The model developed by the author is aimed, among other things, at improving existing education policy. It defines the guidelines and rules for making organizational decisions. While a strategy describes an approach to achieving specific objectives of the model. The approach forms the concept of strategy. It consists of long-term plans, areas of activity, and activities designed to be implemented within the educational system. These activities represent the main practical cores through which the value of the model is realized. And a clear definition ensures focus on key aspects of change in the education system. The strategic vector of development of the model is schematically presented in Figure 3.5.



**Figure 3.5. Strategic vector of development of the model for introducing the concept of the knowledge economy into Israeli educational policy, taking into account globalization processes in the global education market**

Source: developed by the author

The strategic vector of development of the model for introducing the concept of the knowledge economy into Israeli educational policy is an important and promising initiative. Taking into account the globalization processes in the world education market, Israel expresses a clear focus on innovative teaching methods, integration of technologies, and the development of qualified personnel ready for modern challenges. It is important to consider the need for a dynamic and adaptive approach that can effectively respond to changing conditions in the global arena of education and innovation.

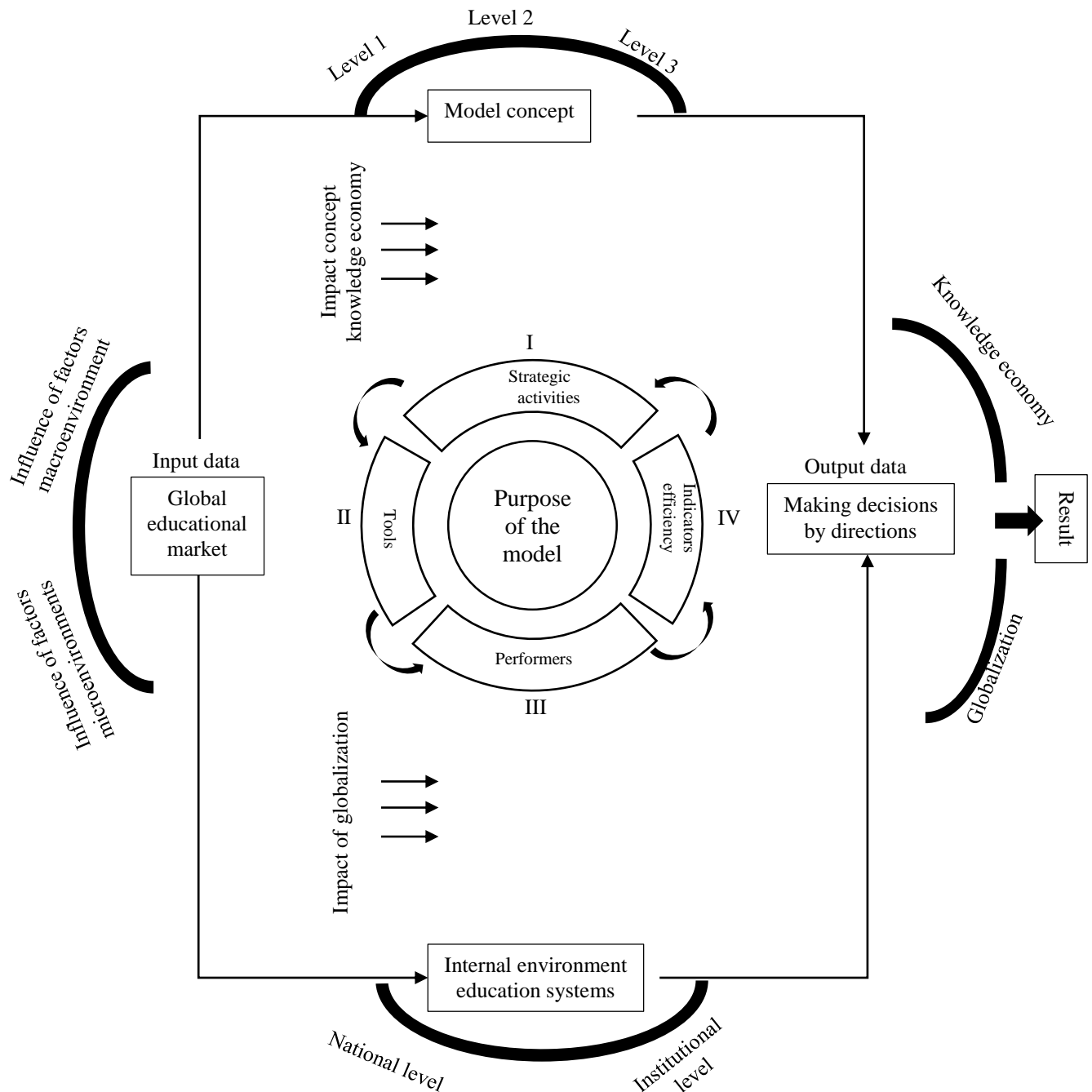
This strategic vector in the model's development aligns with Israel's commitment to fostering innovation in teaching methodologies, technology integration, and the cultivation of a skilled workforce equipped to tackle contemporary challenges. Embracing this forward-looking approach positions Israel at the forefront of adapting to dynamic global conditions in education and innovation. The emphasis on innovation is underscored by a concerted effort to create an educational ecosystem that not only keeps pace with technological advancements but also anticipates and shapes future trends.

Moreover, the model recognizes the paramount importance of international collaboration in achieving its objectives. By actively engaging with Ministries of Education and Finance, business structures, and investment funds, Israel is poised to attract the necessary resources and expertise required for the successful implementation of the knowledge economy concept in its educational policy. This collaborative approach not only enhances the model's robustness but also contributes to the development of a global network for knowledge exchange and mutual learning.

The model's emphasis on qualified personnel reflects a keen awareness of the critical role educators play in shaping the future. Efforts to develop and support skilled educators align with the recognition that their expertise is integral to preparing students for the demands of a knowledge-driven economy. Furthermore, the model's commitment to innovation necessitates a continuous feedback loop, ensuring that educational practices evolve in tandem with the rapidly changing landscape of global education and technology. As Israel advances on this strategic vector, it sets a precedent for other nations seeking to position themselves as leaders in the knowledge economy. The adaptability of the model allows for customization to address unique national contexts while adhering to the core principles of innovation and collaboration.

The most important element of the second level of the model is the development of **a mechanism for implementing the model**. This mechanism includes the identification of executors at each stage of implementation, the formation of strategic activities and, thus, the creation of a specific plan that will ensure the successful implementation of the concept of the knowledge economy in the country's educational policy. This entire process is aimed at creating a

sustainable and adaptive structure capable of effectively responding to the challenges of the modern educational landscape, which is presented in Figure 3.6.



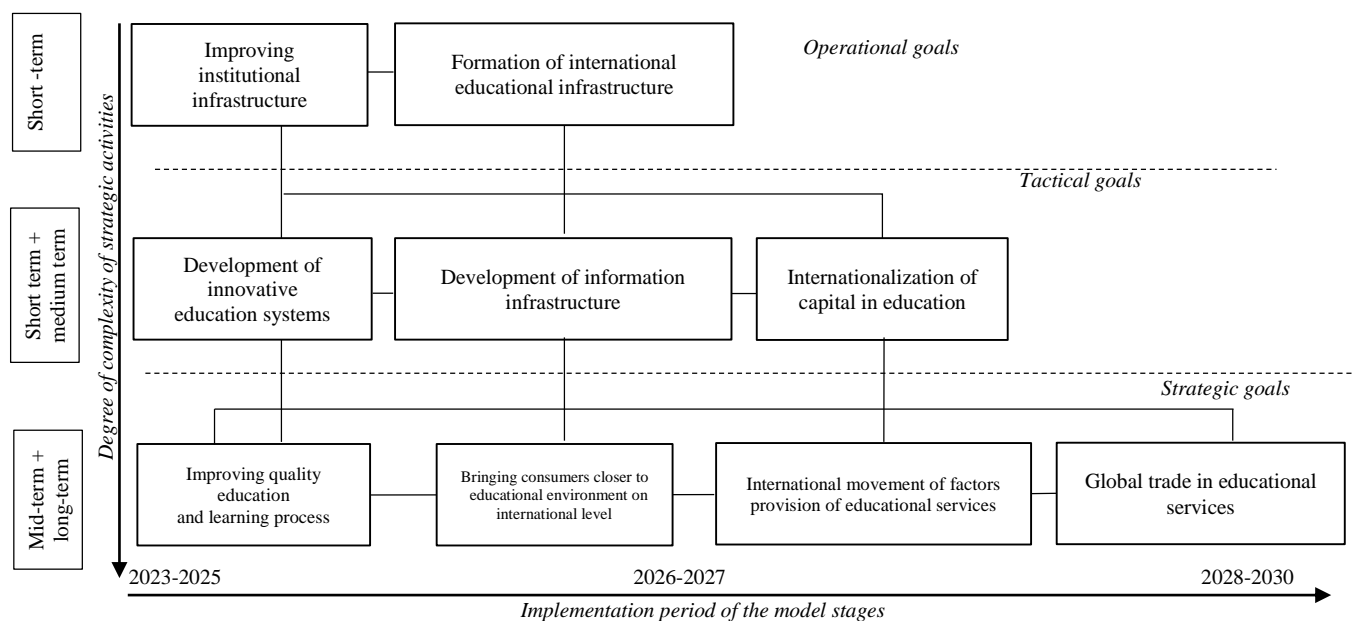
**Figure 3.6. The structure of the mechanism for implementing the model for introducing the concept of the knowledge economy into the educational policy of Israel, taking into account globalization processes in the world education market**

Source: developed by the author

The mechanism developed by the author is presented in the form of a closed loop and

emphasizes the interaction and influence of the two directions on each other (globalization and the knowledge economy) in the field of education. The implementation of the model is particularly influenced by the global market and the processes occurring on it (the influence of macro- and microenvironmental factors). The implementation of the goal of the mechanism (the goal of the mechanism corresponds to the goal of the model) is possible thanks to a set of strategic measures implemented by specific performers using the tools proposed by the author. Based on the results of the implementation of activities, it is important to assess the effectiveness of the model mechanism.

The author has developed **a road map for the implementation of activities**, which is included in the mechanism for implementing the model. A roadmap is an action plan that defines the sequence of steps and key milestones to achieve a specific goal or implement a specific project. In the context of the model under consideration and the strategic actions proposed by the author, the roadmap includes steps to implement changes, improve processes and achieve goals within a certain time frame (years), which is presented as a diagram in Figure 3.7.



**Figure 3.7. Roadmap for implementing the model for introducing the concept of the knowledge economy into Israeli educational policy, taking into account globalization processes in the global education market**

Source: developed by the author

The road map developed by the author was created with the aim of systematizing and consistent implementation of the proposed activities. Each stage of the plan represents a key stage in introducing changes to the Israeli educational system, ranging from preparatory work and assessment of the current state to the step-by-step implementation of innovative methods and

evaluation of their effectiveness. These steps are linked to two directions – globalization and the knowledge economy. Each stage is strategically built taking into account the logical sequence and relationship with previous and subsequent steps, which ensures a balanced and sustainable development of the educational system in accordance with the goals, objectives and principles at the first level of the model.

In this way, the roadmap serves as a tool for organizing and coordinating efforts, providing a clear picture of how the model's three stated objectives will be achieved. The roadmap is being developed to coordinate efforts to achieve the final result for the Israeli education system in the context of globalization. In the future, it can be finalized and include a more detailed description of the stages, resources, deadlines, responsible persons, success criteria, etc.

The second level of the model represents a key stage at which the Israeli education system is being formed, taking into account the relationship between the directions of globalization and the knowledge economy. The implementation of activities in these two areas highlights the need to constantly adapt and update the structure in response to modern challenges.

The structure of the proposed activities supports flexibility and relevance, as it can evolve over time, introducing new ideas that meet the requirements of the knowledge economy in education. The directions are updated in accordance with current realities and developments in the educational sphere.

The mechanism for implementing directions is a closed cycle, which, however, is not limited to one-dimensional movement, but develops in a spiral. This emphasizes the nonlinearity and dynamism of the process, which is capable of evolving and expanding, taking into account new requirements and challenges of the educational market.

The road map for the implementation of activities becomes an important vector and tool aimed at achieving the main goal - successful integration into the global educational space through the introduction of the concept of the knowledge economy into the Israeli education system. This action plan provides a systematic approach to change, structuring steps and ensuring sustainable development of the educational system.

### **3.3. Assessing the effects of Israeli educational policy in the context of globalization**

In the context of rapid development of society and increasing globalization, educational policy is becoming a key tool for shaping future national potential. Israel, in an effort to ensure the sustainable development of its country, pays special attention to the education sector. This issue becomes especially relevant in the modern world, where information technology, economic competition and sociocultural changes impact educational systems.

In this context, assessing the effects of Israeli educational policies represents an important research direction. The Israeli educational experience attracts attention with its unique combination of tradition and innovation, multicultural approach and emphasis on technological development. These factors influence not only the level of knowledge and skills of students, but also the social and economic development of the country and the labor market <sup>231</sup>.

The author has developed the structure of an algorithm for assessing the effectiveness of the model for introducing the concept of the knowledge economy into Israeli educational policy, taking into account globalization processes in the global education market. This algorithm will allow, when conducting an assessment of effectiveness, to identify trends, challenges and prospects associated with education in the context of globalization, to identify those elements that made the Israeli education system successful in the context of the challenges of the knowledge economy.

Assessing the effectiveness of the model is the third stage of the model proposed by the author and plays an important role in determining the success and applicability of the developed model. At this stage, the results obtained from applying the model are analyzed to determine its long-term impact and compliance with the set goals.

An important aspect of this stage is the development of evaluation criteria and indicators that reflect the key results of the successful application and implementation of the model in educational practice in Israel. These criteria include aspects such as predictive accuracy, resource efficiency, end-user satisfaction, and compliance with the model's design goals.

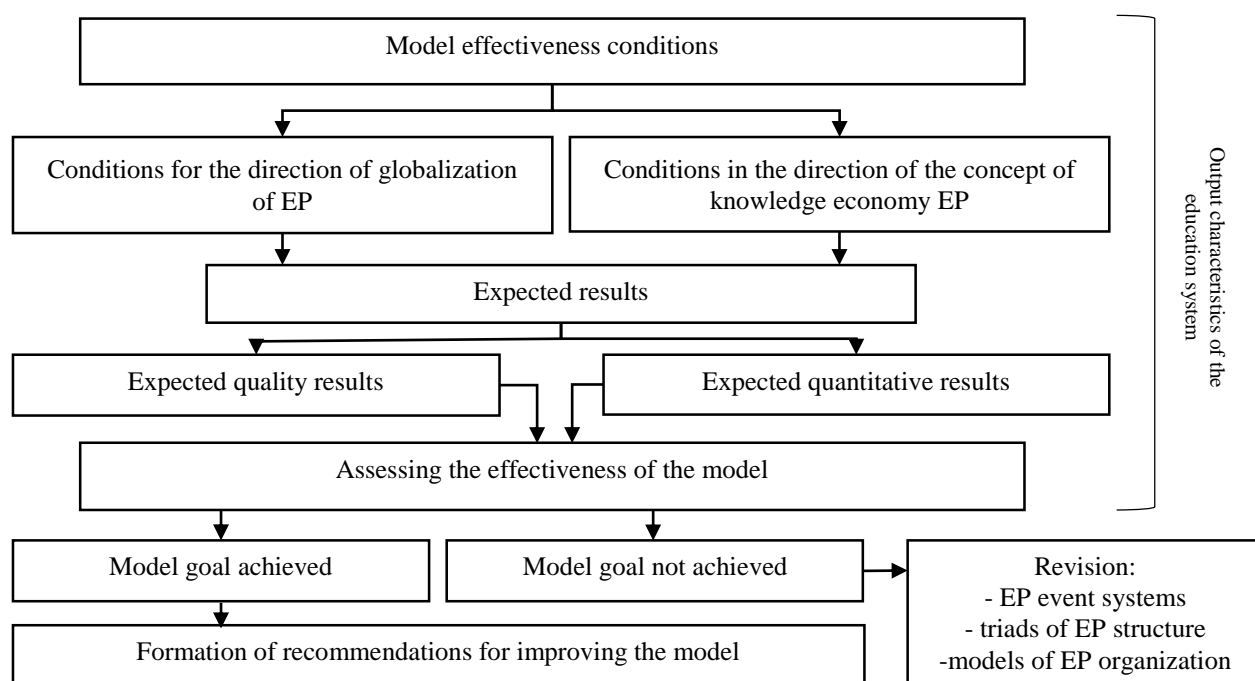
In addition, as part of assessing the effectiveness of the model, an analysis of possible negative consequences and risks associated with the use of the model is carried out. This is necessary to ensure the stability and security of the model in different contexts of use. In light of constant changes in the technological and social environment, it is also necessary to take into account the adaptability of the model, its ability to change in response to new challenges and requirements. Assessing the effectiveness of the model thus becomes an integral part of the process of its improvement and the development of Israeli educational policy as a whole. According to the author, the developed performance assessment system should not be static and unchanging. As the model levels pass (three levels), the research field may change over time, the conditions for using the model may change, new parameters may be introduced, etc. In this regard, the general algorithm and method of assessment remains, but, for example, indicators and assessment criteria

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<sup>231</sup> MASHAL, L. Occupational characteristics during a period of change, in the Israeli labor market. In: *Peoples friendship university of Russia (RUDN University) institute of foreign languages*, Moscow, 2019. pp. 122 – 133. ISBN 978-5-209-09744-0. Available at: <https://elibrary.ru/item.asp?id=41859567>

change.

