

MOLDOVA STATE UNIVERSITY
DOCTORAL SCHOOL IN HUMANITIES AND EDUCATION SCIENCES
CONSORTIUM: Moldova State University, "Alecu Russo" State University of
Balti, "Bogdan Petriceicu Hasdeu" State University of Cahul

Presented as manuscript
CZU: 373.5.015.3:81`246.3(569.4+478)(043.3)

WITTMAN HANA
PSYCHO-PEDAGOGICAL AND METHODOLOGICAL
BENCHMARKS OF MULTILINGUAL EDUCATION
OF STUDENTS FROM A MOTIVATIONAL PERSPECTIVE
IN ISRAEL AND THE REPUBLIC OF MOLDOVA

SPECIALTY 531.01 – GENERAL THEORY OF EDUCATION

PhD Thesis in Education Sciences

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CHISINAU, 2024

UNIVERSITATEA DE STAT DIN MOLDOVA
ȘCOALA DOCTORALĂ ȘTIINȚE UMANISTE ȘI ALE EDUCAȚIEI

CONSORTIU: Universitatea de Stat din Moldova (USM), Universitatea de Stat
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Cu titlu de manuscris

CZU: 373.5.015.3:81`246.3(569.4+478)(043.3)

WITTMAN HANA

REPERE PSIHOPEDAGOGICE ȘI METODOLOGICE
ALE EDUCAȚIEI MULTILINGVE A ELEVILOR
DIN PERSPECTIVĂ MOTIVAȚIONALĂ
ÎN ISRAEL ȘI REPUBLICA MOLDOVA

Specialitatea 531.01 – Teoria generală a educației

Teză de doctorat în științe ale educației

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CHIȘINĂU, 2024

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ANNOTATION

Wittman Hana, "Psycho-Pedagogical and Methodological Benchmarks of Multilingual Education of Students from a Motivational Perspective in Israel and The Republic of Moldova", Doctoral Thesis in Education Sciences, Moldova State University, Chisinau, 2024.

Volume and Structure of the Thesis: The thesis consists of an introduction, three chapters, general conclusions, and recommendations, 184 bibliographic sources, 8 appendices, 140 pages of basic text, 11 figures, and 19 tables.

Keywords: multilingualism, multilingual education, multilingual learning, foreign language learning practices, strategies for learning multiple languages, simultaneous language learning, active communication, motivational theories, motivation for learning.

Field of Study: General Theory of Education

The Purpose of the Research: establishment of the psycho-pedagogical and methodological benchmarks of multilingual education of middle school students from the motivational perspective.

Research Objectives: analyse specialized literature with reference to the studied phenomena; conceptualize students' multilingual education from a motivational perspective; develop a methodology for motivating students to learn multiple languages as a dimension of multilingual education; experimentally validate the methodology for motivating students to learn multiple languages.

The scientific novelty and originality of the research lie in: redefining the concept of multilingual education and identifying the particularities of learning multiple languages among middle school students of Jewish origin; developing an approach to simultaneous language learning based on the principles of transposition, transfer, and active, situational communication; establishing a motivational framework for multilingual education of middle school students based on personal, methodological and social factors.

The scientific problem solved: the contradiction between the need for multilingual education among middle school students and their low motivation to learn multiple languages was mitigated by substantiating psycho-pedagogical and methodological approaches to multilingual learning from a motivational perspective.

The theoretical significance of the research lies in the development of the theory and methodology of multilingual learning among middle school students from a motivational perspective: establishing the concept of multilingual learning among students; defining a motivational framework for the simultaneous learning of multiple languages; deriving the principles of transposition and transfer in active and situational/contextual communication; identifying motivational tools for learning multiple languages, including personal, social, behavioral, and educational factors.

The practical significance of the research capitalizing on multilingual education methodology for middle school students from a practical motivational perspective; implementing mechanisms to enhance student motivation for learning multiple languages in schools where diverse languages are taught; and applying research findings in the initial and continuous training of teachers of native and foreign languages.

Application of the scientific results. The scientific results were presented and discussed during meetings of the Department of Education Sciences at the Moldova State University and at various national and international scientific conferences. The research findings have been disseminated through the publication of 5 articles in international scientific journals and 5 articles in national scientific conferences. Additionally, the practical application of the research was carried out through organized activities with middle school students in Ruppim, Israel.

ADNOTARE

**Wittman Hana, „Repere psihopedagogice și metodologice ale educației multilingve din perspectivă motivațională în Israel și Republica Moldova”,
teză de doctor în științe ale educației, Chișinău, 2024.**

Volumul și structura tezei. Teza este constituită din introducere, trei capitole, concluzii generale și recomandări, 184 surse bibliografice, 8 anexe, 140 pagini text de bază, 11 figuri, 19 tabele.

Cuvinte cheie: multilingvism, educație multilingvă, învățare multilingvă, practici de învățare a limbilor străine, strategii pentru învățarea mai multor limbi, învățarea simultană a mai multor limbi, comunicare activă, teorii motivaționale, motivație pentru învățarea mai multor limbi

Domeniu de studiu: Științe ale Educației

Scopul cercetării: fundamentarea reperelor psihopedagogice și metodologice ale educației multilingve a elevilor din învățământul gimnazial din perspectiva motivațională.

Obiectivele cercetării: analiza literaturii de specialitate cu referire la fenomenele studiate; conceptualizarea educației multilingve a elevilor din perspectiva motivațională; elaborarea metodologiei de motivare a elevilor pentru învățarea mai multor limbi ca dimensiune a educației multilingve; validarea experimentală a metodologiei de motivare a elevilor pentru învățarea mai multor limbi.

Noutatea și originalitatea științifică a cercetării constă în: redefinirea conceptului de educație multilingvă și stabilirea particularităților învățării mai multor limbi străine de către elevii de gimnaziu de origine evreiască; abordarea învățării simultane a mai multor limbi în baza principiilor transpunerii și transferului, comunicării active și situaționale; fundamentarea cadrului motivațional pentru educația multilingvă a elevilor de gimnaziu bazat pe motive personale, metodologice și sociale.

Problema științifică rezolvată: contradicția dintre nevoia de educație multilingvă a elevilor de gimnaziu și nivelul scăzut de motivație al acestora pentru învățarea mai multor limbi s-a redus prin fundamentarea abordărilor psihopedagogice și metodologice ale acestui proces din perspectiva motivațională.

Semnificația teoretică a cercetării constă în: dezvoltarea teoriei și metodologiei învățării mai multor limbi de către elevii de gimnaziu, din perspectiva motivațională: fundamentarea conceptului de învățare a mai multor limbi de către elevi; stabilirea cadrului motivațional pentru învățarea simultană a mai multor limbi; deducerea principiilor de transpunere și transfer în comunicarea activă și situațională/contextuală; identificarea instrumentelor motivaționale pentru învățarea mai multor limbi, incluzând factori personali, sociali, comportamentali și educaționali.

Semnificația practică a cercetării constă în: valorificarea metodologiei educației multilingve a elevilor din învățământul gimnazial, dintr-o perspectivă motivațională practică; aplicarea mecanismelor de motivare a elevilor pentru învățarea mai multor limbi în gimnaziile unde sunt predate diverse limbi; utilizarea rezultatelor cercetării în formarea inițială și continuă a cadrelor didactice, vorbitori nativi, dar și de limbi străine.

Aplicarea rezultatelor științifice. Rezultatele cercetării au fost discutate în cadrul ședințelor Departamentului de Științe ale Educației din cadrul Universității de Stat din Moldova și la diferite conferințe științifice naționale și internaționale: 5 articole în reviste științifice internaționale și 5 articole în conferințe științifice naționale. În plus, aplicarea practică a cercetării a fost realizată prin activități organizate cu elevii de gimnaziu din Rupin, Israel.

АННОТАЦИЯ

Виттман Хана, «Психо-педагогические и методические ориентиры многоязычного образования с мотивационной точки зрения в Израиле и Республике Молдова», докторская диссертация в области педагогических наук, Кишинев, 2024.

Объем и структура дипломной работы: Дипломная работа состоит из введения, трех глав, общих выводов и рекомендаций, 184 библиографических источников, 8 приложений, 140 основных текстовых страниц, 11 фигур, 19 таблиц.

Ключевые слова: многоязычие, многоязычное образование, многоязычное обучение, практики изучения иностранных языков, стратегии изучения нескольких языков, одновременное изучение нескольких языков, активная коммуникация, мотивационные теории, мотивация для изучения нескольких языков.

Область исследования: Общая теория образования.

Цель исследования: обоснование психо-педагогических и методических ориентиров многоязычного образования учащихся гимназий с мотивационной точки зрения.

Задачи исследования: анализ специализированной литературы, касающейся изучаемых явлений; концептуализация многоязычного образования учеников с мотивационной точки зрения; разработка методологии мотивации учеников к изучению нескольких языков как области многоязычного образования; экспериментальная проверка методологии мотивации учеников к изучению нескольких языков.

Научная новизна и оригинальность исследования заключается в переосмыслении определения понятия многоязычного образования и установлении особенностей изучения нескольких языков учащимися средних школ еврейского происхождения; в разработке подхода к одновременному изучению нескольких языков, основанного на принципах транспонирования и переноса, активного и ситуативного общения; в обосновании мотивационной структуры многоязычного образования учащихся средних классов на основе личностных, методических и социальных факторов.

Решена научная задача: уменьшено противоречие между необходимостью многоязычного образования учащихся средних классов и их низким уровнем мотивации к изучению нескольких языков путем обоснования психо-педагогических и методических подходов этого процесса с мотивационной точки зрения.

Теоретическая значимость исследования заключается в: разработке теории и методики изучения нескольких языков учащимися средних классов - мотивационная составляющая: обоснование концепции изучения учащимися нескольких языков, использование дидактических инструментов изучения нескольких языков: личного, социального, поведенческого, образовательного; концептуализация педагогической основы развития мотивации к изучению нескольких языков, построенная на теоретическом, определяющем, ориентировочном измерении, а также на индивидуальных потребностях учащихся.

Практическая значимость исследования заключается в применении методологии многоязычного образования учащихся гимназий с практической мотивационной перспективы; применение механизмов мотивации учащихся для изучения нескольких языков в гимназиях, где преподаются различные языки; использование результатов исследования в процессе начальной и последующей подготовки педагогических кадров, как носителей родных языков, так и иностранных языков.

Применение научных результатов обсуждалось на заседаниях кафедры Педагогических наук Государственного Университета Молдовы и на различных национальных и международных научных конференциях: 5 статей в международных научных журналах и 5 статей на национальных научных конференциях.

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LIST OF ABBREVIATIONS

B.Ed. - Bachelor of Education

CEFRL - The Common European Framework of Reference for Languages

CEFR - Common European Framework of Reference

CHE – Council for Higher Education in Israel

CLIL - Content and Language Integrated Learning

IE - Inclusive Education

IEA – International Association for the Evaluation of Educational Achievement

ITE - Initial Teacher Education

M - Mean (AVERAGE)

M.E.D - Master of Education

MECC – Ministry of Education and Culture in Republic of Moldova

MOE – Ministry of Education in Israel

S.D. - Standard Deviation

UNESCO – United Nations Educational Scientific and Cultural Organization

UNICEF - United Nations Children's Fund

INTRODUCTION

The relevance and importance of the research topic. The period in which we live is marked by complexity. Various social phenomena, alongside global economic crises, have a direct or indirect impact on the schools - institutions integrated within the broader social system. These phenomena influence not only the educational processes the schools carry out but also the way in which social actors perceive the value of education. Consequently, formal education has become subject to evolving conceptions, perspectives, and reforms aimed at modernizing the educational system, an institution increasingly viewed as out of step with contemporary needs.

Bilingual (or multilingual) education, in general terms, refers to the use of two or more languages as mediums of instruction for part or all of the school curriculum. This definition excludes programs that merely involve the bilingual students without actually implementing bilingual (or multilingual) instruction. For a program to qualify as bilingual, both languages must be used as mediums of instruction.

As scientific research has demonstrated, bilingual education becomes effective when multiple languages are used not only for teaching them as subjects in isolation but also for teaching the content of the curriculum, such as mathematics, social sciences, or the humanities. Bilingualism (or multilingualism) cannot be examined solely in relation to the language itself; it must always be understood in the broader social context, considering the specific circumstances of the linguistic communities concerned. These communities, in turn, occupy quite different position within the society, with varying degrees of access to power, recognition and opportunities [1, 3].

Internationally, multilingual education has been established as a priority in numerous educational policy documents, such as Common European Framework of Reference for Languages and the Key Competences for Lifelong Learning, which emphasize the importance of multilingual competences. These skills pertain to the effective and appropriate use of multiple languages for communication. Multilingual competences integrate linguistic, historical, and intercultural components and are grounded in the ability to mediate between different languages and modes of communication.

In this context, it is worth noting that in the Republic of Moldova, Romanian and Russian serve as the primary languages of instruction. In schools with students of Ukrainian, Bulgarian, Gagauz, and Jewish ethnic groups, their mother tongues are taught alongside the foreign languages.

In the in the case of the two schools in Chisinau with Jewish student populations, both Hebrew and Romanian are studied, with the latter as the state language. In these institutions, the students learn at least four languages, manifesting varying levels of motivation to learn them.

The concept of motivation has been the focus of extensive research, with significant efforts dedicated to defining and explaining its essence. In recent years, studies on learning motivation have expanded.

Therefore, learning motivation is understood as a dynamic state that arises from the learner's perception of themselves and their environment, encouraging them to choose, engage in, and persevere with activities aimed at achieving a goal. It is highlighted that motivation in the educational context consists of three fundamental dimensions: it is a dynamic state that fluctuates over time; it is measured by the student's commitment and persistence in the activities carried out; and, it depends on the student's self-perceptions, the school and its objectives [124].

The work explores various dimensions of the study of bilingualism and multilingual education. Emphasis is placed on traditional methodological approaches, such as the comparative-historical method, audio-lingual and communication methods, translation and grammar-focused approaches, and the attitudinal and motivational theories. Attention is also given to the teacher's role and accumulated teaching experience. Moreover, linguistic geography is used: for instance, diachronic comparisons highlight the shared features of Romance languages derived from Latin, while the synchronic comparison elucidates the specifics of languages like Romanian and French. Through these methods, students become aware of the relationship between different linguistic repertoires and cultures, underscoring the interdependence of concepts and theories, which are often applied implicitly across countries and cultures [31].

From the above, we can conclude that motivation is one of the main factors in the learning process, significantly enhancing the effectiveness of activities and contributing to personality development. Thus, this raises the question of what underlies the formation of learning motivation and how it can be stimulated and maintained for optimal academic performance. Accordingly, three primary interests motivate the choice of this research topic: personal, social, and scientific.

The personal interest arises from the author's experience as a teacher in both middle and high school. Working closely with students, parents and colleagues has highlighted the importance of understanding learning motivation, particularly the issue of low motivation and its negative impact on students' academic performance, as observed among students in Israel.

The social interest is characteristic of every society. Society benefits from the well-educated middle school students who are prepared to become experts and professionals in the future.

The scientific interest refers to the fact that, although motivation in middle school learners has been studied extensively, research on this topic within the Israeli context remains limited, especially concerning the Arab minority, whose ethnic and cultural characteristics are distinct. As part of this study, we proposed to address gaps in the literature by investigating the psycho-pedagogical benchmarks of motivation to learn multiple languages among middle school students in Israel and the ways of its development.

Description of the Research Context and the Research Problem. While bilingualism has been extensively researched internationally, multilingualism has received comparatively less attention in research. Scholars agree that when learning multiple languages, the communicative component is essential and plays a dominant role. The principle applies equally to mother tongue and foreign language acquisition.

The respective approach is prominently discussed in the works of N. Chomsky [36], who extend their theories to include elements beyond communication, the degree of students' preparation (student readiness), interpersonal relationships and mental processes involved in the acquisition of some languages. Another theory is proposed by M. Swain [139, 140] who claims that speech production is an integral part of the language acquisition process when practiced under appropriate circumstances.

However, the problem of learning two or more languages has been the object of research of several scholars. E. Shonamy [129-132] and B. Spolsky [135, 136] explore language acquisition depending on contexts and individual needs; while J. Cummins [45-47] emphasizes the metalinguistic awareness in the need to learn languages and the integration of different teaching models. G. R. Tucker [142] argues that multilingualism is the norm in most countries, while E. G. Bokamba [apud. 51] proves that multilingualism is essential for educational and economic development. Similarly, S. May [107] points the cognitive and social benefits of multilingualism, especially for student development.

In the Republic of Moldova, the problem of teaching and studying multiple languages, has been addressed by several education specialists. I. Guțu researched the topic from the perspective of curriculum design and competency standards [174]; A. Solcan explored active methods for learning of multiple languages [177, 184], while V. Goraș-Postica examined the role of the Romanian language as a means of socio-cultural integration for young people in the Republic of Moldova [178]. M. Ianioglo discussed the culture of communication in the context

of intercultural dialogue [180]. T. Slama-Cazacu analyzed essential aspects of psycholinguistics, examining the mechanisms of verbal understanding and expression, as well as the impact of psychological and social contexts on language variation [182, 183]. The education system is currently focused on identifying the linguistic needs of diverse student populations and mapping the main challenges faced by language teachers.

Western researchers play a significant role in the study of motivation, with contributions from J.C. Alderson [5], E. Deci [50, 51], R. Donato [52], J.M. Keller [86], W. Lambert [96], and E. Bialystok [18], and others. The studies carried out refer to a very wide and varied range of issues, including: motivation and performance, motivation and competence development, motivational management, motivation and personality, the role of personality in fostering motivation, motivation and learning strategies, sources of motivation or motivation, motivation as enjoyment of learning and teaching in the classroom, motivation of students with learning difficulties, self-determination theory and learning, adult learning motivation. Despite the wealth of research, *the contradiction* resides in the pressing need to promote multilingualism and multilingual education of students from national minorities and the low level of intrinsic and extrinsic motivation in these students when it comes to studying multiple languages. Additionally, there is an insufficiency of studies and methodological tools to enhance this learning process. The discrepancy raises the following research *problem*: What are the psycho-pedagogical and methodological approaches to multilingual education that can effectively foster motivation among middle school students in Israel and the Republic of Moldova, thereby addressing the identified contradictions.

The Subject of the Research: the process of multilingual education of middle school students from a motivational perspective.

The Purpose of the Research: establishment of the psycho-pedagogical and methodological benchmarks for the multilingual education of middle school students from the motivational perspective.

Research Objectives:

1. Analyse specialized literature with reference to the studied phenomena.
2. Conceptualize students' multilingual education from a motivational perspective.
3. Develop a methodology for motivating students to learn multiple languages as a dimension of multilingual education.
4. Experimentally validate the methodology for motivating students to learn multiple languages.

Research Hypothesis: the establishment of a comprehensive and contextualized approach to motivating students to learn multiple languages simultaneously will positively impact their motivation to study these languages and enhance multilingual education in general.

The research draws upon theories and concepts from the fields of pedagogy, educational psychology, developmental psychology, linguistics-didactics, and sociology. However, the following served as the theoretical benchmarks for the research:

- Conceptions and theories on the essence and evolution of motivation include classical motivational theories by D. Douglas [54] and J.S. Eccles [58], as well as A.H. Maslow's needs theory [106]; modern motivational theories by A. Cruttenden [44] and R.C. Gardner [64]; and integrative motivational theories by J.S. Eccles [59].
- Motivational theories with direct educational implications: the theory of educational objectives by J. Cenoz [33], S.H. Chan and L. Collins [35, 40], self-determination theory by J. Cenoz and J. M. Corbin [31, 42], expectancy-value theory by J. Cenoz [34], self-efficacy theory by J. Cenoz [26, 27, 28], causal attribution theory by D. Crabbe and J. Cummins [43, 45], socio-cognitive theory by D. Crabbe and R. C. Gardner [43, 62], self-esteem theory by R. Alanen and T. Goetz [4, 69], learning theories by P. Cirila and D. Coste [38, 173], demotivation theories by J. Cenoz, P. Cirila, L. Collins, J. S. Eccles [29, 38, 40, 58].