The block diagram of the third stage of the “Performance Assessment” model is presented in Figure 3.8.



**Figure 3.8. Block diagram of the third stage of the model “Assessing the effectiveness of the model”**

Source: developed by the author

The use of the author's methodology for assessing the effectiveness of the model allows experts and all interested parties in analytical conclusions on research into the concept of the knowledge economy in educational policy in the context of globalization and its role in the regional economy of Israel, to obtain original results that do not contradict the observed reality and specify the theoretical results of the research.

Developing a model with a clear focus on achieving a specific outcome assumes that the conditions for effectiveness have been introduced at the early stages, starting with idea generation, goal formation and task definition. This approach ensures targeted progress towards the set goals and ensures that the model meets the expectations and requirements of the Israeli education system and the challenges of the global market. The conditions for the effectiveness of the model correspond to the conditions for the effectiveness of two directions:

- conditions of effectiveness in the direction of globalization of the model;
- conditions of efficiency in the direction of the knowledge economy of the model.

The conditions for the effectiveness of a globalization-oriented model imply that the system must be flexible and adaptable to different cultural and social contexts. This includes adapting the



model to a variety of languages, cultures, and technology standards to facilitate successful implementation in many different areas and markets.

On the other hand, efficiency conditions in the context of the knowledge economy focus on the model's ability to generate and use new knowledge, promoting innovation and improving the overall intellectual domain. This includes a strengthened educational component, support for research and the development of technologies that promote economic growth and competitiveness.

Thus, taking into account the conditions of efficiency in the direction of globalization and the knowledge economy becomes the foundation for creating an assessment of the effectiveness of the model. Conditions for effectiveness in two directions form the qualitative and quantitative expected results from the application of the model. The expected results become the starting point for assessing the effectiveness of the model. After evaluating the effectiveness, a conclusion is made about whether the goal of the model has been achieved or not (to make the Israeli education system not only prepare students for current requirements, but also inspire innovation (knowledge economy), ready for change and global competition in the long term (globalization). If the goal is achieved, recommendations for improving the model are formed, new ambitious goals are set, the structure of the event is revised, etc. If the goal is not achieved completely or partially, then one of three actions occurs:

- revision of the system of educational policy measures;
- revision of the triad of educational policy structure;
- revision of the model of educational policy organization.

When the goal of an educational policy is not achieved in whole or in part, there is a need for re- analysis and subsequent adjustments to the model itself. The three actions proposed by the author represent logical steps that can be taken to improve the effectiveness of educational policy and check for errors that may have been made during the development and implementation of the model.

1. Revision of the system of educational policy measures. This action option includes re-analyzing the results of applying the model, identifying problems, adjusting strategic measures, and selecting more advanced methods for monitoring and controlling effects:

- analysis of the model results - assessment of the effectiveness of current activities and their impact on achieving the set goals;
- and identification of problems - in identifying specific problems that impede the achievement of the goal;
- adjustment of strategic activities - making changes to the strategy, reviewing priorities and reorganizing activities to eliminate identified deficiencies.

- Improved monitoring - introducing a more effective monitoring and evaluation system for continuous monitoring and analysis.

2. Revision of the triad of educational policy structure (goal, means, results):

- analysis of the structural components of the first level of the model (goal, objectives, principles) - and study of the structure of educational policy, including laws, programs and methods, to identify the reasons for insufficient effectiveness at the initial level of development;

- revising the means of implementing the model - updating curricula, introducing innovations and new technologies to improve the quality of education;

- revision of the expected results of the model – prescribing real and measurable qualitative and quantitative results of the model's implementation.

3. Revision of the educational policy organization model includes the following actions:

- assessment of organizational effectiveness - analysis of the work of education management bodies, their structure and effectiveness in achieving their goals;

- reorganization of management structures - review and optimization of the management structure of the educational system for more effective decision-making;

- personnel training - upgrading the qualifications of educational personnel, introducing modern methods and approaches into the educational process;

- strengthening the feedback system - creating feedback mechanisms to take into account the opinions of stakeholders and ensure their participation in the management process.

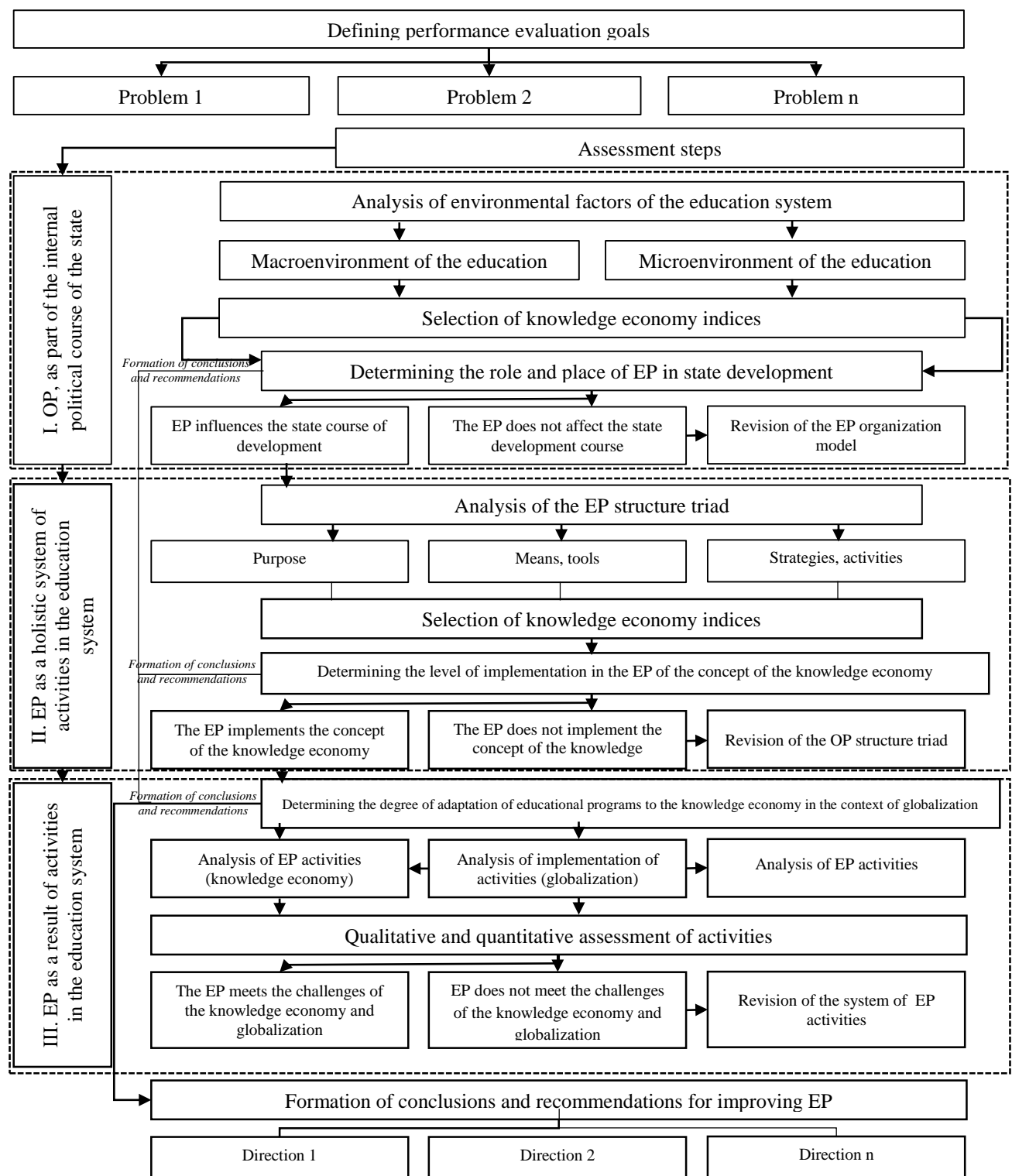
The choice of a particular action depends on the results of the analysis and identification of problems in a particular situation, and often a combination of different measures may be required to best adjust the model to obtain better results.

In the dynamic landscape of educational policy development, the efficacy of chosen actions is contingent upon a nuanced understanding of situational analyses and the identification of specific challenges. It is imperative to recognize that a tailored approach, combining various measures, is often necessary to optimize the model and yield superior outcomes. The iterative nature of policy implementation demands continuous evaluation and adjustment, fostering a responsive and adaptive framework that remains attuned to the evolving needs of the education sector. Flexibility in approach ensures that the model can effectively address diverse contextual factors and contribute meaningfully to the overarching goals of advancing education in the knowledge economy.

The structural model of the third level of the model would be incomplete without an algorithm for assessing the effectiveness, which determines the degree to which the goal of the

model has been achieved and determines further actions and guides in terms of forming recommendations for improving the model and its new implementation in other conditions of the international educational market. A main component of the third-level structural model, the effectiveness assessment algorithm serves as the linchpin, providing a holistic view of the model's success in achieving its overarching goals. Beyond being a diagnostic tool, it plays a pivotal role in guiding future actions and informing recommendations for refining and enhancing the model. This iterative feedback loop is essential for ensuring the model's adaptability to varying conditions within the international educational market, thereby maximizing its impact and relevance.

According to the third level of the structural model, the main goal of the efficiency assessment algorithm is to determine the degree of achievement of the goal and the implementation of the model's objectives. This algorithm serves as a key tool for objectively analyzing the results and identifying those aspects that could demonstrate the effects of the model. The developed algorithm for assessing the effectiveness not only helps in determining the degree of success of the model, but also provides the basis for further improvements, adaptation to new conditions and application of the model in the context of the already full presence of the Israeli education system in the international educational market. Functioning as a vital analytical tool, this algorithm impartially dissects the outcomes, identifying areas that showcase the tangible effects of the model. Beyond merely assessing success, the developed algorithm serves as a foundation for ongoing enhancements, ensuring adaptability to new conditions and facilitating the model's application within the global educational market where the Israeli education system is already firmly established. On Figure 3.9 visually encapsulates the intricate details of this evaluative algorithm, providing a comprehensive overview of its strategic role in continually refining and optimizing the model for sustained success.



**Figure 3.9. Algorithm for assessing the effectiveness of the model introducing the concept of the knowledge economy into Israeli educational policy, taking into account globalization processes in the global education market**

Source: developed by the author

The presented algorithm for assessing the effectiveness of the model is the author's development and is aimed at obtaining comprehensive data on the state of educational policy

during and after the application of the model proposed by the author. The algorithm is divided into three successive stages: assessment of educational policy as part of the internal political course of the state; assessment of educational policy as an integral system of activities in the education system; assessment of educational policy as a result of activities in the education system. These stages need to be implemented sequentially, since each of them represents a unique assessment perspective and examines educational policy from three different perspectives (from the national level to the institutional level). In this regard, the evaluation is convenient because conducting such an evaluation immediately assesses the effects of the model for the State of Israel and for the educational institutions included in the education system. The implementation of these stages consistently provides an integrated and comprehensive approach to assessing the effectiveness of educational policy, allowing one to identify problems at different levels and take targeted measures to solve them.

The first stage of the algorithm **“Evaluation of educational policy as part of the internal political course of the state”** is aimed at an in-depth analysis of educational policy in the context of the general state course. This assessment stage represents a fundamental step in understanding how the educational system corresponds to the strategic directions and goals defined by the internal government policy.

The purpose of the first stage is to analyze educational policy in the light of the internal political course of Israel, aimed at ensuring not only compliance with current goals and priorities, but also at creating a sustainable basis for the effective implementation of education policy that promotes social development in accordance with established government objectives.

At this stage, a large-scale analysis of environmental factors of the education system (macro- and microenvironment) is carried out. The results of the analysis show which indicators of the knowledge economy are selected for assessment at this stage. The state level of implementation of the model implies a response to the challenges of the external educational environment. The analysis will show the place of educational policy in the state development of Israel:

- educational policy influences the state course of development;
- educational policy does not influence the state course of development.

In the case of the associated implementation of educational policy with the state vector of development without influencing the latter, scientific justification suggests an urgent need to rethink the model of organizing educational policy. This need is due to the fact that the effective functioning of the educational system requires strict compliance of its methods and priorities with state development guidelines, which in turn is a key component of ensuring harmonious interaction with national development strategies.

This stage of the assessment algorithm is aimed at a systematic and comprehensive assessment of educational policy in the context of the internal political course of the state. The process involves the use of various analysis tools by education experts, such as PEST analysis and SWOT analysis, but with a special focus on integrating data obtained from knowledge economy indices research. The author presents in more detail how to use these tools during the assessment:

1. PEST analysis

- Political factors. The expert assesses the impact of political decisions on the educational system. This may include legislative changes, stability of the political environment and the influence of political figures on education.

- Economic factors. Economic conditions affecting education, such as financing, budget constraints, investments in education and their impact on the quality of education, are analyzed.

- Sociocultural factors. Sociocultural trends and factors influencing the educational environment, such as demographics, sociocultural changes, and diversity of students and teaching staff, are assessed.

- Technological factors. Technological innovations, their implementation in educational processes, access to modern educational technologies and their impact on the effectiveness of learning are explored.

2. SWOT analysis

- Strengths. The advantages of current educational policies are identified, for example, high quality teaching, innovative programs, successful educational research.

- Weaknesses. The shortcomings and limitations in the educational system, such as insufficient funding, low level of access to education, and management problems are analyzed.

- Opportunities. Prospects for improving educational policy are considered, such as opportunities for introducing new technologies, developing international partnerships, etc.

- Threats. Factors that can negatively affect the educational system are identified, such as economic crises, changes in legislation, competition with other countries.

3. Knowledge economy indices

- The expert collects and analyzes data from various indices, such as the education index, innovation index, competitiveness index. These indices provide quantitative information on various aspects of education and innovation in a country.

- The data is compared with those of benchmark countries that serve as a model for Israel. This allows us to identify the strengths and weaknesses of education policies in comparison with best practices globally.

These steps help experts develop a comprehensive understanding of the current state of the

education system, identify key factors influencing it, and develop recommendations for improving education policy in the context of domestic government policies.

When identifying the compliance of the educational policy with the state course, the expert assessing the effectiveness of the model moves on to the next stage of analysis. This transition is carried out due to the fact that the achieved compliance indicates a high degree of consistency of educational policy with the intended state strategic directions of development, which in turn provides the basis for a more in-depth and detailed study of the impact of this policy on educational processes and achieved results.

The second stage of the algorithm is **“Assessment of educational policy as an integral system of measures in the education system.”** At this stage, an in-depth analysis of educational policy is carried out as an integral system, including various activities in the education system. The key focus of this stage is to evaluate the effectiveness of specific programs and strategies, as well as their impact on educational processes and outcomes.

The purpose of the second stage is to provide a deeper understanding of the effectiveness of education policies through an analysis of the structure, resources and impact of interventions in the education system. This allows you to identify successful practices, as well as identify areas requiring improvements and adjustments. This assessment stage is aimed at structural analysis, namely the triad of educational policy structure: goal, means, tools, strategies and activities. To assess each element of the structure, appropriate measures are selected (for example, knowledge economy indices).

Thus, this stage assesses the quality of the diagnostic and goal-setting level of the model, and also determines the degree of implementation of the concept of the knowledge economy in educational policy. The assessment process involves the use of appropriate measures, such as knowledge economy indices, for each element of the framework.

The author proposes the use of a goal tree, a resource tree and a decision matrix as tools at this stage of performance assessment. Goals must be consistent with available resources, and then decisions must be made. Evaluating the effectiveness of this stage will help assess how effectively the process was carried out.