The Methodological Framework of the Research. To solve the problem, extensive theoretical research and a conclusive empirical approach were carried out. Thus, the research employed both theoretical and empirical methods to achieve its objectives and address the identified research problem:

- Theoretical methods, such as scientific documentation, theoretical analysis and synthesis, typological analysis, comparison, generalization, and systematization.
- Empirical methods: survey (questionnaire on students' attitudes towards academic subjects and the dominant motivation for learning), survey (the survey for middle school students from grades 7-9 (aged 12-15) regarding their views on language learning motivation); carrying out the psycho-pedagogical experiment (exploratory, training, and control).
- Data analysis was conducted using several statistical-mathematical methods: descriptive statistical methods (determining relative frequencies (%) and average values), inferential statistical methods (Student t-test for independent samples), one-way ANOVA test (comparison of average values).

Experimental Basis of the Research: The "Herzl" Jewish School in Chişinău, in the Republic of Moldova (initial phase) and at the "Rupin" school in Israel (all phases). A total of 200 students (grades 7-9, aged 12-15) participated in the study.

The scientific novelty and originality of the research lie in:

- Redefining the concept of multilingual education and identifying the particularities of learning multiple languages among middle school students of Jewish origin;
- Developing an approach to simultaneous language learning based on the principles of transposition, transfer, and active, situational communication;
- Establishing a motivational framework for multilingual education of middle school students based on personal, methodological and social factors.

The Scientific Problem solved: the contradiction between the need for multilingual education among middle school students and their low motivation to learn multiple languages was mitigated by substantiating psycho-pedagogical and methodological approaches to multilingual learning from a motivational perspective.

The theoretical significance of the research lies in the development of the theory and methodology of multilingual learning among middle school students from a motivational perspective:

- Establishing the concept of multilingual learning among students.
- Defining a motivational framework for the simultaneous learning of multiple languages.
- Deriving the principles of transposition and transfer in active and situational/contextual communication.
- Identifying motivational tools for learning multiple languages, including personal, social, behavioral, and educational factors.

The practical significance of the research consists in:

- Capitalizing on multilingual education methodology for middle school students from a practical motivational perspective.
- Implementing mechanisms to enhance student motivation for learning multiple languages in schools where diverse languages are taught.
- Applying research findings in the initial and continuous training of teachers of native and foreign languages.

Approval of Scientific Results. The results obtained during the theoretical and empirical research were discussed in meetings of the Department of Education Sciences at the Moldova State University and at various international scientific conferences where the author's scientific publications were presented, including: *The International Conference “EU: Building Links to Eastern Partnership Countries”*, EUforY, Chişinău, 2023; *The Scientific and Practical Conference “Perspectives on Family Resilience in the Context of Multiple Crises”*, Republic of Moldova for UNESCO, Chişinău, 2023; *The International Scientific and Practical Conference*

“Science. Education. Culture”, State University of Comrat, 2023; The National Scientific Conference with International Participation “Integration through Research and Innovation”, dedicated to the International Day of Science for Peace and Development, Chişinău, 2023, Moldova State University, Chişinău, 2023; and The International Conference on Adult Education „Education for Peace and Sustainable Development”, Moldova State University, Chişinău, 2023. Additionally, five articles were published in international scientific journals.

Thesis Structure. The thesis consists of an introduction, three chapters, general conclusions, and recommendations, 184 bibliographic sources, 8 appendices, 140 pages of basic text, 11 figures, and 19 tables.

Keywords: multilingualism, multilingual education, multilingual learning, foreign language learning practices, strategies for learning multiple languages, simultaneous language learning, active and contextual communication, motivational theories, motivation for learning.

Summary of Thesis Sections:

In the Introduction, the relevance and importance of the research theme are substantiated; the research situation is described, and the research problem is identified; the object, purpose, objectives, and hypothesis of the research are formulated; the research methods are presented; the novelty and scientific originality, the solved scientific problem, the theoretical significance of the research, and the practical value of the work are outlined; and the approval of the research results through dissemination and validation are detailed.

Chapter 1, titled “Multilingual Education: Theoretical Framework,” examines the conceptual approaches and delimitations of multilingual education. The theoretical analysis conducted has allowed us to distinguish the complexity of the multilingual education process, exploring how it enhances cognitive, social, and economic skills and promotes academic engagement through the teaching of native, global, community, and heritage languages. Key concepts such as monolingualism, bilingualism, multilingualism, plurilingualism, and polyglossia are defined and their effects on cognitive functions and cultural empathy are analysed. The chapter also addresses the challenges of multilingual policies, such as developing effective assessments and supporting language learners, proposing bilingual testing methods as a solution. The chapter highlights the way the perspectives on bilingualism have shifted over the past fifty years. Previously viewed negatively due to outdated research, bilingualism is now recognized for its cognitive, linguistic, and social benefits, supported by studies from Montreal. Modern educational approaches focus on both communicative skills and formal language knowledge, marking a shift from traditional grammar-translation methods to communicative and interactive approaches. The chapter contrasts traditional grammar-translation methods with

communicative and interactive approaches, reflecting a shift in modern education toward fluency over linguistic accuracy. This approach aims for fluency and introduces grammar as needed to facilitate communication, supported by theories like the Comprehensible Input Hypothesis and the Output Hypothesis. The chapter also reviews the functional approach, which organizes curricula around practical language functions, and the holistic "whole language" approach, which integrates language learning with real-life experiences. Finally, the chapter explores multilingual education policies in Moldova and Israel, emphasizing how geopolitical and economic factors influence language curricula and student motivation. The Republic of Moldova integrates Romanian, Russian, and Gagauz into its curricula, while Israel emphasizes English and Arabic instruction alongside Hebrew, reflecting its geopolitical realities. Language education policies in both countries are influenced by geopolitical and economic factors, shaping curriculum development and student motivation.

Chapter 2, titled “*Conceptual and Methodological Framework of Multilingual Education of Students from a Motivational Perspective*,” examines multilingual education through various educational perspectives. The psychopedagogical benchmarks of multilingual education constitute a theoretical framework based on general and specific principles that guide the teaching practice of educators and contribute to the achievement of educational objectives.

The *general principles* of education include: the principle of student-centered education, the principle of valuing age-related characteristics, the principle of free choice (or intrinsic motivation), the principle of active learning, the principle of education as interaction, and the principle of ensuring continuity and transition.

These are complemented by *specific principles* aimed at optimizing instruction, such as: the principle of the illustrative nature of teaching materials, the principle of accessibility of content, the principle of contextual adaptation, the principle of individualized and personalized approaches, the principle of active knowledge and skill acquisition, the principle of communicative and intercultural approaches, the principle of collaboration and active student participation, the principle of integrating information and communication technologies into the educational process, and the principle of success orientation. The *methodological benchmarks* provide a framework for the systemic approach to teaching, learning, and assessment, including the design, implementation, and evaluation of educational practices. The key components of this methodology are: teaching strategies, specific educational activities, professional development programs for teachers, and student motivation.

The chapter emphasizes the development of tailored instructional strategies, personalized learning, and motivational techniques informed by psycho-pedagogical research. It also

highlights the importance of supportive environments, effective assessment methods, and differentiated instruction for addressing learning disabilities. The chapter contrasts content-based teaching, which integrates language learning with meaningful content, with structuralist approaches that focus on grammar instruction. It proposes enriched-content instruction, which teaches linguistic elements (e.g., grammar) within relevant content. This approach is well-suited for international settings with limited exposure to the target language, aligning vocabulary, grammar, and cultural content to meet students' needs.

The chapter explores the growing interest in using linguistic landscapes to enhance multilingual awareness and critical literacy. The chapter examines both the general psychopedagogical approach and the methodological approach, as well as the specific motivational perspective. It offers a comprehensive exploration of the scientific content, and theoretical approaches related to the topic, including an analysis of concepts such as motivation and reason. It identifies structural and processual aspects of motivation from diverse perspectives and reviews classical and modern motivational theories and their integration into the educational system. The chapter highlights the complexity and breadth of motivation in general and learning motivation in particular. It addresses the diversity of definitions, theories, and models, noting the challenges in their identification due to their circulation across scientific fields and their evolving forms. The findings suggest that insights from these analyses could inform the refinement of learning programs. A questionnaire is used in the study to investigate differences among students and to identify factors that best support learning for both students and teachers.

Additionally, the chapter describes a methodological framework designed to motivate students to learn multiple languages. It covers various aspects of learning motivation, including typologies, characteristics, influence parameters, learning profiles, personality traits, attitudes, and opinions. The section also examines the evolution of motivation across different countries and the specific characteristics of motivation within the Arab context in Israel, establishing a foundation for developing a representative model to enhance motivation for learning multiple languages.

Chapter 3 “*Experimental Validation of Methodology for Motivating Students to Learn Multiple Languages.*” The research design, methods and tools used to investigate the problem are presented. The pedagogical experiment is divided into three stages: identifying the students' motivation levels, organizing the pedagogical experiment of developing motivation for learning multiple languages from the motivational perspective, and the control experiment. The research explores whether motivational gaps can be addressed and how the learning program can be refined based on the findings. It emphasizes enhancing communication and literacy skills

to improve students' motivation. The study draws on the concept of second language acquisition - and refers to the acquisition of a language, which is not the native language of the learner, but is spoken in his environment, such as in a bilingual one. The foreign language (acquired foreign language) is the language that is not spoken in the learner's place of residence and is not his mother tongue.