The role of the expert will be critical. The expert is assigned functions and responsibilities in the context of applying the goal tree, resource tree and decision matrix of the following nature:

1. Development of a goal tree

- The assessor must have a thorough understanding of the objectives and strategy for performance measurement. He can participate in the development of the goal tree structure, identifying key goals and sub-goals to be achieved during the assessment process.

2. Aligning goals with resources

- The expert must be able to evaluate available resources (financial, human, technological, etc.) and ensure that the objectives of the performance assessment are consistent with the available capabilities.

3. Determination of performance criteria

- The expert can help determine the criteria by which performance will be measured. These can be quantitative indicators such as profit, deadlines for completing tasks, product quality and others.

4. Development of a resource tree:

- Together with the team, the expert can identify the necessary resources to achieve the goals. This may include budget allocation, staff mobilization, equipment procurement and other resources.

5. Decision matrix

- The expert can actively participate in creating the decision matrix, helping to determine the weighting coefficients for each criterion and assessing the impact of decisions on achieving goals.

6. Expert opinion and assessment

- Based on his experience, the expert can provide expert opinion on proposed solutions and their expected impact on efficiency. This may be particularly important in situations where standard criteria cannot fully capture the complexity of the situation.

7. Monitoring and analysis of results

- The expert can participate in the process of monitoring and analyzing results, checking to what extent the goals have been achieved and providing recommendations for adjusting the strategy, if necessary.

Thus, the role of the expert in this context is to ensure the quality development and implementation of the performance assessment process, taking into account both the goals and the available resources.

Based on the results of this stage, experts come to one of two conclusions:

- the concept of the knowledge economy is fully implemented in educational policy;
- the concept of the knowledge economy is not implemented in educational policy.

In the second version of the conclusion, the transition to a revision of the triad of the structure of education policy, since most likely the actions were violated when setting the goal of the model and selecting the appropriate tasks. At the first conclusion, there is a transition to the last stage of efficiency assessment, where specific activities of the model will be assessed.

The third stage of the algorithm is **“Assessment of educational policy as a result of**



**activities in the education system”**. At the third stage of the algorithm, an assessment of educational policy is carried out as a result of implemented activities in the education system, while the basis of this stage is the analysis of the final results of educational policy, measuring the achievement of set goals through specific activities, as well as assessing its impact on the educational community of the country and occupying a place on international educational market.

The purpose of the third stage is to comprehensively analyze the results of educational policy and its impact on the educational community and society as a whole. This stage is key for forming final conclusions about the effectiveness of the decisions made and determining further directions for the development of the educational system within the framework of the model developed by the author.

The author believes that after a positive conclusion regarding the implementation of the concept of the knowledge economy within the framework of the model, the role and influence of globalization processes in the educational environment on the model should be assessed. For this purpose, an analysis of educational policy measures in the areas of both the knowledge economy and globalization is carried out. It is determined what exactly has been done in practice, which activities received a response from their target audience, which activities did not achieve the desired results. Qualitative and quantitative assessment of activities allows you to obtain numerical data and support them with descriptions and explanations. Based on the results, a conclusion is drawn about whether educational policy meets the challenges of the knowledge economy and globalization. If the answer is negative, the set of education policy measures is reviewed. Among the probable reasons may be a bias in one direction or another (either towards the knowledge economy or globalization). Therefore, the results of the analysis may show partial compliance with two modern challenges of the educational market (globalization and the knowledge economy). A positive response about the compliance of the policy, conclusions and recommendations are formulated for further improvement of the educational policy model, if necessary, either in the process of passing the roadmap or at the end of the path. Recommendations are formulated in the form of specific applied areas.

The development of criteria for assessing the effectiveness of a model for integrating the concept of the knowledge economy into Israeli educational policy, taking into account globalization processes, involves the integration of many indicators into an analytical form. The specifics of the assessment include consideration of the following key aspects:

- **Knowledge Index** reflecting the level of knowledge and education in a country, can be a key performance indicator. This index may include standardized test scores, educational attainment, scientific research, and other related data;

- **Level of global competitiveness** assessing how the model affects Israel's level of global competitiveness in the field of education and innovation;

- **The degree of integration into the global educational community** includes the quantity and quality of international scientific and educational partnerships, participation in international projects and student exchanges;

- **Economic indicators.** Education-related economic indicators such as employment rates, incomes, and investment in scientific research.

- **Assessing the level of innovation** - studying innovative approaches in the educational system, developing new technologies, and integrating innovative methods into teaching.

Developing criteria for assessing the effectiveness of a model for integrating the concept of the knowledge economy into Israeli educational policy is a complex and multifaceted process that requires attention to various aspects. Integrating multiple indicators into an analytical form allows for a comprehensive assessment, taking into account both qualitative and quantitative aspects.

The author recommends that this assessment be carried out regularly, at regular intervals, in accordance with the implementation of the model roadmap, in order to track dynamic transformations. Performance evaluation can be carried out in parallel with the process of model implementation.

The basis for selecting indicators for assessment is the very structure of Israel's educational policy and the model that was developed by the author. The main point is to develop performance indicators that are closest to the selected areas of development, goals and objectives of educational policy. Indicators can be formed both for educational policy, its goals in general, and for its individual directions, in particular.

Indicators or indicators are means by which one can gain insight into the current state of the education system and inform the educational community throughout the country about it. It is important to understand that an indicator is not just data in a mathematical expression. They provide information designed to study processes influenced by Israeli educational policies. Therefore, it is important not to introduce simple statistical data into indicators, which may lead to the erosion of the idea of a systematic approach to indicators.

The indicators recommended by the author for use in assessing the effectiveness of the model should:

- correspond to the task;
- generalize or summarize information without distorting it;
- be structurally and organizationally connected with other indicators, which will allow for a general analysis of the state of educational policy;

- be accurate and comparable;
- be trustworthy and reliable.

In addition, indicators must evaluate the state to the set goal (goal of the model), identify problem areas, answer questions that arise for the researcher, compare current readings with reference values or with similar readings for other periods preceding the measurement. Indicators play one of the main roles in monitoring and assessing the effectiveness of the educational system and the implementation of the model proposed by the author.

To develop indicators, it is important to identify the most significant and interesting phenomena and processes to be assessed. The author proposes to use knowledge economy indices as universal indicators. Indicators must provide a clear and precise target description of the model. A general overview and assessment is important; it should set areas of comparison when analyzing various phenomena. It is known that some phenomena in the educational system can be tracked only by observing for a long time, and for some, conclusions can be drawn by direct recording.

In addition to their descriptive function, indicators serve as elements for analyzing the ongoing educational policy. Properly selected groups of indicators will allow us to come to an understanding of the cause-and-effect relationships of changes occurring in the education system during the implementation of education policy. It is important that the selected indicators allow for a comprehensive assessment of the various effects, influences and aspects of the model.

The algorithm developed by the author for assessing the effects of the model solves an important problem. It allows you to systematize and analyze the various aspects of the model, providing a comprehensive assessment of its impact. It is important to note that the algorithm takes into account various aspects, such as the level of knowledge, global competitiveness, integration into the global educational community, economic indicators and the level of innovation. This allows for a deep understanding of the model's impact on various areas of education and the economy.

The results of the application of the performance assessment algorithm serve as a source for making informed decisions in the development and improvement of educational policy in Israel. They provide a basis for adjusting strategies and formulating long-term plans aimed at improving the effectiveness of the educational system in the context of the global market.

### **3.4. Conclusions to Chapter 3**

1. The author made a practical conclusion that globalization is a determinant of the knowledge economy. The globalization trend inherent in the knowledge economy is not only inevitable, but also entails the globalization of educational markets, turning higher education into

a key element of the knowledge economy.

2. The need for modeling the knowledge economy in the context of Israeli educational policy is identified. The current relevance of the theoretical and practical aspects of introducing the concept of the knowledge economy into Israeli educational policy emphasizes the need to create a model that can not only theoretically comprehend changes in the field of educational services, but also provide a practical tool for adapting to the influence of the knowledge economy in the global educational market.

3. The model developed by the author for introducing the concept of the knowledge economy into Israeli educational policy takes into account globalization processes in the global education market and is a system of three successive levels: diagnostics and goal setting, structure formation and assessment of the effectiveness of the model. Each level performs unique tasks, providing a comprehensive approach to introducing the concept of the knowledge economy into Israeli education policy, and can also serve as a guide for improving the country's future education policies and strategic development vectors.

4. Separate structural diagrams of three levels of the model for introducing the concept of the knowledge economy into the educational policy of Israel have been developed, taking into account globalization processes in the world education market. At the first level, issues of diagnosing the education market are resolved and the goals of the model are set. This takes into account national development strategies, as well as a focus on key areas in the field of education and innovation. The second stage includes the development of the structure of the model in two main areas: globalization and the knowledge economy. The third level is an assessment of the effects of the developed model both in the future, at the end of the period of its application, and during application, as we pass through all levels of the model.

5. The proposed specific activities are aimed at strengthening globalization and introducing the concept of the knowledge economy into Israeli educational policy, ensuring more effective participation in foreign educational markets.

6. The developed roadmap of the model will become the basis for strict adherence to time, resource and management frameworks in the process of implementing a set of proposed activities.

7. A flexible algorithm for assessing the effectiveness of the model, proposed by the author, will allow you to systematically analyze the results and make adjustments, ensuring adaptation to changing conditions and maintaining the stability of the model in the long term.

## GENERAL CONCLUSIONS AND RECOMMENDATIONS

Research devoted to the economy of knowledge and educational policy in the context of globalization turned out to be very relevant. The results revealed key aspects of the innovative development of the country's educational system, highlighted problems and gaps, and emphasized the importance of adapting global practices to the unique context of Israel in its desire to implement the concept of the knowledge economy in the country's educational policy for the most effective entry into the international educational space. The results of the study confirmed the main research hypothesis, which was put forward by the author before starting the scientific and research work on the dissertation research.

This study has had a useful impact by revealing gaps in theoretical concepts, as well as highlighting the lack of clarity in the implementation of educational policies in various countries, including Israel. The identified weaknesses in teacher training, the problems of digital inequality, the slow pace of implementation of information and communication technologies, innovations in the educational process at all levels in Israel, became the subject of attention of the author, providing an opportunity to find practical ways to overcome them.

The purpose of this study was to analyze the relationship between the concept of the knowledge economy and educational policy in Israel under globalization. The main research tasks included identifying innovative practices, analyzing problems in adapting educational policies, strategies, plans, and activities to the context of the global market. The study aimed to identify problems and gaps in the implementation of the concept of the knowledge economy in the Israeli educational system, as well as to propose specific recommendations for improving this process, emphasizing the benefits and positive effects of this process.

Further prospects for this research include the development of specific applied recommendations regarding the tools for each activity provided within the two directions of the model. The relevance of the study is emphasized by the fact that it not only identified problems, but also provided a basis for the development of specific strategies and solutions that contribute to the effective implementation of the concept of the knowledge economy in the Israeli educational system and, as a result, increasing its competitiveness in the global context.

Based on the theoretical and practical research carried out, the author formulated the following **conclusions**:

- The scale of educational policy was revealed, which covers various aspects. This area of social activity, which is of great importance, is created at several levels of the educational system, including international, national, regional, and even within individual educational institutions. A deep theoretical study of these levels and the mechanisms of their interaction becomes an essential

task for a more complete understanding of the phenomenon of educational policy in the context of globalization.

- It has been determined that in the process of formation and implementation of educational policy there are three key participants: the state, the market and educational institutions. Depending on the predominant role of each of them, three main models of educational policy are distinguished: state-paternalistic, liberal and social-corporate.

- It is emphasized that in modern conditions the main task of educational policy is to ensure a high level of education that meets the current needs of the individual, society and the state in the context of globalization and the knowledge economy. This policy, representing the interests of the country's society and reflecting them in a global context, takes into account global development trends in the field of education.

- A variety of approaches to defining the knowledge economy has been discovered. Various researchers and international organizations have presented multidirectional approaches to revealing the essence of the concept of the knowledge economy, aimed at its comprehensive definition. At the same time, the author highlighted the lack of a unified approach, but noted the presence of different theories and definitions, which emphasizes the complexity and versatility of this concept.

- From a methodology point of view, the structure of the concept of the knowledge economy is a cyclical process that covers input and output data. The input process involves the creation and dissemination of knowledge, while the output process involves applying it and increasing competitiveness. The internal structure includes interrelated components such as organizational structure, innovation system, education and training, and information infrastructure.

- The research results emphasize that the problem of assessing the effectiveness of educational policy in the knowledge economy remains relevant and unresolved from a theoretical point of view. The lack of a clear methodology and a precise definition for a given context complicates both theoretical and practical solutions to the problem. Researchers often reduce the process of assessing the effectiveness of education policies to economic or technical assessments focused on quantitative indicators. Performance measurement models associated with the knowledge economy take a systems approach but face uncertainty due to the subjective decisions and judgments of researchers and developers.

- A global analysis of the education system shows that the adaptability of the market model is carried out through the principle of necessary diversity. The social-corporate and state-paternalistic models demonstrate adaptability by involving new actors in educational decision-making, in addition to the state. Civil organizations and the principle of public-private partnership

in financing play a significant role in adaptation, making the social-corporate model one of the most adaptive in the context of globalization and taking into account the peculiarities of the knowledge economy.

- Studying the experience of various countries emphasizes that in the practical implementation of educational reforms in the international education market, in the vast majority of cases, two main difficulties arise: limited resources and the lack of effective mechanisms for implementing reforms.

- Based on the data, it was concluded that globalization provides Israel with a chance to learn from the experience of other countries and introduce advanced teaching methods. It also creates opportunities for international partnerships that can support knowledge sharing and the development of world-class programs. But with all the advantages of globalization in education, the introduction of the concept of the knowledge economy into the Israeli education system requires taking into account its unique features. The process of adapting and implementing the concept of the knowledge economy into Israeli education policy depends on various factors, including political, economic, social and technological.

In order to deepen the process of globalization and integration of the Israeli education system into the international market of higher education services, based on the results of theoretical and practical research, the author formulated the following **recommendations**:

- Researchers, for future study of the process of integrating the concept of the knowledge economy into the education system, are recommended to use the definition of the knowledge economy developed by the author - this is a world process covering the global economy in which social progress and economic growth are achieved through the constant updating of knowledge and its use as a new factor of production.

- The Israeli Ministry of Education is recommended to structure the state approach to the implementation of educational policy through the adoption and implementation of the model introducing the concept of the knowledge economy into Israeli educational policy, taking into account globalization processes in the global education market.

- The Israeli Ministry of Education is recommended to approve at the state level a set of measures, divided into two directions (globalization and the knowledge economy) and enshrined in the road map, as part of ensuring the effective entry of the Israeli education system into the global educational space by adapting educational policy to modern requirements and economic challenges knowledge.

- Public and private educational institutions in Israel are recommended to consolidate and implement, within the framework of institutional strategies, policies, programs, plans, approved

activities at the level of the Israeli Ministry of Education in order to achieve a single two-level vector of development of the education system on the path to full and high-quality entry into the world educational space through the preparation of educational systems, formation of structural aspects of the model and assessment of the effects of this process.

- Israeli educational institutions are recommended to implement a mechanism for implementing the model for introducing the concept of the knowledge economy into Israeli educational policy, taking into account globalization processes in the global education market.

- In a changing environment of educational services and with rising student expectations, assessing the effectiveness of educational policies requires constant improvement. The Ministry of Education and educational institutions in Israel are recommended to use a three-step performance assessment algorithm. It helps measure current status and understand how to improve and accelerate the process of achieving full competitiveness in the international educational arena, using a variety of tools to obtain objective data and analysis to make informed decisions.



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## APPLICATIONS

## Appendix 1

### Evolutionary stages of development of the knowledge economy

Stage	Characteristic stages	Features of formation
Early stage (1950-1960s years)	<ul style="list-style-type: none"> <li>- the emergence of prerequisites for the knowledge economy;</li> <li>- transition to a knowledge economy;</li> <li>- emergence of reasons for studying the knowledge economy.</li> </ul>	<ul style="list-style-type: none"> <li>- active development of higher education and science;</li> <li>- attention to innovation and scientific research;</li> <li>- knowledge technologies.</li> </ul>
The emergence of the concept of the knowledge economy (1970-1990s)	<ul style="list-style-type: none"> <li>- the beginning of the formation of the basic ideas of the knowledge economy;</li> <li>- information is defined as a factor determining the level of competitiveness and productivity of firms;</li> <li>- tasks for the state in the knowledge economy.</li> </ul>	<ul style="list-style-type: none"> <li>- privatization of state property;</li> <li>- Central planning and management of bureaucracy are ineffective, since the basis of the knowledge economy is innovation, possible only through private enterprise</li> </ul>
Support for the development of the knowledge economy by organizations and international institutions (1990-2000s)	<ul style="list-style-type: none"> <li>- international organizations actively research and support the development of the knowledge economy;</li> <li>- emphasis on studying the process of interaction between elements of the knowledge economy.</li> </ul>	<ul style="list-style-type: none"> <li>- innovative strategies and training as key components of the knowledge economy.</li> </ul>
Digital revolution (1990-2000s)	<ul style="list-style-type: none"> <li>- the era of Internet technologies is happening;</li> <li>- knowledge becomes more accessible ;</li> <li>- information infrastructure is an important factor in the development of the knowledge economy.</li> </ul>	<ul style="list-style-type: none"> <li>- the emergence of the Internet and digital technologies has radically changed the economic environment ;</li> <li>- the basis of the knowledge economy is the production, distribution and use of knowledge, and the infrastructure is the Internet.</li> </ul>
Development of education and research (2000-present).	<ul style="list-style-type: none"> <li>- globalization of education and scientific research ;</li> <li>- development of higher education and scientific research as a priority for countries;</li> <li>- desire to strengthen the country's position in the knowledge economy.</li> </ul>	<ul style="list-style-type: none"> <li>- the main emphasis is on scientific research and the educational environment;</li> <li>- interaction of the education system with the sphere of entrepreneurship.</li> </ul>

Source: developed by the author based on <sup>232 233</sup>

<sup>232</sup> MADRAK-GROCHOWSKA, M. The Knowledge-based Economy as a Stage in the Development of the Economy. In: *Oeconomia Copernicana*. 2015, No. 6(2), p. 7-21. ISSN 2353-1827.

<sup>233</sup> ALLEE, V. *The knowledge evolution*. Milton Park: Routledge, 2012. 296 p. ISBN 9780750698429

**Characteristics of researchers' approaches to determining educational policy**

Name of the approach	Contents of the approach	Competencies
Educational policy as a prerogative state power	Educational policy is a system of strategies, laws, regulations, rules, decisions and actions adopted by government or other educational organizations for the purpose of defining, organizing and regulating educational processes in society.	The sphere of competence of educational policy also includes innovative changes in the education system, as well as the activities of government authorities that initiate these changes.
Educational policy as the interaction of interests of various subjects in the educational space	Educational policy includes the establishment of educational goals and standards by various entities in the education sector, the development of programs, regulation of the financing of educational institutions, as well as the implementation of measures to ensure equal access to education and improve its quality.	The competence of the subjects includes the determination of means and organization, the use of tools and resources to create and provide an educational system
Educational policy as a result of the influence of three main actors (market, state, university)	The interaction of the market, state and university is determined by the emphasis in educational policy: on innovation, accessibility of education and socio-economic development.	Market forces influence educational policy through the need for specific skills and competencies. The role of the state influences educational policy through legislation, funding, and setting public standards. Universities, as educational institutions, influence educational policy through their programs, research and interaction with society
Inclusion of economic aspects of society into the concept of educational policy	Including economic aspects in the concept of educational policy means recognizing the close relationship between the education system and the economic development of society. This implies that education is seen not only as a means of generating intellectual capital, but also as a key factor in promoting economic prosperity.	In the context of economic aspects, educational policies may include measures aimed at preparing qualified professionals who are able to participate effectively in the modern economy. This also includes developing training programs that meet the needs of the labor market, encouraging entrepreneurship and innovation in the educational sector to improve productivity and competitiveness of society.

Source: developed by the author based on <sup>234 235 236 237 238</sup>

<sup>234</sup> BELL, L., Stevenson H. *Education policy: Process, themes and impact*. Milton Park: Routledge, 2006. 212 p. ISBN 9780415377720.

<sup>235</sup> SYCHEVA, E., BUDAGOV, A., NOVIKOV, A. Urban infrastructure development in a global knowledge-based economy. In: *SHS Web of Conferences. EDP Sciences*, 2020. No. 74, p. 03013. ISSN 2261-2424.

<sup>236</sup> JENTZSCH, N. The new economy debate in the US: A review of literature. In: *SSRN Electronic Journal*. 2001. ISSN 1556-5068 DOI: [10.2139/ssrn.268950](https://doi.org/10.2139/ssrn.268950)

<sup>237</sup> HADAD, S. Knowledge economy: Characteristics and dimensions. In: *Management dynamics in the Knowledge economy*. 2017, No. 5(2), p. 203-225. ISSN 2392-8042.

<sup>238</sup> BURDULI, V. et al. Essence of knowledge economy and the degree of its interoperability with innovative economy. In: *International Journal of New Economics and Social Sciences IJONESS*. 2020, No. 11(1), p. 61-82. ISSN 2450-2146.

### The dual nature of education policy

Educational policy as finished intellectual product	Educational policy as the process of translating the developed provisions and norms into reality
<p>In a completed intellectual work, educational policy is a textual statement of the values and principles of the education system, where development strategies and basic quality standards are formulated.</p> <p>This document states:</p> <ul style="list-style-type: none"> <li>- development strategies, goals and priorities that society considers important for the educational process,</li> <li>- key principles aimed at ensuring quality education, including the principles of accessibility, equity and social justice.</li> </ul>	<p>Educational policy finds its full manifestation in the process of translating the developed provisions into reality. Educational policy is becoming a dynamic and adaptive tool aimed at:</p> <ul style="list-style-type: none"> <li>- to achieve specific educational goals,</li> <li>- ensuring the effective functioning of educational institutions,</li> <li>- development of training programs,</li> <li>- creating conditions for the full learning and development of every individual in society.</li> </ul>

Source: developed by the author based on <sup>239</sup>

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<sup>239</sup> ELIAS, M. J. Social-emotional and character development and academics as a dual focus of educational policy. In: *Educational Policy*. 2009, No. 23(6), p. 831-846. ISSN 1464-5106.

## World Education Index for 2021

Country	Education index 2021
Iceland	0.959
Germany	0.942
Norway	0.933
Denmark	0.932
New Zealand	0.931
Finland	0.929
United Kingdom	0.928
Australia	0.924
Sweden	0.92
Switzerland	0.92
Netherlands	0.919
Slovenia	0.917
Canada	0.917
Belgium	0.913
United States	0.908
Lithuania	0.902
Estonia	0.894
Latvia	0.892
Israel	0.891
Ireland	0.886
Poland	0.884
Czech Republic	0.88
Greece	0.88
South Korea	0.876
Japan	0.868
Argentina urban	0.868
Russian Federation	0.864
Georgia	0.86
United Arab Emirates	0.86
Singapore	0.857
Austria	0.853
Spain	0.851
Kazakhstan	0.85
Cyprus	0.849
Liechtenstein	0.84
Slovakia	0.834
Luxembourg	0.834
Chili	0.829
Belarus	0.826

Hungary	0.826
Croatia	0.826
Tonga	0.826
France	0.826
Monte Negro	0.825
Saudi Arabia	0.825
Bahrain	0.821
Cuba	0.818
Italy	0.809
Grenada	0.801
Moldova	0.795
Oman	0.793
Trinidad & Tobago	0.791
Turkey	0.788
Portugal	0.788
Ukraine	0.787
Bahamas	0.78
Serbia	0.779
Albania	0.778
Fiji	0.773
Romania	0.771
Kosovo	0.771
Saint Vincent and the Grenadines	0.769
Mauritius	0.769
Uruguay	0.767
Bulgaria	0.766
Barbados	0.765
Iran	0.761
South Africa	0.758
Peru	0.757
Sri Lanka	0.754
Costa Rica	0.753
Kyrgyzstan	0.746
Bolivia	0.743
Uzbekistan	0.743
Armenia	0.742
Turkmenistan	0.742
Bosnia and Herzegovina	0.735
Thailand	0.731
Mongolia	0.73
Azerbaijan	0.726
Venezuela	0.726
Malaysia	0.725

Samoa	0.725
Andorra	0.721
Mexico	0.72
North Macedonia	0.719
Saint Kitts and Nevis	0.717
Panama	0.714
Dominican Republic	0.712
Antigua and Barbuda	0.704
Brazil	0.704
Palestine	0.702
Egypt	0.702
Tajikistan	0.701
Ecuador	0.7
Colombia	0.697
Brunei Darussalam	0.694
Suriname	0.688
Botswana	0.685
Qatar	0.684
Jamaica	0.678
Tunisia	0.676
Algeria	0.675
Gabon	0.675
Kuwait	0.67
Indonesia	0.667
Philippines	0.664
Belize	0.656
Paraguay	0.656
China	0.649
Jordan	0.644
Saint Lucia	0.642
Dominica	0.641
Vietnam	0.639
Guyana	0.635
Zimbabwe	0.627
Tuvalu	0.614
Ghana	0.612
Libya	0.61
Lebanon	0.604
Iraq	0.599
Maldives	0.595
Kiribati	0.594
Bangladesh	0.592
El Salvador	0.59

Morocco	0.59
Nicaragua	0.589
Micronesia (Federated States of)	0.581
Sao Tome & Principle	0.578
Namibia	0.571
Cameroon	0.569
Eswatini	0.568
Cape Verde	0.558
Vanuatu	0.556
India	0.552
Congo Brazzaville	0.548
Zambia	0.543
Bhutan	0.54
Lesotho	0.535
Timor Leste	0.532
Nepal	0.529
Togo	0.527
Nigeria	0.521
Angola	0.519
Kenya	0.519
Honduras	0.518
Myanmar	0.516
Congo Democratic Republic	0.507
Malawi	0.502
Comoros	0.501
Cambodia	0.488
Guatemala	0.483
Solomon Islands	0.477
Uganda	0.473
Cote d'Ivoire	0.47
Tanzania	0.469
Equatorial Guinea	0.467
Lao	0.461
Rwanda	0.459
Liberia	0.459
Haiti	0.455
Madagascar	0.452
Papua New Guinea	0.446
Benin	0.443
Syria	0.425
Mauritania	0.424
Sierra Leone	0.418
Gambia	0.416



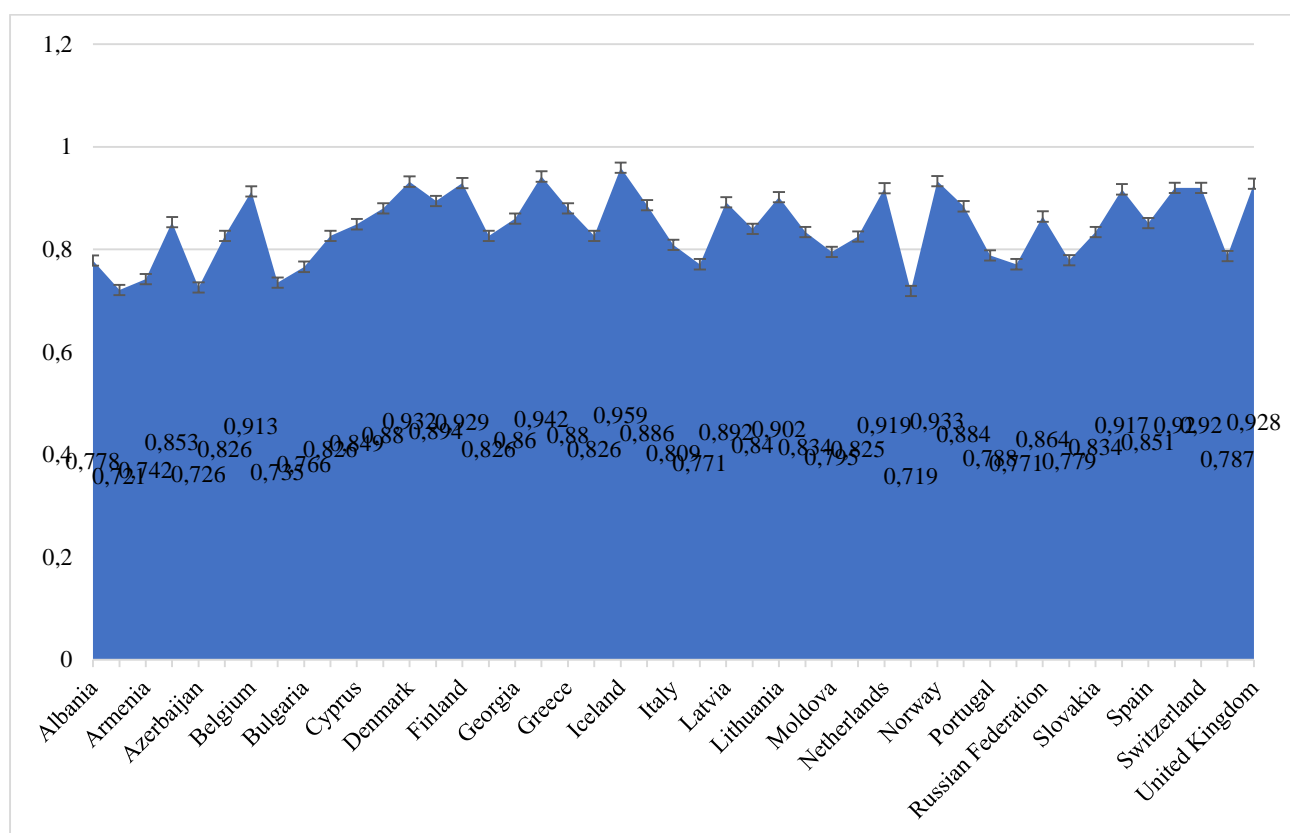
Guinea Bissau	0.414
Burundi	0.402
Pakistan	0.392
Mozambique	0.39
Eritrea	0.387
Afghanistan	0.385
Ethiopia	0.375
Central African Republic CAR	0.368
Yemen	0.359
Sudan	0.348
Senegal	0.347
Guinea	0.346
South Sudan	0.345
Djibouti	0.343
Burkina Faso	0.324
Chad	0.309
Mali	0.283
Nigeria	0.264
Somalia	0.227

Source:<sup>240</sup>

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<sup>240</sup> Education index. (accessed 02/22/2023). Available at: <https://globaldatalab.org/shdi/table/2021/edindex+lgnic/>  
<https://globaldatalab.org/shdi/table/2021/edindex+lgnic/>

### Dependence of the education index on government funding in the education system of European countries, 2021



**Figure 5.1. Dependence of the education index on government funding in the education system of European countries, 2021**

Source:<sup>241</sup>

**Table 5.1. Dependence of the education index on government funding in the education system of European countries, 2021**

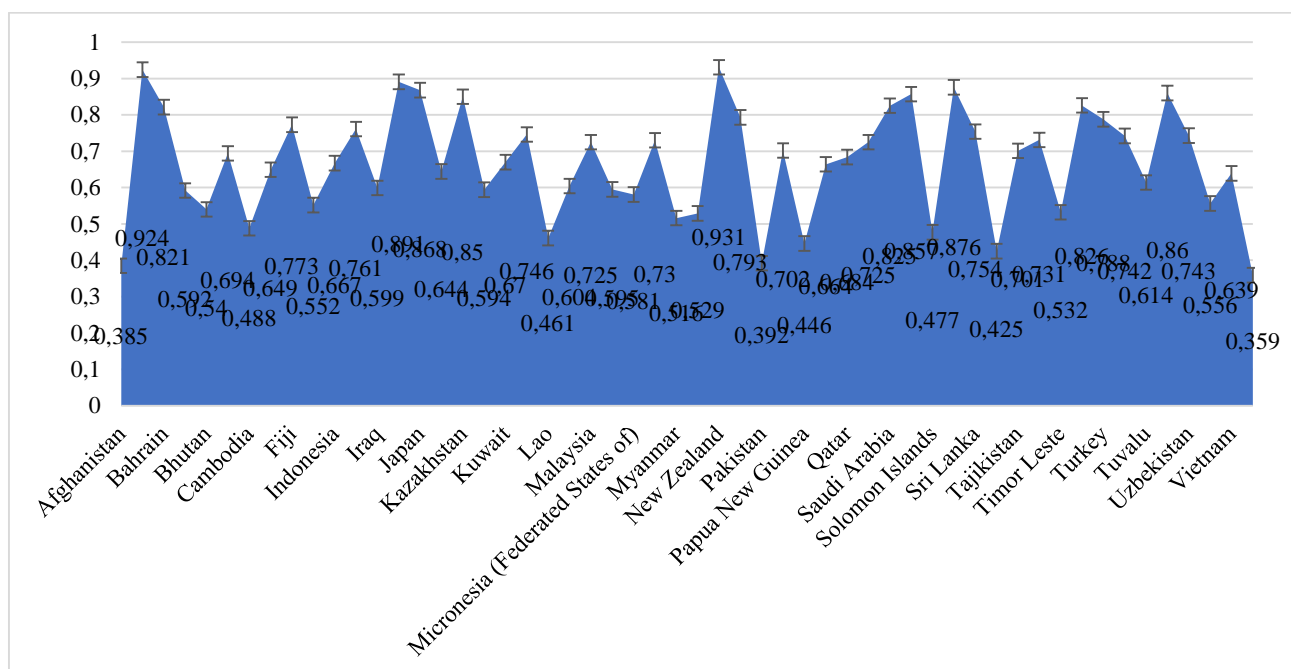
Country	Education Index 2021
Iceland	0.959
Germany	0.942
Norway	0.933
Denmark	0.932
Finland	0.929
United Kingdom	0.928
Sweden	0.92
Switzerland	0.92
Netherlands	0.919
Slovenia	0.917
Belgium	0.913