Research deals with an empirical investigation of claims that can be confirmed/disproved by collecting and testing data. The research was quantitative and aimed to apply knowledge on learning multiple languages, using accumulated data to infer quantitative models. Questionnaires were conducted in two schools in Israel and the Republic of Moldova for students in grades 7-9 (aged 12-15). The research involved the "Herzl" Jewish school in the Republic of Moldova and a secular state school in the Sharon area of Israel. In the initial phase of the experiment, 200 questionnaires were distributed, consisting of a general questionnaire on multilingual education and a motivation questionnaire. Data were collected and analyzed for statistical purposes during the year 2023. The chosen methods for the questionnaire were presented to students from Jewish schools in both the Republic of Moldova and Israel. The research design involved providing questionnaires to each participant in the study/sample. After analyzing the results, a pedagogical model for developing motivation was designed and implemented throughout an entire school year in Israel. The results confirmed the research hypothesis. Each chapter concluded with key findings and generalizations related to the research objectives. The results obtained validated the research hypothesis by demonstrating that the implementation of an effective motivational methodology for learning multiple languages increases students' engagement with these languages and improves their academic outcomes in Israel. The research concluded with general findings, summarizing the scientific results and contributions, and offered recommendations for teachers and students.

1. MULTILINGUAL EDUCATION: THEORETICAL FRAMEWORK

1.1 Conceptual Approaches and Delimitations of Multilingual Education

Multilingual education is defined as the teaching of multiple languages, including the students' mother tongues, global languages, community languages and heritage languages, where each language is taught at diverse levels according to varying contextual needs [129].

This definition of multilingual education resonates with parallel definitions provided by other researchers in the field of sociolinguistics, who emphasize the need for students to learn more than one language to move between different languages through linguistic mixing - to promote the understanding of students from marginalized groups in the content area through the use of their first language or languages in the classroom, and to enrich the linguistic repertoire and linguistic awareness in all students by building links between similar patterns in different languages [47, 150, 154].

This definition of multilingual education belongs to the field of sociolinguistics and emphasizes the students' need to learn more than one language [31] to move between different languages through linguistic mixing - translanguaging - to promote students' understanding, to enrich the linguistic repertoire and linguistic awareness in all students through building links between similar patterns in different languages [47]. Indeed, the recognition of the importance of knowledge and skills in multiple languages - as opposed to only one language or even two - was accompanied by a change in emphasis from a monolingual educational policy to a bilingual educational policy and finally to a multilingual educational policy [175, 108].

The concept of bilingualism describes the ability to use (understand and speak) two languages, when both are acquired naturally. A family is bilingual when both parents speak to their child in two different languages. In fact, the child is exposed to both languages from the moment of birth and acquires them simultaneously (an Israeli father who speaks to the child in Hebrew, and an American mother who speaks in English). Another type of bilingualism is home versus community bilingualism. In this context, one language is primarily spoken within the household, while a different language is used in public or social settings. This form of bilingualism is particularly common in immigrant communities [129].

Multiple studies, conducted before 2009, argued that bilingualism damage the child's development. These studies ignored qualitative biographical data, which pointed to the advantages of bilingualism. Furthermore, the lack of adherence to a correct and accurate methodology stands out in these studies, namely the comparison of bilingual subjects of different socio-economic status with monolingual ones. Initially, researchers operated under the

assumption that bilingualism was an attribute of immigrant communities, often neglecting to conduct language proficiency tests or establish a clear definition of bilingualism. However, J. Cummins highlights a shift in this perspective. According to J. Cummins, this change began when Canadian researchers W. E. Lambert and E. Peal identified significant methodological flaws in many early studies on bilingualism, which focused narrowly on second language acquisition [96].

This shift in understanding of bilingualism mirrors the broader distinction between education and learning as related concepts, but they include distinct aspects of acquiring knowledge and skills. Education refers to the formal process of acquiring knowledge, skills, values, beliefs, and habits through structured instruction, often in an institutional setting such as schools, colleges, or universities. Education comprises a systematic curriculum, defined learning objectives and organized teaching methods delivered by qualified educators or instructors. Education aims to impart both theoretical knowledge and practical skills, preparing people for academic and professional success while promoting personal growth and development. On the other hand, learning is a broader and more inclusive concept, encompassing the acquisition of knowledge, skills and understanding through various experiences, interactions, and activities. It occurs in formal educational settings as well as through informal channels such as self-study, research, observation, experiments, and real-life experiences. Moreover, learning is a lifelong endeavour taking place continuously and in diverse contexts, including personal, social, cultural, and professional settings. Therefore, education is a system, and learning is a part of this system.

Multilingual education refers to teaching that leads to the ability to speak fluently in multiple languages. This ability is highly valued in today's global world, and a truly relevant one where communication between cultures is essential. Multilingual people can navigate diverse linguistic and cultural landscapes easily, while fostering cross-border understanding and cooperation. A multilingual learner possesses various cognitive, social, and economic advantages. From a cognitive perspective, speaking multiple languages improves brain function, including improved memory, problem-solving skills, and multitasking abilities. Socially, multilingualism enables meaningful interactions with people from diverse backgrounds, fostering empathy, tolerance, and intercultural understanding. From the economic perspective, multilingual people have a competitive advantage in the job market because they can communicate effectively with a wider range of customers, clients, and colleagues. Overall, multilingual education is not just mastery of languages, it is about embracing diversity, promoting inclusiveness, and bridging gaps between people and cultures. It opens doors to new

opportunities, enriches firsthand experiences and contributes to a more connected and harmonious global community [119].

Multilingual education has a profound effect on academic proficiency, allowing students to engage with academic content at a deeper level. When students study subjects in multiple languages, they are exposed to different terminologies, expressions, and conceptual frameworks, requiring them to integrate and synthesize information across linguistic boundaries. This cognitive process enhances their critical thinking and metacognitive skills by encouraging them to compare, contrast, and contextualize knowledge in diverse linguistic forms. As a result, students develop a deeper understanding of subject matter, as well as a flexible, adaptive learning approach that can be applied across various academic disciplines and real-life contexts.

Furthermore, the bilingual or multilingual learning environment promotes improved literacy skills. Students learn to navigate the grammar, syntax, and vocabulary of multiple languages, which sharpens their linguistic acuity. This increased linguistic awareness translates into better writing, more effective communication, and improved comprehension skills in all the languages they learn. Such skills are invaluable in the academic world, where clear expression and detailed understanding are necessary for success [170].

Bilingual and multilingual environments enhance literacy and exemplify broader concepts such as monolingualism, bilingualism, multilingualism, plurilingualism, and polyglossia.

Monolingualism refers to proficiency in a single language, where individuals communicate and operate exclusively within one linguistic framework. This practice offers several advantages. First, it facilitates a deeper understanding and mastery of the language, allowing individuals to better grasp its nuances and complexities. Additionally, it simplifies communication within a monolingual community, removing the need for translation and ensuring smoother interactions. However, monolingualism also presents certain challenges. Cognitively, it limits the brain's ability to experience the benefits associated with bilingualism, such as enhanced executive function and multitasking skills. Furthermore, it restricts cultural exposure, potentially hindering the development of cultural empathy and awareness, as individuals have fewer opportunities to engage with diverse languages and cultures. As a result, monolingualism may reduce one's ability to fully appreciate and navigate the broader global context where multiple languages coexist.

Bilingualism, defined as the ability to use two languages proficiently, offers significant advantages, both cognitively and educationally. From a cognitive perspective, bilingual individuals demonstrate enhanced executive function, which contributes to greater cognitive

flexibility, improved multitasking abilities, and more effective problem-solving skills. Research also highlights the positive impact of bilingualism on memory, with bilinguals exhibiting better working memory and a delayed onset of dementia compared to monolinguals. In an educational context, bilingualism is often associated with improved academic performance, largely due to the cognitive benefits it provides. Enhanced executive function and memory enable bilingual learners to process information more efficiently and apply critical thinking more effectively, which contributes to their academic success. Furthermore, bilingualism promotes cultural awareness by exposing individuals to multiple languages and cultural contexts. This exposure fosters greater empathy, cultural understanding, and adaptability, equipping bilingual individuals with the tools needed to navigate and thrive in increasingly multicultural and diverse environments.

Multilingualism refers to the ability to use two or more languages either at the individual or societal level. This concept encompasses both personal linguistic proficiency and the presence of linguistic diversity within a community. On a personal level, multilingualism is exemplified by individuals who are fluent in multiple languages, such as someone proficient in English, French, and Spanish. At the societal level, multilingualism is reflected in communities where multiple languages coexist, such as in Switzerland, where German, French, Italian, and Romansh are all official languages. The cognitive benefits of multilingualism are well-documented. Research indicates that multilingual individuals demonstrate enhanced cognitive flexibility, improved problem-solving skills, and a delayed onset of dementia compared to monolinguals. These cognitive advantages contribute to overall mental agility and resilience. An example of societal multilingualism can be observed in Canada, where both English and French are official languages, and a significant portion of the population is proficient in both. Multilingualism in such contexts not only promotes effective communication but also fosters cultural exchange and understanding within diverse populations. Thus, multilingualism enhances both cognitive capacities and social integration, making it a key factor in fostering academic success and intercultural competence.

Plurilingualism, a concept developed by the Council of Europe, refers to an individual's ability to use multiple languages with varying levels of proficiency. Unlike multilingualism, which often implies full fluency in several languages, plurilingualism emphasizes the flexible and context-dependent use of languages, acknowledging that individuals may possess different levels of competence depending on the language and the communicative situation. A key feature of plurilingualism is its adaptability, where individuals draw upon their linguistic repertoires to suit specific purposes, whether personal, professional, or educational. The Common European

Framework of Reference for Languages (CEFR) supports this concept by promoting the development of linguistic competencies that can be applied in diverse communicative contexts, encouraging learners to build and refine their language skills across multiple languages. An example of plurilingualism is an individual who speaks conversational Spanish with family, uses English for professional communication, and reads French for leisure. This demonstrates the dynamic and practical nature of plurilingualism, where language use varies depending on context and need. Thus, in educational settings, plurilingualism fosters linguistic versatility, encouraging learners to develop language skills that are adaptable to various real-life situations, ultimately contributing to broader communicative competence.

Polyglossia refers to proficiency in multiple languages, a common trait in multicultural societies. This ability allows individuals to navigate various language systems with ease, offering numerous cognitive, social, and professional benefits. Cognitively, polyglossia enhances flexibility in thinking, enabling seamless switching between languages, which fosters creativity and strengthens executive control. This constant engagement improves problem-solving skills and cognitive adaptability. In social and professional contexts, polyglossia enhances communication skills in diverse environments, making individuals effective in globalized workspaces. It also promotes cultural empathy, leading to better intercultural communication and relationships. However, polyglossia presents challenges, including the difficulty of maintaining proficiency in all languages, especially when not regularly used. Managing multiple languages can also increase cognitive load, potentially affecting performance in high-stress situations. In educational settings, polyglossia encourages communicative competence and intercultural awareness but necessitates support for language maintenance and strategies to effectively manage cognitive load.

The main aspect of a multilingual policy is to increase the range of languages taught, to deepen and improve the teaching methods of multiple languages, and to give a central place to "heritage languages" referring to indigenous languages, minority languages, and home languages, whose descendants now partially control the language [122, 129].

Educational linguistic policy encourages multilingual education as a vital component of linguistic education, thereby promoting the equality of speakers of marginal languages and enriching the other students cognitively and socially. The core of a multilingual educational policy concerns the assimilation of knowledge and skills in different languages among students their mother tongues, global languages, community languages and heritage languages [131]. Knowledge in each language does not have to be equal but should reflect specific goals for each language.

Emerging changes in ideology, alongside growing processes of globalization versus expressions of resistance by groups of immigrants and natives, have recently led certain researchers in the field of sociolinguistics to encourage a multilingual educational policy, which recognizes the linguistic diversity of the speakers, permits the integration of this diversity in the curriculum, and encourages learners to cultivate Multilingualism. This turn in linguistic education in the last decade, known by several researchers as the multilingual turn [107], is also receiving increasing support from the research findings, which point to the advantages of bilingualism in cognitive and social dimensions and the encouragement of social tolerance in cultural and emotional dimensions [18, 74].

With the intensification of globalization, transnationalism, and rapid technological advancements, there is a growing recognition of the need to acquire proficiency in multiple world languages. This linguistic competence not only fosters economic and professional leadership but also equips students with the skills necessary to thrive in emerging global markets. Multilingual knowledge is an essential component in the ability to engage in new and unique emerging markets in various international contexts and as such contributing to the advancement of society at both national and global levels [75].

A study was carried out on the promotion of a new multilingual policy in Israel mostly based on the recognition that languages are taught for different purposes [111, 130]. However, significant challenges remain regarding the training of teachers for multilingual education, many lacking sufficient preparation to teach multiple languages effectively. Additionally, teaching methodologies are often outdated, there is a shortage of up-to-date study materials that reflect the current socio-cultural contexts of language learning, and the assessment methods frequently do not capture the complexities of multilingual competence.

However, out of all the students in the education system today, there is a high proportion of immigrant students and children of immigrants, for whom different languages are part of their heritage - even if they do not master the languages. Indeed, there is enormous variation among students learning heritage languages in terms of language control, familiarity, and literacy. Thus, when we come to promote a new multilingual policy, it is of great importance to have a deeper understanding of the current situation regarding most of the languages taught in the education system, the characterization of the needs of the various languages, and the mapping of the main challenges faced by language teachers [113, 174].

UNESCO emphasizes the importance of multilingualism in fostering sustainable development, cultural diversity, and peace. The organization advocates for mother tongue-based multilingual education (MTB-MLE), which starts with instruction in the learner's first language

and gradually introduces additional languages. This approach is believed to enhance learning outcomes, self-esteem, and cultural preservation. UNESCO's commitment to linguistic diversity is highlighted in various reports and initiatives aimed at promoting quality education through multilingualism. They argue that multilingualism contributes to cognitive development and helps build more inclusive societies by respecting and promoting cultural and linguistic diversity.

The European Union also places a strong emphasis on multilingualism as a core value and a practical necessity for fostering mobility, cooperation, and mutual understanding among its member states [174]. Additionally, in the vision of the French national curriculum CEFRL in 2018 and 2019, specific aspects related to multilingualism were revealed, with an emphasis on a number of comprehensive skills, such as: multicultural and multilingual.

Tucker's research on multilingual education policies emphasizes that multilingualism is the norm rather than the exception in most countries worldwide. He argues that the ability to speak multiple languages is not an unusual occurrence but a common reality for a substantial portion of the global population. From this perspective, a sizeable number of people routinely use two or more languages in their daily lives [142].

Many students in Africa, for example, speak their mother tongue at home, another language in the community, and another one as the language of instruction at school. In some cases, the language of instruction in the school is a "legacy" from the days of colonialism. Often added to this system is the English language, whose position as a global language gives it a place of honour in linguistic education all over the world. Bukamba holds that a policy encouraging multilingualism is fundamental for educational and economic development [70, 156].

We are currently observing, although under varied circumstances, trend of tri/multilingualism in some European countries, where students often learn two or three languages concurrently. The European Union Education Council and CEFRL have indeed advocated for a policy of promoting the teaching of multiple languages in addition to the mother tongue, to foster linguistic diversity across Europe. In line with this vision, the European Commission adopted the "Strategy for Multilingualism" in 2008 [37]. Among the documents published under this strategy, one is highlighting the educational advantages of multilingualism. The goals of the multilingual policy comprise encouraging the learning of Shafo (additional languages) to enhance linguistic diversity within society; promoting a healthy multilingual economy; providing legislative support to ensure that European citizens can interact with government ministries and access information in their mother tongue. The long-term goal set by the committee is to increase multilingualism among the residents, until every citizen has mastered practical skills, in at least two languages, in addition to their mother tongue [6, 152].

In fact, until the culmination of phenomena as the invention of printing, the growth of the nation-state and the development of modern linguistics, the use and mixing of different language codes and dialects was less controlled and manipulated, so that the codes themselves were less defined, if at all [81]. In other words, the use of language throughout history has been examined in its multilingual aspect by many sociolinguists, either at the level of the individual moving between different codes and dialects in discourse or at the level of the society, where groups speaking different and mixed languages exist [31].

Consequently, multilingualism at both societal and individual levels has become unacceptable in many regions of the world, particularly in the West. This phenomenon is rooted in the standardization process that certain languages underwent to represent the nation-states [155]. At the core of this perception, which views languages as inherently separate, are monotheistic ideologies. Nation-states have used linguistic distinctions to separate and marginalize various minority groups, immigrants, and Indigenous populations [80]. Thus, nation-states have instituted rigid linguistic policies that use language as a symbol of national identity – summarized as „one language, one country”. This approach to language as a symbol of national identity has resulted in a rigid educational framework that often neglects the needs of multilingual individuals and communities.

This study is relevant given the current linguistic context in the Republic of Moldova. In the two Jewish schools in Chisinau, students who speak Russian and Romanian are required to learn Hebrew as a foreign language. Similarly, in Israel, Hebrew-speaking students are obliged to learn Arabic as a foreign language, reflecting the complex relationship between bilingualism and multilingual education [173]. The research aims to adhere to the six fundamental principles of scientific investigation, namely: organized and systematic procedures, externally testable processes, reproducibility of research results, internal feedback mechanisms, explaining phenomena, and building confidence in the research results [9].

The purpose of the questionnaire is to identify the differences between bilingual and monolingual students in learning multiple languages and to explore what supports both students and teachers in optimizing foreign language acquisition. The study will assess the students' achievements, the teachers' challenges and the difficulties students encounter when learning foreign languages.

The questionnaire incorporates theoretically grounded questions to investigate the relationship between the two subjects (fundamental research variables). Specifically, it examines the connection between the number of mother tongues a student speaks and their ability to learn additional foreign languages. Hypotheses were formulated to define the relationship between

these two variables. In formulating the questions, we have considered the types of inquiry commonly used in the social sciences: ontological questions explore the nature of reality and ask, "How does reality function?" and epistemological questions focus on the nature of knowledge and the learner's interaction with the subject of study, posing questions such as: "What is the nature of the relationship between the learner and the knowledge or skills being acquired?" [42, 99].

One of the accepted approaches to learning *multiple languages* is the pedagogical approach that emphasizes education not only as a means of acquiring knowledge but also for developing understanding, critical thinking, and cognitive skills. A standard-based approach in a multilingual curriculum, aligns teaching with clearly defined goals and policies that shape the curriculum. The formulation of such standards is a frequent topic in discussions involving curriculum planners, experts in educational assessment, academics from various disciplines, administrators, teachers, and other stakeholders in education. The agreed-upon definitions of educational standards outline what student are expected to know in specific areas, such as writing and reading skills, ensuring that they reach age-appropriate milestones in their linguistic performance. According to the model of complexity levels, these standards allow one to reach the level of their linguistic performance, at different ages [150]. There are three types of standards: of content, of performance and of learning opportunities [61]:

- Content standards define what learners should know and be able to do. These standards indicate knowledge and skill, ways of thinking, vocabulary, and grammar rules.
- Performance standards are contents defined as more specific and concrete examples. That is, explicit definitions of what the student needs to know and be able to do to demonstrate compliance with the content standards.
- Practical standards provide examples of learner activities regarding what they need to know and be able to demonstrate compliance with the content standards and the expected level of performance or understanding.

These are indicators of quality showing how much proficiency or mastery the student's performance should reflect, that is, what is considered a proficient level in oral and written expression [144, 157].

Linguistic-didactic and motivational approaches to learning multiple languages, along with processes that shape foreign language education in the field of 'bilingualism' have undergone drastic changes over the past fifty years. Historically, early perspectives often posited that that bilingualism is harmful to the learners or the speakers. However, there is a certain

consensus that, under favourable circumstances, the use or mastery of two or more languages may have a positive effect on the social and cognitive aspects of human development [119, 176].