<sup>241</sup>Education index. (accessed 03/20/2023). Available at: <https://globaldatalab.org/shdi/table/2021/edindex+lgnic/>

Lithuania	0.902
Estonia	0.894
Latvia	0.892
Ireland	0.886
Poland	0.884
Czech Republic	0.88
Greece	0.88
Russian Federation	0.864
Georgia	0.86
Austria	0.853
Spain	0.851
Cyprus	0.849
Liechtenstein	0.84
Luxembourg	0.834
Slovakia	0.834
Belarus	0.826
Croatia	0.826
France	0.826
Hungary	0.826
Monte Negro	0.825
Italy	0.809
Moldova	0.795
Portugal	0.788
Ukraine	0.787
Serbia	0.779
Albania	0.778
Kosovo	0.771
Romania	0.771
Bulgaria	0.766
Armenia	0.742
Bosnia and Herzegovina	0.735
Azerbaijan	0.726
Andorra	0.721
North Macedonia	0.719

## Appendix 6

### Dependence of the education index on government funding in the education system of Asian countries, 2021



**Figure 6.1. Dependence of the education index on government funding in the education system of Asian countries, 2021**

Source:<sup>242</sup>

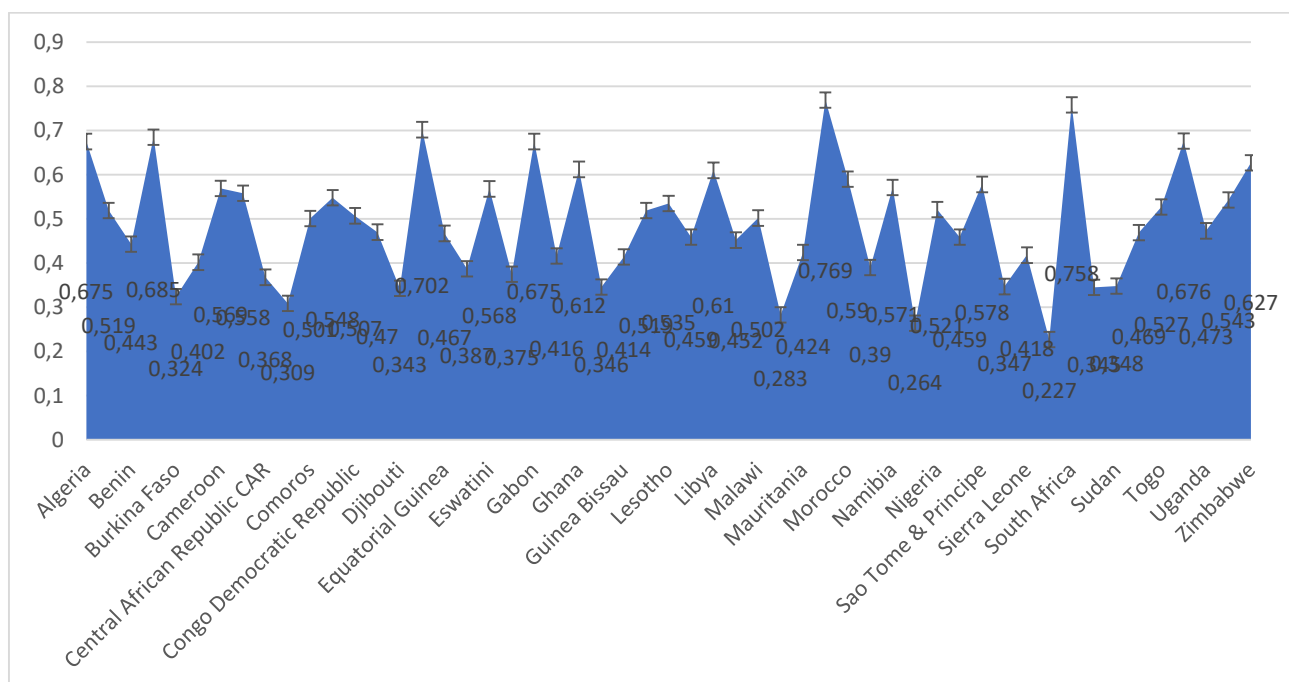
**Table 6.1. Dependence of the education index on government funding in the education system of Asian countries, 2021**

Country	Education Index 2021
New Zealand	0.931
Australia	0.924
Israel	0.891
South Korea	0.876
Japan	0.868
United Arab Emirates	0.86
Singapore	0.857
Kazakhstan	0.85
Tonga	0.826
Saudi Arabia	0.825
Bahrain	0.821
Oman	0.793
Turkey	0.788
Fiji	0.773
Iran	0.761

<sup>242</sup>Education index. (accessed 03/20/2023). Available at: <https://globaldatalab.org/shdi/table/2021/edindex+lgnic/>

Sri Lanka	0.754
Kyrgyzstan	0.746
Uzbekistan	0.743
Turkmenistan	0.742
Thailand	0.731
Mongolia	0.73
Malaysia	0.725
Samoa	0.725
Palestine	0.702
Tajikistan	0.701
Brunei Darussalam	0.694
Qatar	0.684
Kuwait	0.67
Indonesia	0.667
Philippines	0.664
China	0.649
Jordan	0.644
Vietnam	0.639
Tuvalu	0.614
Lebanon	0.604
Iraq	0.599
Maldives	0.595
Kiribati	0.594
Bangladesh	0.592
Micronesia (Federated States of)	0.581
Vanuatu	0.556
India	0.552
Bhutan	0.54
Timor Leste	0.532
Nepal	0.529
Myanmar	0.516
Cambodia	0.488
Solomon Islands	0.477
Lao	0.461
Papua New Guinea	0.446
Syria	0.425
Pakistan	0.392
Afghanistan	0.385
Yemen	0.359

### Dependence of the education index on government funding in the education system of African countries, 2021



**Figure 7.1. Dependence of the education index on government funding in the education system of African countries, 2021.**

Source:<sup>243</sup>

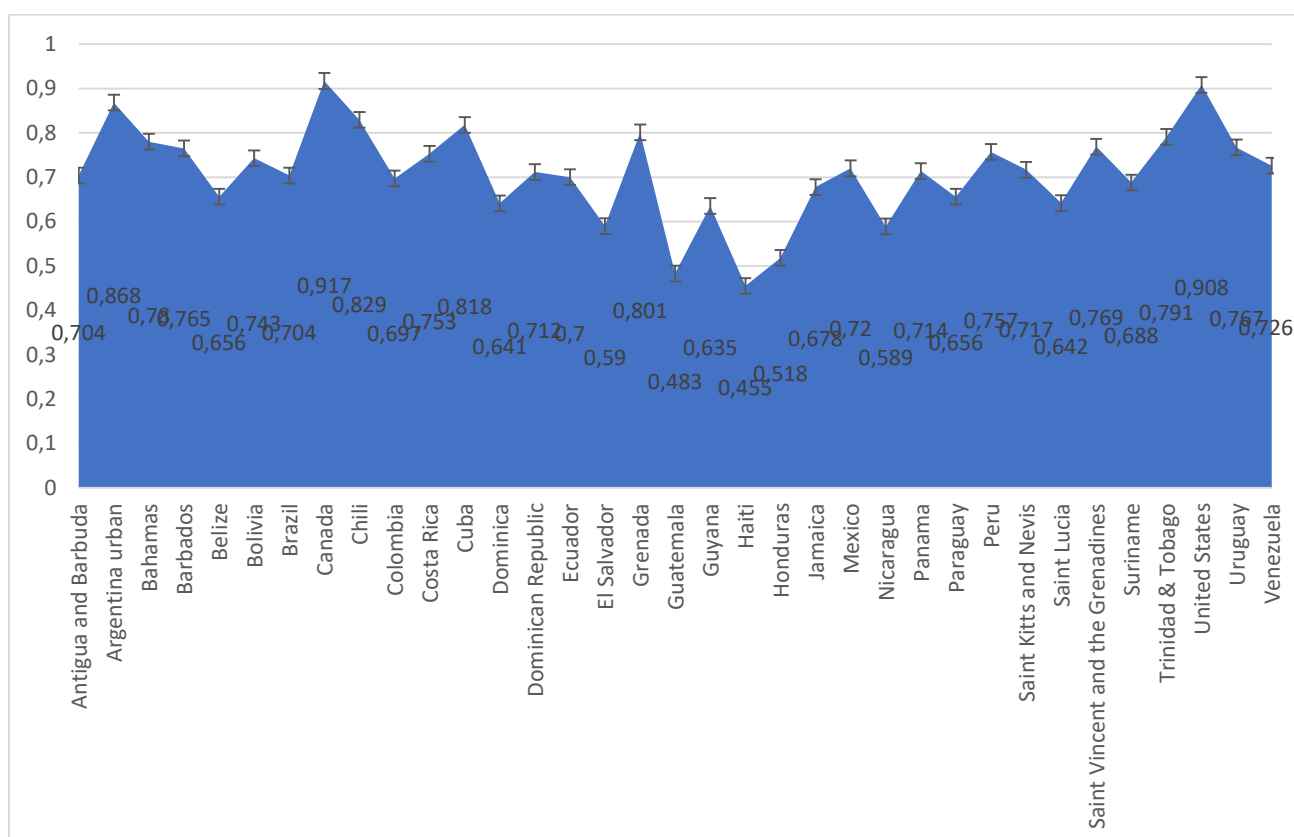
**Table 7.1. Dependence of the education index on government funding in the education system of African countries, 2021.**

Country	Education Index 2021
Mauritius	0.769
South Africa	0.758
Egypt	0.702
Botswana	0.685
Tunisia	0.676
Algeria	0.675
Gabon	0.675
Zimbabwe	0.627
Ghana	0.612
Libya	0.61
Morocco	0.59
Sao Tome & Principe	0.578
Namibia	0.571
Cameroon	0.569

<sup>243</sup>Education index. (accessed 03/20/2023). Available at: <https://globaldatalab.org/shdi/table/2021/edindex+lgnic/>

Eswatini	0.568
Cape Verde	0.558
Congo Brazzaville	0.548
Zambia	0.543
Lesotho	0.535
Togo	0.527
Nigeria	0.521
Angola	0.519
Kenya	0.519
Congo Democratic Republic	0.507
Malawi	0.502
Comoros	0.501
Uganda	0.473
Cote d'Ivoire	0.47
Tanzania	0.469
Equatorial Guinea	0.467
Liberia	0.459
Rwanda	0.459
Madagascar	0.452
Benin	0.443
Mauritania	0.424
Sierra Leone	0.418
Gambia	0.416
Guinea Bissau	0.414
Burundi	0.402
Mozambique	0.39
Eritrea	0.387
Ethiopia	0.375
Central African Republic CAR	0.368
Sudan	0.348
Senegal	0.347
Guinea	0.346
South Sudan	0.345
Djibouti	0.343
Burkina Faso	0.324
Chad	0.309
Mali	0.283
Nigeria	0.264
Somalia	0.227

### Dependence of the education index on government funding in the education system of American countries, 2021



**Figure 8.1. Dependence of the education index on government funding in the education system of American countries, 2021**

Source:<sup>244</sup>

**Table 8.1. Dependence of the education index on government funding in the education system of American countries, 2021**

Country	Education Index 2021
Canada	0.917
United States	0.908
Argentina urban	0.868
Chili	0.829
Cuba	0.818
Grenada	0.801
Trinidad & Tobago	0.791
Bahamas	0.78
Saint Vincent and the Grenadines	0.769
Uruguay	0.767

<sup>244</sup> Education index . (accessed 03/20/2023). Available at: <https://globaldatalab.org/shdi/table/2021/edindex+lgnic/>



Barbados	0.765
Peru	0.757
Costa Rica	0.753
Bolivia	0.743
Venezuela	0.726
Mexico	0.72
Saint Kitts and Nevis	0.717
Panama	0.714
Dominican Republic	0.712
Antigua and Barbuda	0.704
Brazil	0.704
Ecuador	0.7
Colombia	0.697
Suriname	0.688
Jamaica	0.678
Belize	0.656
Paraguay	0.656
Saint Lucia	0.642
Dominica	0.641
Guyana	0.635
El Salvador	0.59
Nicaragua	0.589
Honduras	0.518
Guatemala	0.483
Haiti	0.455

Education level – region Europe

Country	Education Index 2021
Iceland	0.959
Germany	0.942
Norway	0.933
Denmark	0.932
Finland	0.929
United Kingdom	0.928
Sweden	0.92
Switzerland	0.92
Netherlands	0.919
Slovenia	0.917
Belgium	0.913
Lithuania	0.902
Estonia	0.894
Latvia	0.892
Ireland	0.886
Poland	0.884
Czech Republic	0.88
Greece	0.88
Russian Federation	0.864
Georgia	0.86
Austria	0.853
Spain	0.851
Cyprus	0.849
Liechtenstein	0.84
Luxembourg	0.834
Slovakia	0.834
Belarus	0.826
Croatia	0.826
France	0.826
Hungary	0.826
Monte Negro	0.825
Italy	0.809
Moldova	0.795
Portugal	0.788
Ukraine	0.787
Serbia	0.779
Albania	0.778
Kosovo	0.771
Romania	0.771

Bulgaria	0.766
Armenia	0.742
Bosnia and Herzegovina	0.735
Azerbaijan	0.726
Andorra	0.721
North Macedonia	0.719

Source:<sup>245</sup>

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<sup>245</sup> Education index. (accessed 03/20/2023). Available at: <https://globaldatalab.org/shdi/table/2021/edindex+lgnic/>

## Education level – region Africa

Country	Education Index 2021
Mauritius	0.769
South Africa	0.758
Egypt	0.702
Botswana	0.685
Tunisia	0.676
Algeria	0.675
Gabon	0.675
Zimbabwe	0.627
Ghana	0.612
Libya	0.61
Morocco	0.59
Sao Tome & Principle	0.578
Namibia	0.571
Cameroon	0.569
Eswatini	0.568
Cape Verde	0.558
Congo Brazzaville	0.548
Zambia	0.543
Lesotho	0.535
Togo	0.527
Nigeria	0.521
Angola	0.519
Kenya	0.519
Congo Democratic Republic	0.507
Malawi	0.502
Comoros	0.501
Uganda	0.473
Cote d'Ivoire	0.47
Tanzania	0.469
Equatorial Guinea	0.467
Liberia	0.459
Rwanda	0.459
Madagascar	0.452
Benin	0.443
Mauritania	0.424
Sierra Leone	0.418
Gambia	0.416
Guinea Bissau	0.414
Burundi	0.402

Mozambique	0.39
Eritrea	0.387
Ethiopia	0.375
Central African Republic CAR	0.368
Sudan	0.348
Senegal	0.347
Guinea	0.346
South Sudan	0.345
Djibouti	0.343
Burkina Faso	0.324
Chad	0.309
Mali	0.283
Nigeria	0.264
Somalia	0.227

Source:<sup>246</sup>

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<sup>246</sup> Education index. (accessed 03/20/2023). Available at: <https://globaldatalab.org/shdi/table/2021/edindex+lgnic/>