A *monolingual educational approach* helped to fix and establish a hierarchy of languages, a hierarchy that is artificial. Moreover, the ideological preference for monolingualism has become the norm, which is justified through far-reaching and scientifically unfounded assumptions regarding the superiority of monolingualism over multilingualism [68].

The changing perception of language together with the increase in the prevalence of multilingualism and the discourse regarding linguistic rights has begun in recent decades, and a turning point in the perception of the nature of human language has also occurred. The preference for monolingualism, which dominated most of the academic world, preserved the idea of language as a fixed set of words and structures with clearly defined boundaries, and saw the typical multilingual speaker as seemingly composed of several monolingual speakers [100, 109].

This view has been challenged in studies that emphasize that language is a phenomenon that is closely related to social constructions, languages in their linguistic resources in special and diverse ways [110].

Following the activity of groups promoting human rights in democratic societies and various anti-colonialist movements, certain sociolinguists began to emphasize the importance of encouraging the use of additional languages, especially among speakers whose home languages differ from the national language. According to these researchers, encouraging the use of additional languages responds to the right of these speakers to preserve their home languages and use them as they wish [129]. These ideologies recognize the legitimacy of marginal languages as a central part of linguistic education. Alongside this emergent change in ideology, the increasing processes of globalization, transnationalism and mass migration have made multilingual practices more common in places where these practices were previously limited [31]. However, certain languages, such as English, have become dominant throughout the world, thus raising concerns among some linguists regarding the reduction of linguistic diversity by the increasing takeover of languages [123].

The emerging change in ideology has led certain researchers to encourage a multilingual educational policy. The recognition of the linguistic diversity of the speakers allows the integration of this diversity in the curriculum and encourages learners to cultivate multilingualism [76]. This turn in linguistic education in the last decade, regarded by several researchers as the multilingual turn, points to the advantages of bilingualism in cognitive and social dimensions, encouraging social tolerance. The recognition of the advantages of

bilingualism has led to attempts in some countries to promote a multilingual educational policy [95].

Multilingual education can be defined as the instruction of multiple languages, encompassing the students' mother tongues, global languages, community languages and heritage languages, with each language taught at varying proficiency levels according to contextual needs. Historically, multilingualism has been recognized as the most prevalent societal model, whether at the individual level, where speakers navigate between different languages, dialects, and codes in various communicative contexts, or at the societal level, where diverse linguistic groups coexist and interact. Nevertheless, the simultaneous existence of multilingualism at both levels has diminished over time in the nation-states, especially in Western culture, partly through the standardization processes those certain languages underwent to represent the identity of nation-states [83].

These processes led to the implementation of rigid linguistic policies within nation-states, prioritizing the national language as the central and most important language. The national language became a key unifying marker collective identity, while other languages got a secondary status, often classified as immigrant languages or languages of disadvantaged and marginalized minority groups. In this way, monolingual educational policies were regarded as means of control, reinforcing and preserving a hierarchy between different social groups within the country's population. Two additional factors contributed to this development: first, the printing revolution, which brought about the need for the standardization of certain codes, and second, modern linguistics, as scholars classified languages and emphasized their differences from one another, a process that, among other things, highlighted the need for multilingual education [79, 129].

History shows that language use is multifaceted and evolves continuously among individuals and societies. Over the course of an individual's life, language use is shaped by personal choices, personality traits and the social contexts in which he/she participates. Language use is influenced by demographic composition of the population, by the mutual effects of languages as well as by the different dynamics of power relations among various speakers [98, 131]. As a reflection of this flexibility in the use of language, it is not surprising that throughout history hybrid versions and fusions of linguistic codes and dialects can be identified, which exist side by side in various locations in the world. All these result from the intensifying processes of globalization, immigration, transnationalism, and technological developments [31].

As a result of all of these developments, multilingual education increasingly interacts across national borders of nation-states more frequently than in the past. This trend is

accompanied by certain shifts in the political and the socio-linguistic discourse, which now foster the integration and fusion of languages with multilingual education, a phenomenon some have referred to as a miracle [112].

Additionally, the emergence of the concept of „linguistic rights” in international legislative documents and legal decisions, rooted in the political struggles for the rights of various groups in democratic countries, has become increasingly common, and reinforced the demand for multilingual education. The aim is to ensure that all societal groups can function and participate properly in distinct types of discourse in the public sphere and in society in general. This comprises access to legal language, communication medical institutions, social interactions, and academic and occupational contexts, as well as in any public spheres [114, 131].

It is important to note that speakers of marginalized languages are not guaranteed equal opportunities in participating in such types of discourse unless they possess sufficient proficiency in dominant languages, or if such types of discourse are not accessible to them in some way, for example through translation services. At its core, linguistic rights advocate for equal opportunities to preserve and promote the use of the mother tongues (of speakers of marginalized languages).

Although the concept of linguistic rights is underrepresented in the political and social space, its increasing prevalence reflects a growing awareness of linguistic rights in democratic countries [5]. Multilingual education raises two central questions: How can the time required to learn a new language be shortened? How can students be assisted in acquiring educational content, even before fully mastering the new language, without compromising their academic progress?

A major obstacle to the implementation of multilingual education programs lies in the assessment of students' educational achievements. Standardized, monolingual tests, widely used in national and international contexts, typically measure language use/proficiency and content knowledge in relation to a single dominant national without any reference to the students' full linguistic repertoire, especially their competence in the mother tongue [93].

Indeed, for years there has been an awareness of the centrality of bilingual/multilingual tests since they allow students to demonstrate their full knowledge and achieve appropriate performance in the school content areas. The common way to deal with this issue is through adjustments that should make it easier for the students to succeed in content tests without the new language being a barrier for them [2].

Using bilingual tests, which include both the new language and the familiar language, enables multilingual students to have better academic performance and express their academic

knowledge - more accurately that in monolingual tests, which are based solely on the new language. In the Israeli context, previous studies found that students evaluated in mathematics using a bilingual format (Russian and Hebrew) achieved higher scores than those - assessed in Hebrew only, that is, in the monolingual version [131].

This finding is not surprising because most theories show that students build on their existing knowledge when acquiring new material.

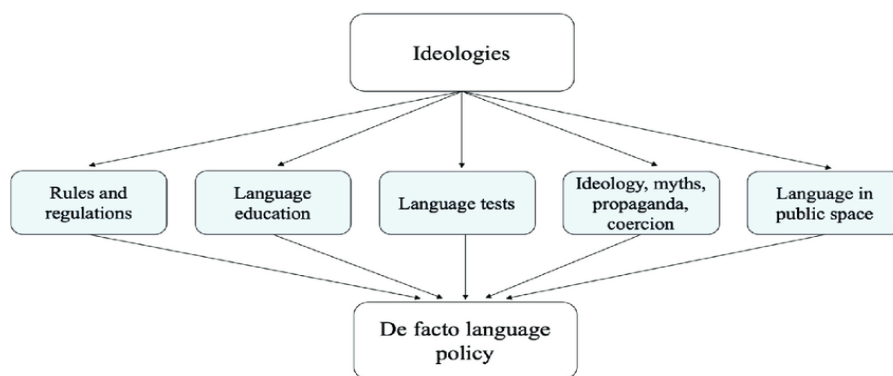


Fig. 1.1. Language Policy Mechanisms and Language Learning Practices [129]

Therefore, the idea is to build on the existing linguistic knowledge. This knowledge is connected to what is now referred to as a full linguistic repertoire - that is, relying on the students' existing linguistic resources for the purpose of acquiring a new language alongside new subject matter. In teaching English for example, when it is taught as a third language or beyond, the current trend emphasizes not only the use of the target language but also building on students' first language [148].

In recent years, with growing recognition of the many advantages of multilingualism and the concept of a full linguistic repertoire, there has been a shift in the way the role of the first language is perceived. It is accepted that the first language, acquired in childhood, continues to serve a foundation for understanding over many years, especially when the students are at the beginning stages of acquiring a new language which, as mentioned above, takes a long time, and sometimes can extend across a lifetime [23].

The benefits of multilingual education also extend to critical thinking and analytical skills. Students educated in multiple languages learn to tackle problems from multiple perspectives, a direct result of their exposure to unfamiliar cultures and linguistic frameworks. This exposure fosters a broader worldview and encourages a more analytical and questioning approach to learning, qualities that are especially useful in disciplines that require critical analysis and innovative thinking [7].

In terms of specific academic subjects, multilingual students often show higher performance levels in areas such as math and science. This could be the results of the cognitive

benefits of multilingualism, such as improved problem solving and memory, directly applicable to these subjects. In addition, the ability to understand and apply complex concepts in different languages can lead to superior performance in standardized tests and higher academic achievements.

Finally, the academic skill acquired through multilingual education prepares students for a global academic and professional world. In an era where intercultural communication and multilingual skills are increasingly valued, students who can operate effectively in multiple languages are well prepared for success. Whether continuing into higher education or entering the global workforce, multilingual students have a distinct advantage due to the comprehensive and diverse skill set developed during their education [31].

Multilingual education highlights the cognitive, emotional, and social benefits associated to multilingual tendencies in educational programs, demonstrating that such educational programmes offer significant advantages not only for students but also for educators and society as a whole. A central theoretical concept underlying a significant advantage of multilingual learning is language transfer - which refers to „any contact between the languages of bilingual and multilingual individuals, which affects their linguistic functioning” [45].

In other words, language transfer refers to the potential advantages that result from the interaction of multiple languages within an individual’s linguistic repertoire. According to this claim and within the framework of a comprehensive approach to language, J. Cummins proposed the hypothesis of mutual dependence, which states that language learners develop a basic common skill - common underlying proficiency- that exists separately from a specific language and that can facilitate the acquisition of additional languages [45].

This transfer of skills can occur in any direction, from the first language to additional languages or vice versa, and encompasses various aspects of linguistic knowledge. It helps dispel concerns about cross-contamination raised by proponents of the superiority of monolingual education over multilingual approaches.

Moreover, mastering more than one language has been found to have cognitive advantages in general. Research findings showed that multilingual speakers perform better in certain meta-linguistic tasks, which include cognitive skills such as inhibitory control and selective attention, when compared to monolingual speakers. These findings are extremely important, since inhibitory control, the belief in inhibiting impulsive impulses in favour of more appropriate behaviour that corresponds to the individual's long-term goals, and selective attention, which enables the ability to concentrate on a certain task for a long time, are part of the executive functions of a person [20].

Additionally, research findings have shown that multilingual speakers' knowledge of more than one language can delay cognitive decline associated with aging [96]. Moreover, bilingual students who master both languages at a prominent level achieved significantly higher results in verbal and non-verbal intelligibility tests than monolingual students. This statement highlights another advantage for multilingual education, namely the possibility of improving the students' academic performance.

1.2. Theoretical Approaches to Learning Multiple Languages

The approaches and processes that characterize foreign language learning in the field of „bilingualism” have undergone drastic changes in the last fifty years. In general, part with the old position that bilingualism is harmful to the speaker. There is a certain consensus that, under favourable circumstances, the use or mastery of two or more languages may have a positive effect on the social and cognitive aspects of human development [154].

Many studies, conducted before 2009 claimed that bilingualism harmed the child's development. These studies overlooked the qualitative biographical data, which pointed to the advantages of bilingualism. Furthermore, their methodological flaws are evident, such as comparing bilingual subjects with monolinguals of different socio-economic backgrounds. These studies set off from the assumption that bilingualism was limited to immigrants, without language assessments or a clear definition of bilingualism. This perspective shifted, as J. Cummins argues, when Canadian researchers, W. E. Lambert and E. Peal identified the methodological deficiencies of many of the early studies on second language acquisition [45,96].

A decade after the publication of this study, a research project was conducted that tracked English-speaking students who attended a French-speaking school in Montreal for seven years. The researchers examined the cognitive, linguistic, and emotional development of these students and compared their progress with their monolingual peers. This study refuted the claims made in previous studies and showed that bilingual students possess significant advantages both language proficiency and cognitive processing. Furthermore, it highlighted the linguistic and social advantages of learning additional languages [142].

Learning objectives enhance competence, understanding and appreciation of what is being learned. Within the framework of performance or prestige goals, the focus is on outperforming others to raise one's personal status at the expense of peers. At the same time, the model distinguishes two performance objectives: performance as an approach and performance as avoidance (Table 1.1).

Table 1.1 Approach and Avoidance of Learning Task [36]

Objective	Perspective	
	Approach	Avoidance
of performance	To appear superior in the eyes of others	To avoid appearing incompetent in the eyes of others
of learning	To learn, understand, master the task	To avoid misunderstanding, failure to perform the learning task

There are many approaches and processes that characterize the learning of a foreign language in a school setting. We shall refer to the most widely accepted approaches to teaching multiple languages today [36]. Each approach allows for the development of various learning and teaching methods, which apply the principle of optimal learning. In examining these approaches, we can notice the gradual evolution of the different methods and strategies for language teaching since the 1960s, which have resulted from advancements and developments in linguistic theories related to language acquisition [127].

In the initial stages of the field, the understanding of ways of acquiring a second language was based on behavioural theories from psychology. Language acquisition was viewed as a learned behaviour achieved through conditioning and repetition. The focus on the various components of the language led to the application of knowledge from these components in teaching and acquisition. Instruction was based on detailed grammatical explanations, with the expectation that learners would master the material as a prerequisite for the ability to function in the target language.

Later, linguistic processes evolved and became more sophisticated, they came to the conclusions that the behaviour theory could not explain students' ability to express an idea that had never heard before or to create sentences that were not part of the course curriculum. Based on the aforementioned conclusions, coupled with the growing dissatisfaction with the existing teaching methods, prompted a search for novel approaches to language teaching. Consequently, there arose the need to expand the learner's knowledge to include the communicative competences, in addition to formal language knowledge [90].

Diverse and innovative approaches and methods have been developed to meet this need, comprising varying degrees of emphasis on communication and language structure.

In the first stage, there was a sharp shift to an emphasis on the content and the message, assuming that language structure would be acquired naturally.

However, over the years, professionals, linguists, and teachers saw the need to find a balance between all the essential elements of the curriculum in additional language instruction. The main approaches, which have taken shape over the years are listed below [149, 153, 155].

The traditional approach regards language as a system of elements used to encode meaning. Learning the language is seen as controlling the structure of the language to convey messages: grammar, vocabulary, the sounds of a language and more. According to this approach, the curriculum is designed according to grammatical structures, such as verb tenses, prepositions, etc. Additionally, this approach posits that knowledge of the language structure, in all its aspects, will lead to the acquisition of the language in its entirety, and that the structural approach is among the first approaches on which language teaching was based.

In the specialised literature, the terms method and approach are used interchangeably when discussing language teaching through grammar, translation, and IE. Whether we regard grammar and translation as a method based on the structuralist approach, or whether we treat it as a separate approach, the message will be similar.

Teaching through grammar and translation originated in Europe in the 21st century and was used by teachers and students in teaching/learning classical languages. In this approach, grammar was studied as a subject to facilitate the understanding of classical texts.

The learning experience was restricted to reading comprehension and writing in multiple languages, with minimal emphasis on speaking and listening skills. Instruction was conducted in the mother tongue, with translations into the target language, and there was little attempt to use the language as a medium of communication [14].

In language courses, instructors were typically individuals with backgrounds in literature and the humanities rather than formal training in language teaching. This situation is often noticed in Arabic classes in Israel. In many cases, in the study of the Arabic language, in compulsory classes in grades 7-9, the focus is primarily on grammar and translation of the scriptures, while the lessons are conducted in Hebrew. This is largely due to the fact that the language being studied is not used for everyday communication.

Starting in the 2010s in the USA, the grammar-translation approach gave way to the new communicative approaches to language teaching. While some classes still adhere to the grammar-translation method, it has become less suitable for teaching modern languages, even though various methods rooted in communicative approaches have emerged [153].

According to the method of *teaching by hearing and speaking (audio-lingual method)*, the student listens to the language, through a demonstration by the teacher or from an audio device, and immediately repeats what is heard.

For example, if the teacher says, “Danny went to kindergarten,” the students will usually repeat in unison, “Danny went to kindergarten.” Immediately the teacher will say, “grocery store,” prompting the students to respond, “Danny went to the grocery store.”

The method focuses on providing models for students to imitate, allowing them to learn the grammatical structures through repetition. Reading and writing skills are also developed by practicing grammatical structures and reading comprehension exercises.

In general, when it comes to language acquisition, linguists agree that exposure is the essential component in acquiring a mother tongue, a second language, or additional languages .

A child learns their mother's language by being exposed to it from infancy. This method relies on the interaction between parent and child, where children communicate with each other while being surrounded by adults who model proper language use. This exposure is fundamental to acquiring a mother tongue, and similar implications can be drawn for learning additional languages. Many theories in the field of second language acquisition are built upon this premise [149].

The communicative approach places emphasis on communication and the transmission of messages as its primary focus. According to this approach, the structure of the language is not the main subject of the lesson; instead, it is taught based on communicative needs. In addition to this, the goal of learning is successful and fluent expression on the part of the learner even if it comes at the expense of linguistic accuracy.

However, among teachers and researchers, the definition of the communicative approach is not universally clear or agreed upon. The main distinction lies in the reference, or the lack of reference to focus on grammar in teaching. Professional definitions fall along a continuum that varies in the focus on teaching grammar. At one end of the axis is foreign language teaching that focuses on the meaning, fluency, and the overall message - a focus on meaning. At the other end is a focus on form, which emphasizes the treatment of various language components and structures [44].

There are several approaches to teaching and acquiring multiple languages regarded as communicative. N. Spada [134] cites S. D. Krashen [93] and M. Long [101], who paved the way for the communicative approaches that are prevalent today.

S. D. Krashen developed the Comprehensible Input Hypothesis, according to which the process of acquiring a second language fundamentally resembles the process of acquiring a mother tongue. He argued that a native speaker can acquire a language in its entirety without learning grammatical rules. In contrast, few learners of a second language achieve a level of proficiency close to that of a native speaker, despite the focus on grammatical rules [93].

Therefore, to learn a second language, the speaker must be involved in communication that is meaningful and relevant to his life, at a higher level of difficulty than his linguistic ability. Thus, similarly, to acquiring a mother tongue, the learner will acquire a second language

naturally. S. D. Krashen argues that, to learn a language, the learner must be able to understand messages. The role of the teacher is to provide comprehensible input - at a level slightly higher than the learner's level of knowledge [93].

The measured effort to understand adds to the developing linguistic repertoire of the learner. The scholar also points to a more comprehensive theory of language acquisition, which includes, in addition to the exposure element, the learner's readiness, the learning context, a series of mental operations that transform input into linguistic knowledge, and what happens in the acquisition process, that is, everything related to creation [91]. In a similar vein, there is the Output Hypothesis, which holds that the act of expressing speech or writing is, under appropriate circumstances, part of the language acquisition process [139].

According to this approach, output has three main roles. First, when learners attempt to express themselves, they often become aware of their gaps in knowledge in the target language. In other words, the output functions as a mechanism for noticing - and for raising awareness about gaps in linguistic knowledge, and in the field, or fields, in which enrichment or deepening of understanding is required. This awareness facilitates cognitive processes that promote research and development of new linguistic knowledge [121].

According to M. Swain [139], another function of the output is hypothesis testing. The scholar argues that the output from the learner's point of view may constitute an "experiment" and test of theories, regarding the way an idea can be transformed into a clear verbal message. This test occurs, even when the recipient does not understand the learner's message, which encourages him to improve and change his expression. This process, related to discovery and investigation, helps to acquire the target language.

Finally, the third function of the output is meta-linguistic, that is, it refers to the use of language as a mediator for assessing the language of the others, or the language of the learner.