## Education level – region Asia

Country	Education Index 2021
New Zealand	0.931
Australia	0.924
Israel	0.891
South Korea	0.876
Japan	0.868
United Arab Emirates	0.86
Singapore	0.857
Kazakhstan	0.85
Tonga	0.826
Saudi Arabia	0.825
Bahrain	0.821
Oman	0.793
Turkey	0.788
Fiji	0.773
Iran	0.761
Sri Lanka	0.754
Kyrgyzstan	0.746
Uzbekistan	0.743
Turkmenistan	0.742
Thailand	0.731
Mongolia	0.73
Malaysia	0.725
Samoa	0.725
Palestine	0.702
Tajikistan	0.701
Brunei Darussalam	0.694
Qatar	0.684
Kuwait	0.67
Indonesia	0.667
Philippines	0.664
China	0.649
Jordan	0.644
Vietnam	0.639
Tuvalu	0.614
Lebanon	0.604
Iraq	0.599
Maldives	0.595
Kiribati	0.594
Bangladesh	0.592

Micronesia (Federated States of)	0.581
Vanuatu	0.556
India	0.552
Bhutan	0.54
Timor Leste	0.532
Nepal	0.529
Myanmar	0.516
Cambodia	0.488
Solomon Islands	0.477
Lao	0.461
Papua New Guinea	0.446
Syria	0.425
Pakistan	0.392
Afghanistan	0.385
Yemen	0.359

Source:<sup>247</sup>

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<sup>247</sup> Education index. (accessed 03/20/2023). Available at: <https://globaldatalab.org/shdi/table/2021/edindex+lgnic/>

## Education level – region America

Country	Education Index 2021
Canada	0.917
United States	0.908
Argentina urban	0.868
Chili	0.829
Cuba	0.818
Grenada	0.801
Trinidad & Tobago	0.791
Bahamas	0.78
Saint Vincent and the Grenadines	0.769
Uruguay	0.767
Barbados	0.765
Peru	0.757
Costa Rica	0.753
Bolivia	0.743
Venezuela	0.726
Mexico	0.72
Saint Kitts and Nevis	0.717
Panama	0.714
Dominican Republic	0.712
Antigua and Barbuda	0.704
Brazil	0.704
Ecuador	0.7
Colombia	0.697
Suriname	0.688
Jamaica	0.678
Belize	0.656
Paraguay	0.656
Saint Lucia	0.642
Dominica	0.641
Guyana	0.635
El Salvador	0.59
Nicaragua	0.589
Honduras	0.518
Guatemala	0.483
Haiti	0.455

Source:<sup>248</sup>


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<sup>248</sup> Education index. (accessed 03/20/2023). Available at: <https://www.cbs.gov.il/en/Pages/default.aspx>



## Education level – all regions

Region	Europe	Education Index 2021
Europe	Germany	0.942
Asia	New Zealand	0.931
Europe	United Kingdom	0.928
America	Canada	0.917
Europe	Belgium	0.913
America	United States	0.908
Asia	Israel	0.891
Europe	Russian Federation	0.864
Europe	France	0.826
America	Grenada	0.801
Europe	Moldova	0.795
Asia	Turkey	0.788
Europe	Ukraine	0.787
Europe	Romania	0.771
Africa	Mauritius	0.769
America	Uruguay	0.767
Asia	Uzbekistan	0.743
Europe	Azerbaijan	0.726
Asia	Malaysia	0.725
America	Mexico	0.72
America	Dominican Republic	0.712
America	Colombia	0.697
Asia	China	0.649
America	Dominica	0.641
Africa	Morocco	0.59
Asia	India	0.552
Africa	Lesotho	0.535
Africa	Comoros	0.501
Asia	Cambodia	0.488
America	Haiti	0.455
Africa	Madagascar	0.452
Africa	Eritrea	0.387
Asia	Afghanistan	0.385
Africa	Senegal	0.347
Africa	Burkina Faso	0.324
Africa	Somalia	0.227

Source:<sup>249</sup>


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<sup>249</sup> Education index. (accessed 03/20/2023). Available at: <https://www.cbs.gov.il/en/Pages/default.aspx>

## Global knowledge index by pillars

Country	PRE-UNIVERSITY EDUCATION	RESEARCH, DEVELOPMENT AND INNOVATION	TECHNICAL AND VOCATIONAL EDUCATION AND TRAINING	RESEARCH, DEVELOPMENT AND INNOVATION	INFORMATION AND COMMUNICATIONS TECHNOLOGY	ECONOMY	ENABLING ENVIRONMENT	GKI
United States	83.74	59.9	66.07	51.47	75.1	70.45	66.46	66.9
United Kingdom	79.72	55.97	64.77	54.04	70.45	65.95	76.61	65.7
Belgium	83.97	64.9	63.16	43.71	59.8	67.62	77.96	64.1
Israel	77.56	56.13	62.22	54.99	69.82	66.89	62.25	63.9
Germany	75.72	63.75	61.14	47.35	61.93	66.52	79.4	63.68
Canada	91.22	59.35	60.66	37.15	62	69.79	73.84	62.4
New Zealand	73.42	67.37	57.19	40.47	64.2	65.77	79.66	62.1
France	78.54	55.21	53.45	45.27	65.22	65.46	75.27	61.1
China	81.22	48.7	51.37	42.98	69.25	79.16	47.73	58.9
Romania	60.16	57.74	55	31.99	54.19	58.94	64.63	53
Malaysia	60.78	51.04	47.99	36.31	56.85	62.29	59.33	52.4
Uruguay	67.84	53.4	47.81	25.14	53.35	50.51	79.56	50.2
Mauritius	71.93	50.53	46.12	21.03	52.11	58.12	65.63	48.5
Russian Federation	80.52	52.41	41.1	27.35	50.98	49.71	48.1	47.9
Colombia	66.21	47.07	48.48	33.96	44.54	48.46	54.04	47.9
Moldova	74.99	51.52	41.95	25.38	51.12	50.65	54.93	47.7
Turkey	66.75	56.98	32.77	33.47	49.28	52.48	50.83	47.4
Ukraine	73.37	52.13	43.66	27.04	50.54	40.8	52.91	46.5
Uzbekistan	77.44	48.77	39.92	23.89	42.45	49.66	48.71	44.8
Mexico	64.64	53.73	45.33	18.48	44.71	53.71	51.27	44.4
Dominican Republic	57.59	41.91	46.31	26.78	39.36	47.12	56.1	43.3
Dominica	57.59	41.91	46.31	26.78	39.36	47.12	56.1	43.3
Morocco	58.63	49.84	33.06	25.97	45.4	45.31	51.26	42.5
Azerbaijan	62.91	50.88	42.05	23.25	40.69	42.39	43.57	42
India	57.43	38.77	35.02	30.05	41.29	52.89	43.6	41.7
Afghanistan	63.75	50.78	31.25	27.68	38.48	38.81	34.91	39.6
Cambodia	43.39	47.8	34.46	20.43	37.51	48.64	43.44	37.8
Comoros	51.69	46.94	37.88	25.45	29.57	34.14	40.45	36.9
Grenada	37.55	49.2	36.84	19.57	33.66	48.22	41.22	36.5
Lesotho	51.64	53.96	34.88	19.68	26.12	39.96	42.1	36.1
Senegal	34	44.86	30.95	17.27	29.56	41.81	47.42	33
Haiti	40.09	42.06	31.68	16.3	25.26	41.35	42.27	32.1

Madagascar	29.74	40.56	40.92	20.2	20.83	34.45	43.05	31
Eritrea	23.03	37.76	32.92	16.35	28.35	32.21	32.9	27.9
Burkina Faso	27.78	35.46	29.75	16.42	22.17	34.11	35.98	27.5
Somalia	17.14	45.23	25.35	15.41	20.72	34.51	36.86	25.5

Source:<sup>250</sup>

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<sup>250</sup> Global Knowledge Index. (accessed 08/28/2022). Available at: <https://www.knowledge4all.com/ranking>

## Global knowledge index by years, 2020-2023

Country	GKI 2023	GKI 2022	GKI 2021	GKI 2020
United States	66.9	68.3	69.8	71.1
United Kingdom	65.7	63.9	68.8	68.1
Belgium	64.1	62.5	65.1	65.4
Israel	63.9	62.6	65.4	63.7
Germany	63.6	63.6	66.5	66.2
Canada	62.4	59	-	61.1
New Zealand	62.1	61.2	-	63.2
France	61.1	61.4	63.5	64
China	58.9	57.2	62.1	66.8
Romania	53	51.2	53.1	48.5
Malaysia	52.4	50.7	52.8	55.6
Uruguay	50.2	48.6	52.06	50.3
Mauritius	48.5	49	53.4	47.8
Russian Federation	47.9	48	51.6	50.6
Colombia	47.9	46.6	48.8	44.7
Moldova	47.7	47	49.4	43.9
Turkey	47.4	45.4	47.1	45.2
Ukraine	46.5	46.4	49.6	47.6
Uzbekistan	44.8	42.3	-	-
Mexico	44.4	44.4	47.9	47.5
Dominican Republic	43.3	42.3	44.1	41.1
Dominica	43.3	42.2	-	-
Morocco	42.5	42.4	-	42.6
Azerbaijan	42	41.4	-	45.8
India	41.7	41.5	42.8	44.4
Afghanistan	39.6	38.4	39.9	-
Cambodia	37.8	37.9	39.3	-
Comoros	36.9	35.8	-	-
Grenada	36.5	36.7	-	-
Lesotho	36.1	34.8	37.2	-
Senegal	33	31.8	32.4	35
Haiti	32.1	31.5	-	-
Madagascar	31	28.9	30.9	-
Eritrea	27.9	26.2	28.2	-
Burkina Faso	27.5	27.1	29.2	31
Somalia	25.5	25	-	-

Source:<sup>251</sup><sup>251</sup> Global Knowledge Index. (accessed 08/28/2022). Available at: <https://www.knowledge4all.com/ranking>

## Global Innovation Index by years, 2020-2023

Country	GII 2023	GII 2022	GII 2021	GII 2020
United States	63.5	61.8	61.3	60.5
United Kingdom	62.4	59.7	59.8	59.7
Belgium	49.9	46.9	49.2	49.1
Israel	54.3	50.2	53.4	53.5
Germany	58.8	57.2	57.3	56.5
Canada	53.8	50.8	53.1	52.2
New Zealand	46.6	47.2	47.5	47
France	56	55	55	53.6
China	55.3	55.3	54.8	54.2
Romania	34.7	34.1	35.6	35.9
Malaysia	40.9	38.7	41.9	42.4
Uruguay	thirty	29.2	32.2	30.8
Mauritius	32.1	34.4	35.2	34.3
Russian Federation	33.3	34.3	36.6	35.6
Colombia	29.4	29.2	31.7	30.8
Moldova	30.3	31.1	32.3	32.9
Turkey	38.6	38.1	38.3	34.9
Ukraine	32.8	31	35.6	36.3
Uzbekistan	26.2	25.3	27.4	24.5
Mexico	31	31	34.5	33.6
Dominican Republic	22.4	22.7	25.1	25.1
Dominica	22.4	22.8	25.1	-
Morocco	28.4	28.8	29.3	28.9
Azerbaijan	23.3	21.5	28.4	27.2
India	38.1	36.6	36.4	35.59
Afghanistan	-	-	-	-
Cambodia	20.8	20.5	22.8	21.4
Comoros	15.3	20.3	19.7	19.9
Grenada	-	-	-	-
Lesotho	-	-	-	-
Senegal	22.5	19.9	23.3	23.75
Haiti	-	-	-	-
Madagascar	19.1	18.6	22.5	20.4
Eritrea	-	-	-	-
Burkina Faso	14.5	15.3	20.5	20
Somalia	13.3	14.2	19.5	19.1

Source.<sup>252 253 254 255</sup>

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<sup>252</sup> Global Knowledge Index. (accessed 08/28/2022). Available at: <https://www.wipo.int/edocs/pubdocs/en/wipo-pub-2000-2023-en-main-report-global-innovation-index-2023-16th-edition.pdf>

<sup>253</sup> Global Knowledge Index. (accessed 08/28/2022). Available at: [https://www.wipo.int/edocs/pubdocs/en/wipo\\_pub\\_gii\\_2020.pdf](https://www.wipo.int/edocs/pubdocs/en/wipo_pub_gii_2020.pdf)

<sup>254</sup> Global Knowledge Index. (accessed 08/28/2022). Available at: [https://www.wipo.int/edocs/pubdocs/en/wipo\\_pub\\_gii\\_2021.pdf](https://www.wipo.int/edocs/pubdocs/en/wipo_pub_gii_2021.pdf)

<sup>255</sup> Global Knowledge Index. (accessed 08/28/2022). Available at: <https://www.wipo.int/edocs/pubdocs/en/wipo-pub-2000-2022-en-main-report-global-innovation-index-2>

## Global Innovation Index by pillars, 2023

Country	Institutions	Human capital and research	Infrastructure	Market sophistication	Business sophistication	Knowledge and technology outputs	Creative outputs	GII
United States	16	12	25	1	2	2	12	63.5
United Kingdom	24	8	6	3	13	7	2	62.4
Belgium	thirty	14	44	26	10	15	thirty	49.9
Israel	40	20	36	eleven	6	5	33	54.3
Germany	22	4	23	14	16	9	7	58.8
Canada	14	10	thirty	4	18	19	22	53.8
New Zealand	12	21	29	31	29	39	28	46.6
France	27	17	22	9	17	16	6	56
China	43	22	27	13	20	6	14	55.3
Romania	43	22	27	13	20	6	14	34.7
Malaysia	29	32	51	18	36	37	47	40.9
Uruguay	31	83	57	86	59	66	78	thirty
Mauritius	26	64	74	24	91	90	57	32.1
Russian Federation	110	26	72	56	44	54	53	33.3
Colombia	110	26	72	56	44	54	53	29.4
Moldova	96	67	75	76	101	60	42	30.3
Turkey	105	41	50	36	46	44	27	38.6
Ukraine	105	41	50	36	46	44	27	32.8
Uzbekistan	105	41	50	36	46	44	27	26.2
Mexico	105	41	50	36	46	44	27	31
Dominican Republic	67	109	76	91	86	95	94	22.4
Dominica	101	106	99	95	85	94	77	22.4
Morocco	83	86	94	80	107	65	55	28.4
Azerbaijan	42	87	95	85	64	114	100	23.3
India	56	48	84	20	57	22	49	38.1
Afghanistan	-	-	-	-	-	-	-	-
Cambodia	87	101	108	59	125	93	103	20.8
Comoros	87	101	108	59	125	93	103	15.3
Grenada	-	-	-	-	-	-	-	-
Lesotho	-	-	-	-	-	-	-	-
Senegal	87	101	108	59	125	93	103	22.5
Haiti	-	-	-	-	-	-	-	-
Madagascar	87	101	108	59	125	93	103	19.1
Eritrea	-	-	-	-	-	-	-	-
Burkina Faso	92	108	121	116	128	112	130	14.5
Somalia	-	-	-	-	-	-	-	-

Source:<sup>256</sup>

- 1th - Very High performers, ranks 1st to 33rd
- 2rd - High performers, ranks 34th to 66th
- 3rd - Middle performers, ranks 67th to 99th
- 4st - Low performers, ranks 100th to 132nd

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<sup>256</sup> Global Innovation Index 2023. (accessed 03/20/2023). Available at: <https://www.wipo.int/edocs/pubdocs/en/wipo-pub-2000-2023-en-main-report-global-innovation-index-2023-16th-edit>



## Appendix 18

### Educational institutions by indicators in the Republic of Moldova, 2019-2023

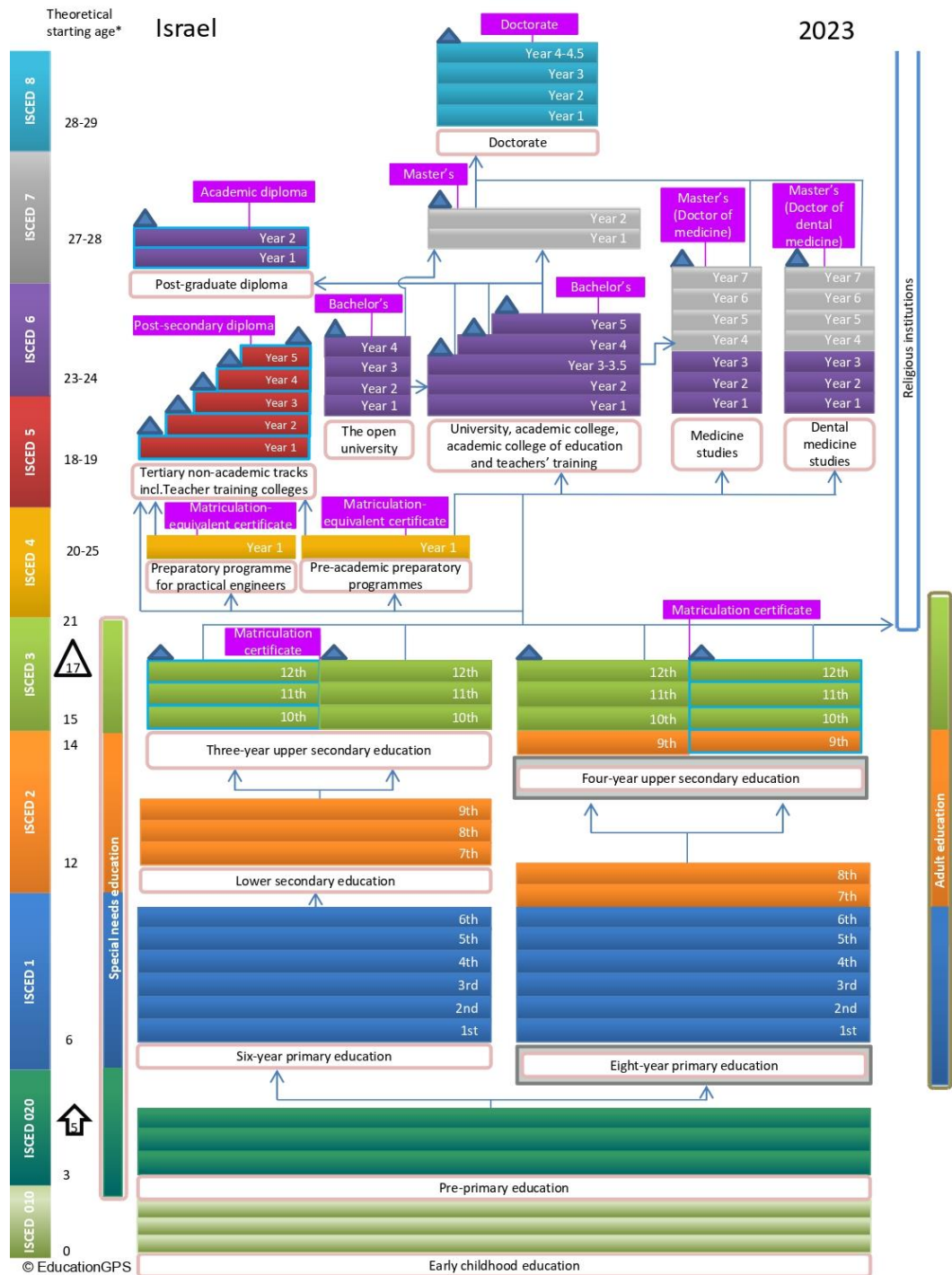
Indicator	2019	2020	2021	2022	2023
<b>Educational institutions</b>					
General schools	1246	1255	1241	1231	1218
Secondary vocational schools	44	44	44	44	43
Postsecondary vocational schools	45	47	47	47	47
Higher educational institutions	29	27	24	24	21
<b>Pedagogical staff</b>					
General schools	27691	27426	26897	26506	26272
Secondary vocational schools	1731	1597	1513	1453	1372
Postsecondary vocational schools	2338	2268	2230	2304	2399
Higher educational institutions	4545	4291	4114	4020	3772
<b>Students</b>					
General schools	334159	333144	334375	336713	334542
Secondary vocational schools	15306	14673	15077	15015	14357
Postsecondary vocational schools	29042	28891	29766	30983	31574
Higher educational institutions	60608	56840	59033	59647	56758

257

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<sup>257</sup> Education and science. Statistics of Moldova. (accessed 03/12/2023). Available at: [https://statistica.gov.md/ru/statistic\\_indicator\\_details/5#data\\_bank](https://statistica.gov.md/ru/statistic_indicator_details/5#data_bank)

## Structure of the Israeli education system



Source :<sup>258</sup>

<sup>258</sup> Education policy outlook Israel, OECD 2023. (accessed 05/22/2022). Available at: <https://www.oecd.org/education/education-policy-outlook-4cf5b585-en.htm>

## Student application to higher education in Israel, by faculties and years

Study year / academic faculty	2006- 2007	2018-2019	2019-2020	2020 - 2021	<u>2021-2022</u>
Engineering (software, infrastructure, industry, energy),	16.6	17	17.4	18.1	18.6
Mathematics, statistics, computer sciences	4.7	6.5	6.7	7.3	8.2
Humanities	9.5	6.9	6.2	5.8	5.9
Education and teaching training	14.4	15.5	16.1	17	17
Art and design professions	2.8	2.9	3.1	3.1	3.1
social sciences	21.9	19.6	19.2	18.6	<b>17.6</b>
Business and management sciences	8.8	10.9	9.9	9.8	<b>9.7</b>
Law	9.3	8.3	8.5	7.1	<b>6.9</b>
Medicine	0.9	1	1.1	1.1	<b>1.1</b>
Allied health professions	4.7	6	6.3	6.5	6.5
Physical sciences	1.8	1.3	1.4	1.4	<b>1.4</b>
Biological sciences	3.2	2.6	2.6	2.6	<b>2.5</b>
Agriculture	0.5	0.6	0.6	0.6	<b>0.5</b>
Architecture	0.9	0.9	0.9	1	1

Source: made by the researcher from<sup>259</sup>

<sup>259</sup> Statistical data files on higher education in Israel. Council for Higher Education. (accessed 02/23/2022). Available at : <https://che.org.il/en/statistical-data/>

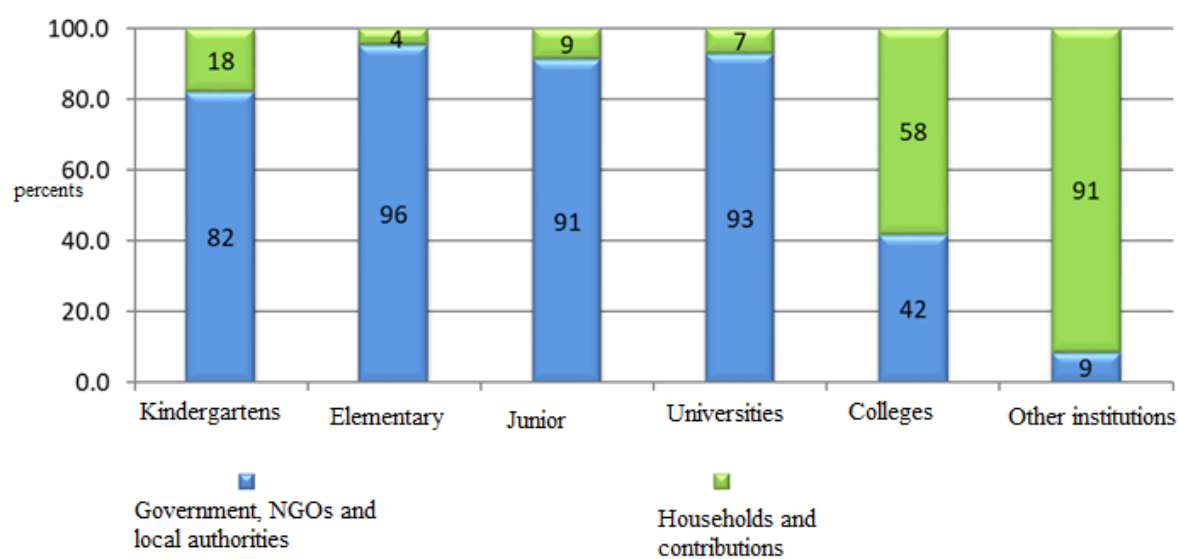
## Colleges budget by sub-sections (thousand USD) 2017 -2021

Teacher College	Academic Year	Ministry of education	Income from Tuition fee	Council of higher education	External donations and projects
<b>Beit Berl College</b>	2017-2018	3,935	18,195	23,591	3,471
	2018-2019	3,982	18,472	23,177	4,125
	2019-2020	3,150	17,699	24,248	4,247
	2020-2021	2,080	17,314	22,851	4,711
<b>Seminar Kibbutzim College</b>	2017-2018	15,326	17,799	15,309	386
	2018-2019	8,545	17,292	21,508	321
	2019-2020	6,942	16,858	22,511	316
	2020-2021	5,328	15,861	22,877	286
<b>Hachva College</b>	2017-2018	1,381	9,790	17,299	349
	2018-2019	1,730	9,820	17,565	246
	2019-2020	2,483	8,961	18,323	388
	2020-2021	2,589	8,387	18,583	401

Source : developed by the author based on<sup>260</sup>

<sup>260</sup> Statistical data files on higher education in Israel. (accessed 02/23/2022). Available at : <https://www.cbs.gov.il/en/Pages/default.aspx>

## Education expenditures funding in 2020 by types



Source:<sup>261</sup>

<sup>261</sup> Central Bureau of Statistics. National Expenditure on Education in 2019-2020. Available at: <https://www.cbs.gov.il/en/mediarelease/pages/2021/national-expenditure-education-2019-2020.aspx>

### Strategic guidelines for educational policies of higher education institutions in Israel in the context of globalization

University	Strategic document	Key provisions of the strategic goal
Hebrew University <sup>262</sup>	Strategic Plan	Mission: To create an educated community capable of global transformation by promoting holistic education, offering enterprise skills and fostering cultural development.
Tel Aviv University <sup>263</sup>	Strategic Priorities	TAU's mission is to advance research of the highest caliber and equip tens of thousands of students each year with academic knowledge and critical thinking skills. The university also strives to influence society in Israel and around the world in areas such as industry, culture and education.
Technion-Israel Institute of Technology <sup>264</sup>	Strategic Plan for Undergraduate Studies	Main goal: to make the Technion competitive in the academic world, locally and globally. Objectives: to ensure the integration and development of advanced technologies and approaches in both education and research; encourage interdisciplinary discourse, teaching, research and collaboration, among others.
Ben-Gurion University of the Negev <sup>265</sup>	Strategic Priorities	BGU research results have an impact throughout Israel and the world. The university's research centers make the most of resources and lead to increased opportunities for academic and industrial collaboration, as well as an increase in the number of publications and competitive grants.
Bar-Ilan University <sup>266</sup>	Strategic Plan	Mission: Committed to combining cutting-edge research with the best standards of academic teaching. Objective: Participate in conferences and research activities with leading strategic research centers around the world.
University of Haifa <sup>267</sup>	Strategic Plan 'Multiversity'	The University has established strategic partnerships with outstanding institutions around the world, enhancing the quality of our research and providing transformative experiences for our students.
Weizmann Institute of Science <sup>268</sup>	Strategic Plan	Mission: To create an inclusive and equitable campus environment for people of all genders, ethnicities, religions, etc. Objective: interdisciplinary approach to science, membership in the international corporation GMTO
Ariel University <sup>269</sup>	Strategic Priorities	Priority in cooperation with international organizations

Source: elaborated by the author<sup>259-266</sup>

<sup>262</sup> Mission. Hebrew University. (accessed 08/17/2022). Available at : <https://jewishus.org/about-page/>

<sup>263</sup> Strategic Priorities. (accessed 07/12/2022). Available at : <https://english.tau.ac.il/strategy#:~:text=The%20vision%20of%20the%20University,knownledge%20and%20critical%20thinking%20skills>.

<sup>264</sup> Strategic Plan for Undergraduate Studies: vision, strategic plan, implementation and integration. Haifa: Technion-Israel Institute of Technology , 2022. 32 r.

<sup>265</sup> Strategic Priorities. Ben-Gurion University of the Negev . (accessed 07/12/2022). Available at : <https://in.bgu.ac.il/en/associates/Pages/Strategic-Priorities.aspx>

<sup>266</sup> Bar-Ilan University . (accessed 06/18/2022). Available at : <https://www.biu.ac.il/en/about-bar-ilan/overview/about>

<sup>267</sup> University of Haifa . (accessed 05/12/2022). Available at : <https://magazine.haifa.ac.il/index.php/inside-6/43-example>

<sup>268</sup> Research and discovery. Weizmann Institute of Science . (accessed 07/19/2022). Available at : <https://www.weizmann.ac.il/pages/about-institute/research-and-discovery>

<sup>269</sup> Ariel University. (accessed 06/18/2022). Available at : <https://www.ariel.ac.il/wp/en/>

## PEST analysis of the Israeli education system

Criteria	Factors influencing the education system	Factors influencing educational institutions	Perspective on the evolution of the influence factor
<b>Political factors</b>			
- Stability of the political situation	- Possibility of long-term planning and reforms	- Opportunity for universities to attract international students	- Creating a stable legislative foundation for education that supports innovation and development
- Public investment in education	- Financing and development of educational infrastructure	- Ensuring the financial sustainability of universities	- Development of a strategy for the development of the education system in accordance with national policies and economic priorities
- Science and Technology Policy	- Specific focus on innovation and technological progress	- Support for research activities and innovative projects	- Introduction of standards and orientation towards innovative educational methods
- Legislative acts in the field of education	- Defining rules and standards for the education system	- Regulation of the structure and activities of universities	- Development of a global education strategy to attract international students and researchers
- Foreign policy, including international relations	- The influence of international factors on the educational system	- Participation in international educational projects and programs	- Cooperation with world universities and institutions to exchange knowledge and experience
<b>Economic forces</b>			
- Level of economic development	- Availability of funding and resources for education	- Financial stability of universities and the possibility of investment in development	- Development of an education financing strategy, taking into account economic realities
- Unemployment rate and labor market	- Connection of educational programs with the needs of the labor market	- Development of educational programs that meet market requirements	- Support for educational programs that help increase employment and maintain labor market stability
- Inflation and interest rates	- Financial stability of the education system in conditions of inflation	- Management of expenses and investments of universities	- Development of a strategy to counter the negative impact of inflation on education
- State budget and financial policy	- Financing of educational programs and reforms	- Dependence of universities on the state budget	- Development and support of budgetary measures to ensure sustainability of

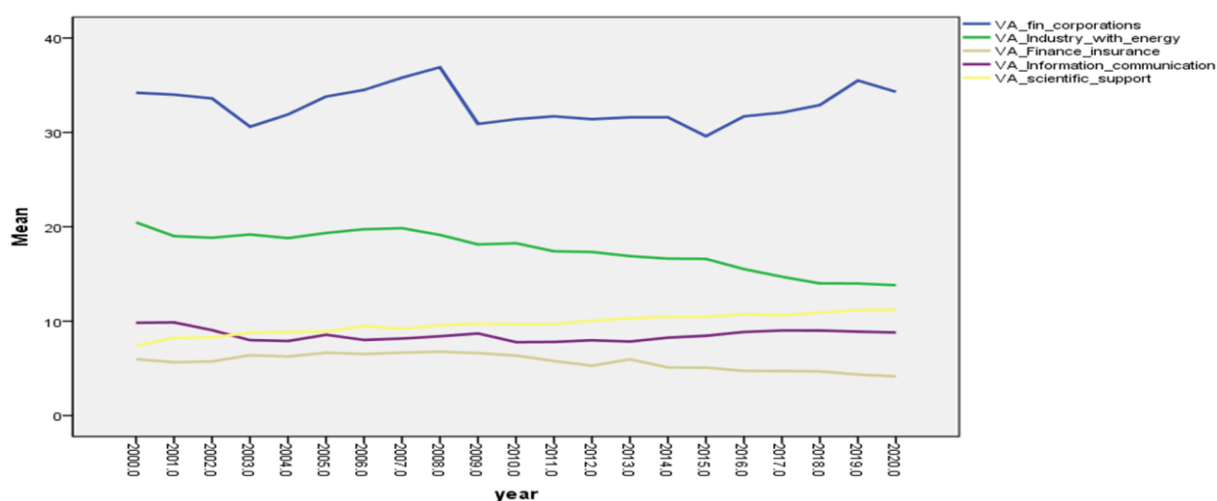
			financing
- Investment in research and innovation	- Promoting research and innovation activities in the education system	- Financial support for scientific research and innovative projects	- Development and support of programs and incentives for innovative activity in education
- International trade and globalization	- Promoting international cooperation and knowledge exchange	- Attracting international students and researchers	- Development and support of activities aimed at globalizing the education system
<b>Social factors</b>			
- Cultural values and traditions	- Reflection of cultural aspects in educational programs	- The influence of cultural preferences on the format and content of training	- Taking measures to create a culturally sensitive educational environment
- Social mobility and inequality	- Opportunities for social mobility through education	- Overcoming inequalities in access to education and opportunity	- Development of programs and activities aimed at reducing social inequality
- Family structure and lifestyle	- Adaptation of educational programs to changes in family structure and lifestyle	- Specialization of programs in accordance with student needs	- Development of flexible learning formats to accommodate changes in family structure
- Technological literacy and digitalization of society	- Integration of technology into educational practices	- Development of digital skills and infrastructure in universities	- Implementation of educational programs that promote the development of digital literacy
- Educational traditions and preferences	- Compliance of educational programs with traditional and expected standards	- Adaptation of educational methods to student preferences	- Drawing attention to changes in educational approaches and methods in accordance with current requirements
<b>Technological factors</b>			
- Innovations in education	- Integration of innovation and technology into the educational process	- Development of new forms of training using advanced technologies	- Creating a structural framework for integrating technology into educational programs
- Digital educational platforms and technologies	- Introduction of digital technologies for distance learning	- Development of online education and digital learning platforms	- Development and implementation of digital infrastructures and educational platforms
- Interactive educational resources and applications	- Development of interactive educational resources and tools	- Use of interactive technologies in the educational process	- Support and investment in the development of new educational technologies
- Artificial intelligence in education	- Use of artificial intelligence in personalized learning	- Implementation of artificial intelligence systems to optimize educational processes	- Development of a strategy for the use of artificial intelligence in education



- Cloud technologies in education	- Improving the availability of data and resources through cloud technologies	- Use of cloud technologies for storing and sharing educational materials	- Development of educational cloud platforms and ensuring their security
- Technological training of teachers	- Providing teachers with the necessary technology skills	- Training of teachers in the use of modern technologies	- Development of professional training programs for teachers in the field of technology

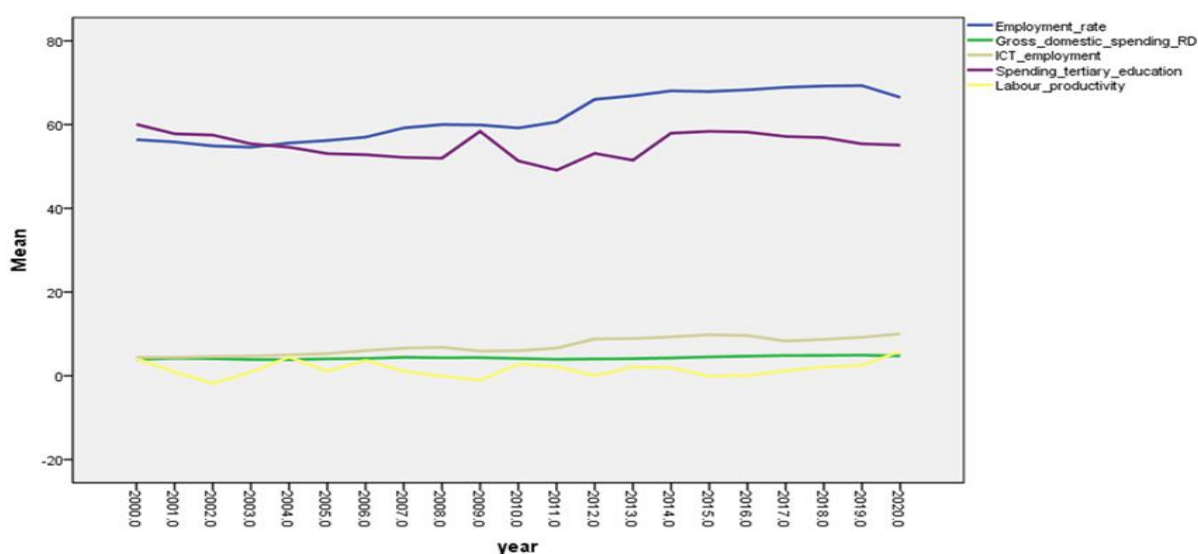
Source : developed by the author

### The contribution of economic factors to integration of the knowledge economy in Israel



**Figure 25.1. Economic activity fluctuation of knowledge economy professions between 2000-2020 in Israel (% of total value added)**

Source: made by the author from source<sup>270</sup>

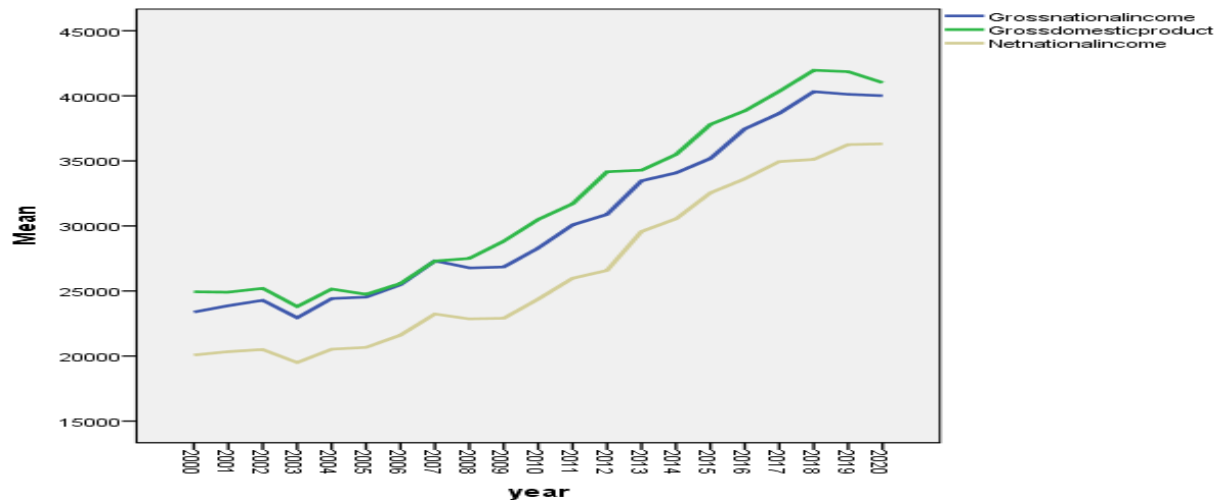


**Figure 25.2. The reciprocal relations between economic factors and economics outputs and values in Israel, 2000- 2020**

Source: made by the author from source<sup>271</sup>

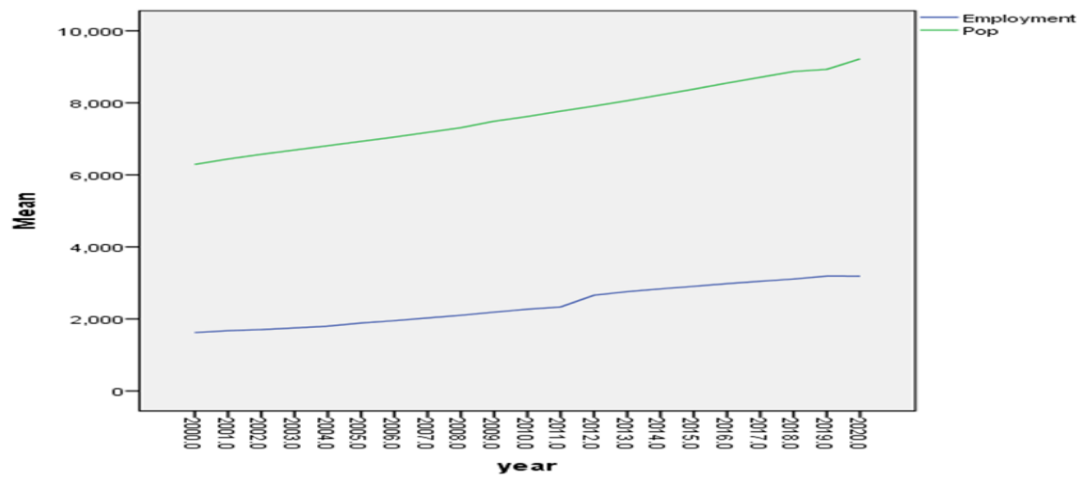
<sup>270</sup> OECD data from Israel. (accessed 10/12/2022). Available at : <https://data.oecd.org/israel.htm>

<sup>271</sup> Israel Central Bureau of Statistics. (accessed 10/12/2022). Available at :



**Figure 25.3. The implications from the economic policy - the income from GDP; GNI & nationalization income in Israel, 2000 – 2020**

Source: made by the author<sup>272</sup>

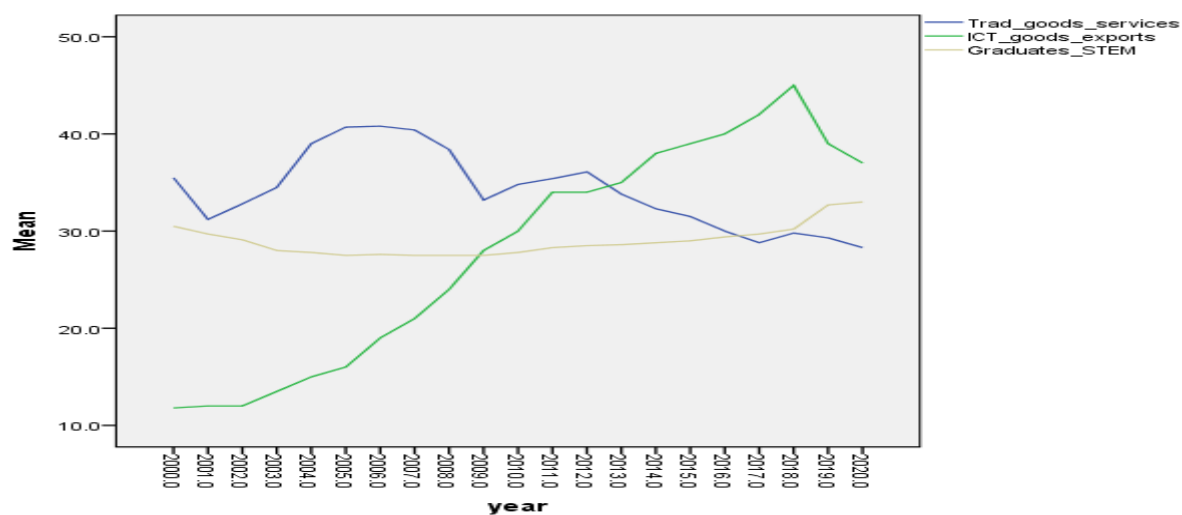


**Figure 25.4. The correlations between two economic factors, (population & employment rate), Israel, 2000 – 2020**

Source: made by the author<sup>273</sup>

<sup>272</sup> Israel Central Bureau of Statistics. (accessed 10/12/2022). Available at : <https://www.cbs.gov.il/en/Pages/default.aspx>

<sup>273</sup> Israel Central Bureau of Statistics. (accessed 10/12/2022). Available at : <https://www.cbs.gov.il/en/Pages/default.aspx>



**Figure 25.5. Level of goods, services and communication and information products exported versus STEM faculties' graduates in Israel, 2000 - 2020**  
Source: made by the author<sup>274</sup>

<sup>274</sup> Israel Central Bureau of Statistics. (accessed 10/12/2022). Available at : <https://www.cbs.gov.il/en/Pages/default.aspx>

**The key categories: economic factors / economic outputs and values, Israel, 2000-2020**

<b>Economic outputs and values</b>	<b>Economic factors</b>
Value-added in financial corporations	Trade in goods and services
Gross domestic spending on R&D by %	ICT employment by % from all labor force
Gross national income pp by thousands USD	Employment by activity -Services by thousands
Gross domestic product (GDP) pp thousands USD	Graduate of STEM degree (Science, Technology, Engineering and Mathematics)
Net national income	Number of populations, By millions
Value added by activity - Industry, including energy	Spending on tertiary education Public, % of education spending
Value added by activity- Finance and insurance,	Labor productivity and utilization
Value added by activity- Information, communication,	Employment rate by %
Value added by activity Professional, scientific, support services, % of value added	ICT goods exports by Millions USD

Source: developed by the author

## **RESPONSIBILITY STATEMENT**

The undersigned, declare on my own responsibility that the materials presented in the present doctoral thesis is the result of my own researches and scientific achievements. I am aware of the fact that, otherwise, I will bear the consequences in accordance with the law in force.

**Mashal, Lama**

Signature:

Date: \_\_\_\_\_

## IMPLEMENTATION LETTERS

המכללה האקדמית לחינוך ע"ש ק"י בבאר-שבע בע"מ (חל"צ)  
רחוב עזריאל ניצני 6, ת.ד. 4301 מיקוד 84536, טל: 08-6402777, פקס: 08-6413020



Date: 11/01/2022

To, **Academy of Public Administration of Moldova**

### *Doctoral thesis/ Ph. D Dissertation of Mrs. Mashal Lama*

I hereby confirm I have read Mrs. Mashal doctoral thesis and found it very interesting. The research paper is written in a thorough and deep manner that encompasses professionally and multidimensionally the knowledge economy integration in all life areas, and the bond between economics and education.

In her work, the doctoral student manages presenting a real and purposeful presentation, which sharpens the need to impart knowledge, understanding, and abilities that will prepare the learner for the future professions.

The model presented and ideas proposed by the researcher will allow better preparation of all education system stakeholders, decision makers, teaching teams and of course, the students.

After reading the thesis we have decided to adopt some of the proposed recommendations, thus improve staff and student individual abilities, and of course expand the learner approach and perspective to economical thinking caring to his future.

The ideas and recommendations applied in our institute were formulated with Mrs. Mashal, and we thank her for it.

We wish Mrs. Mashal continued fruitful and interesting work and extensive academic career.

Sincerely

ד"ר חגית חורבן  
המכללה האקדמית לחינוך ע"ש ק"י  
באר-שבע  
06-2106-21  
08-6234966  
08-6238599



Date: 22.12.21

**To: University - ACADEMY OF PUBLIC ADMINISTRATION OF MOLDOVA**  
(Lama Mashal - 309632495 - Ph. d thesis)

*I have read Mrs. Lama Mashal - PhD thesis and I would like to confirm it meets high standards, compatible with profound analysis ability of theoretic contents, models and global knowledge economy development trends.*

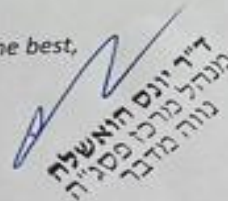
*The PhD thesis comprehensively presents the comparison of what is happening and the world and in Israel. However, not adopting successful models from the world and adjusting them to Israel is a threat on future economy and occupation, and unemployment as a result of lack of skills and abilities.*

*We have adopted the orderly plan the researcher proposes for developing teaching manpower with economic orientation and it is operated in our school this year (2021-2022) for the first time.*

*All the teachers are learning various courses, and learning contents are studied within all grade schedules.*

*I would like to take this opportunity to thank Mrs. Lama Mashal for her work and wish her  
good luck.*

All the best,

  
ד"ר יונס חואשלה  
מנהל מרכז פסיגיה  
נווה מדבר



## CURRICULUM VITAE



**Date of birth :** January, 10. 1967– Israel.

**Address:** Ernest – Chen St', 8. Beer – Sheva, Israel.

**Home/fax telephone :** 972 – 8-9910114/ **Mobile telephone :** 972 – 054-5915553

**E-mail :** [lamamashal@gmail.com](mailto:lamamashal@gmail.com) / **Nationality :** Israel

### **Higher Education:**

**2018 – Today** - Doctoral Studies - Faculty of World Economy, International Economic Relations – Academy of Public Administration of Moldova.

**2010-2012** - Master's degree (MA) in educational counseling at "Kaye College" in Beer - Sheva, Israel.

**2007-2010** - Bachelor's degree (B.Ed.) in special educational, "Kaye College" in Beer - Sheva, Israel.

**1997 – 2000** - Bachelor's degree (BA) in Psychological. Burlington College, US.

**1995-2002** – Bachelor's degree (B.Ed.) in Mathematics, Open University, Jerusalem, Israel.

### **Professional Education:**

**1995 – 1997** - Teaching studies Certificate- Ministry of Education in Israel.

### **Employment :**

**2012 – Today** – Pedagogical teaching training in Kaye College, Beer Sheva, Israel

**2012-2016** - Pedagogical teaching training in Achva College, Israel.

**2012 – 2014** – Educational counseling in Segev Shalom High school, Israel.

**2000-2014** – Mathematics teacher in High school; Psychological studies, Segev Shalom High school, Israel

**1993 – 2000** - Mathematics & Arabic studies teacher in Tel Sheva municipality.

**Languages:**

	<b>Speaking</b>	<b>Reading</b>	<b>Writing</b>
<b>Hebrew</b>	<i>Very Well</i>	<i>Very Well</i>	<i>Very Well</i>
<b>English</b>	<i>Very Well</i>	<i>Very Well</i>	<i>Very Well</i>
<b>Arabic</b>	<i>M. language</i>	<i>M. language</i>	<i>M. language</i>

**Computers and software:**

Control of OFFICE software

Use of social media networks