This role is based on *L. Vygotsky's socio-cultural theory*, stating that learning arises from social experience and mediates actions of the learner with peers, or with himself. This is an adequate theoretical basis for inculcating the use of the target language, in pair and group work, in additional language classes [apud.140].

The second central theory that underpins many communication approaches, according to N. Spada, is the Interaction Hypothesis. According to this theory, processes related to expression, rather than mere understanding, are the main factors that promote the acquisition of a second language. During a conversation, the more experienced speaker adjusts their speech to the learner's level, thus creating comprehensible input that fosters language acquisition. This

process of generating meaningful messages encourages the learner to acquire the grammar of the target language.

Teachers who advocate for communicative methods in teaching a second language, believe that providing opportunities for interaction is sufficient for learners to gain full proficiency in the target language. However, this theory has led to the development of myths and misconceptions regarding the implementation of the communicative approach in the classroom [134].

Despite the clear emphasis on conversation and conveying messages, N. Spada wishes to emphasize that the communicative approach does not ignore the elements of language, as it may also include:

1. Focus on linguistic forms and grammar. A mistake in perception led teachers to focus exclusively on meaningful communication, while omitting the teaching of linguistic rules, structures, and grammar. Communication approaches should combine content and form, and not highlight one at the expense of the other.
2. Feedback and error correction. One of the prevailing myths according to the media approach, is that correcting mistakes will be done only indirectly. As usual according to this approach, the teacher will repeat a sentence that included an incorrect linguistic form - in its correct form. But the media approaches do not necessarily dictate this but indicate that it is important to repeat the sentence, drawing the learner's attention to the error.
3. Putting the teacher in the centre. Although teaching according to communicative approaches requires a lot of group work, the approach encourages a combination of these, with frontal activities and lessons.
4. Development of reading and writing skills. Complete communication skills also include mastery of reading and writing skills. Again, a combination of accents is the one that will lead to the acquisition of a second language. A communicative approach avoids focusing on separate aspects of language. But she puts the emphasis on the combination of a variety of elements for the purpose of creating meaningful communication [134].

Additionally, according to the communicative approach, the extensive reading method is indicated for the purpose of developing reading skills in a second language. The goal is to foster reading for pleasure, without assessments and reading comprehension exercises. The proposal is based on a saying, according to which “you learn to read by reading” [93].

The measured and controlled use of the speaker's native language, as deemed necessary, acknowledges that the mother tongue can be used in second language classrooms. The difference from other approaches is that one learns the second language directly rather than about the second language in the mother tongue. That is, students learn English through English and

Arabic through Arabic; however, they may use a familiar language for clarification, provide grammatical explanations, and facilitate understanding when necessary [118].

It is surely possible to notice differences of opinion regarding the very definition and applications of the approach, after so many years of research and discussion on communicative approaches in foreign language teaching.

Some state that communicative teaching is not a collection of methods, but rather an approach. Others emphasize that communicative teaching is not an approach, but rather a philosophy. There are disagreements among the researchers regarding different teaching methods seen as communicative approaches.

D. Larsen-Freeman, for example, reviews different foreign language teaching methods, classifying few of the methods as part of the communicative approach, as due to various subtleties, the others are not compatible with this approach [97].

In contrast, other authors argue that certain approaches do not qualify as communicative in nature [134]. A comprehensive and contemporary examination of the concept of “communicative teaching” reveals a multifaceted perspective that integrates both content and form. The communicative approach can be implemented through various methods, the central focus being effective communication.

Additionally, it is important to acknowledge the underlying linguistic knowledge associated with traditional and established teaching methods that fall under the umbrella of the “communicative approach” [5].

The functional approach. This approach regards language as a tool for expressing meaning. A functional approach which means, first, conducting research on how language is used, that is, trying to find out the purposes of language use, and the ways these purposes can be reached through speaking and hearing, reading, and writing.

According to this approach, curricula should not be organized according to grammatical structures, but according to useful topics that require a variety of functions such as introductions, apologies, etc. Indeed, there is a connection between the context in which the language is used and the choice of words [21].

Therefore, based on this approach, the student will be exposed to the linguistic structures required for communication, in a way that is more similar to language acquisition, under more natural conditions than in a classroom, while focusing on the message.

Functional approaches see language as a means of functioning in a specific context. Therefore, the teaching methods should be diverse and include work in small groups or in pairs. Additionally, it is important for the student to be challenged with tasks and exercises requiring

him to express himself orally, in situations that simulate real-life in a natural context [100]. It follows that the purpose of the functional approach lies in highlighting the relationship between language form and its function. Under this approach, the form and the actual functionality are learned simultaneously [17].

According to *the interactive approach*, passive language learning—such as merely listening to explanations and completing written exercises—is insufficient. Instead, interaction between students and teachers, as well as among students themselves, in the target language is essential for effective language acquisition.

The interactive approach to teaching multiple languages is rooted in learning theories that link learning with cognitive development and social interaction, rather than being confined to language-specific theories. This implies that to learn a language, meaningful and relevant communication between the learners is in fact essential.

S. Gass states, “Conversation is not only a means of practice but also a means through which learning takes place” [65]. This approach does not state that there is necessarily a causal relationship between interaction and learning a foreign language. However, it is possible to identify elements of the interaction between the speakers as factors that help in the learning process.

Communication tactics such as: repeating things, checking understanding, or requests for clarification, are useful for foreign language acquisition processes. Furthermore, researchers point out that the negotiation between two speakers and not only the use of language is a factor that affects the acquisition of a foreign language. In the context of “negotiation,” it is argued that the speaker's focus is directed toward achieving successful communication.

This focus fosters connections among input, output, the speaker's internal abilities, and attentiveness to language. Additionally, it is emphasized that the negotiations occurring during interaction involve adjustments in both language and methods of communication [73].

These changes, together, give the speaker new opportunities to pay attention to the distinct aspects of the language structure. All of these will eventually contribute to the language acquisition process [65].

Another approach to *teaching multiple languages* has developed as a holistic method of teaching reading skills in the mother tongue in the elementary school. It was based on J. Dewey's writings, who suggests “starting where the child is,” and which developed further mainly due to K. S. Goodman's works [70].

The scholar stated that, based on the “whole language” approach, educators work according to the theory that language, thinking and knowledge develop in a holistic way and

support each other. The language is learned while participating in relevant and experiential activities, and the teaching focuses on literature, writing, research and learning processes [85].

This approach seeks to link the language and its learning to real experiences that occur in the learner's life and opposes the division of the language into separate elements. Later, the method became a movement towards change, the main aspects covering respect for the student as part of a certain culture.

Moreover, it is asserted that several factors have contributed to the widespread adoption of this approach in teaching. Among these are the principle of respecting the teacher and the emphasis on meaningful, student-centred activities. It is argued that this perspective reflects a political stance, as the teacher tailors the study materials to align with the developmental stages and needs of the child [118].

Compared to the methods that bring pre-structured study programs, according to parameters, determined by external factors, and disconnected from a complex entity, i.e. [171], the principles of the approach include:

1. Constructed knowledge, during social interaction, which is not transferred from a "knowing" entity to a "receiving" entity.
2. The use of language with the purpose to construct meaning.
3. "Realistic" is a keyword and refers to situations, study materials, etc.
4. The student is at the centre, not the curriculum.

In subsequent years, researchers and educators advocated for an ideal, balanced learning approach that incorporates the principles of "Whole Language" alongside the teaching of reading skills. Experts in the psychology of reading, who unequivocally support the supreme importance of teaching reading skills, according to a method of breaking it down into factors - phonics, letters, sounds, etc. point out the great contribution of an approach the 'whole language' as a complement to the application of the approach in teaching multiple languages. Professionals in the field of linguistic education have applied the principles of the 'whole language ' to the development of second language teaching methods [39].

These methods are intended for use both in bilingual schools, in programs for children of immigrants in schools, and in foreign language acquisition programs. The main *whole language* principles, which were brought to linguistic education, include learning from experience and the relevance of the task to the learner's being. One of the most prominent researchers in the field of second language acquisition, S. D. Krashen, advocates interactive methods for successful development of a second language, when the learner is focused on the message, and cares less about the form [92].

Following a comprehensive discussion on input, understanding, and the acquisition of multiple languages, he extensively examined the development of literacy among both native language speakers and second language learners. He demonstrated that various components of reading abilities improve across different populations through independent reading, achieving similar levels of reading development and success as populations receiving direct instruction in the tested subjects [92].

1.3. Multilingual Education in the Republic of Moldova and Israel

The strategic objective of implementing the concept of multilingual education in the Republic of Moldova is to improve equity and the opportunities available to students, enabling them to develop multilingual skills and intercultural competencies that will allow them to function effectively as citizens. This approach involves fostering respect for cultural diversity, promoting intercultural communication, and valuing the Romanian language as a common foundation for interaction.

The development of multilingualism is closely linked to the preservation and development of the mother tongue of ethnic groups residing in the Republic of Moldova. Ensuring equal opportunities for all children and young people, regardless of social status, gender, religion, ethnicity, and psychomotor abilities, to access quality language education will increase their involvement in social, political, and professional processes. This, in turn, will contribute to the development of attitudes towards the responsible management of ongoing changes in society and the economy.

The Republic of Moldova has a complex linguistic landscape, reflecting its diverse ethnic composition. While the official state language is Romanian, Russian and Gagauz also play significant roles, particularly in regions such as Gagauzia and Transnistria.

Below is an overview of the policies and efforts of the Republic of Moldova regarding multilingual education. Official Policies and Language Education Initiatives:

The Republic of Moldova recognizes several minority languages, including Russian, Gagauz, and Ukrainian, under the European Charter for Regional or Minority Languages. This commitment involves efforts to promote and protect these languages in public life and education.

Proposals have been made for a multilingual curriculum that integrates Romanian, Gagauz, and other local languages in primary education. This approach aims to foster better communication and understanding among different ethnic groups from an early age.

Initiatives such as summer language institutes and exchange programs for students and educators are designed to promote language learning in immersive, practical settings. These

programs aim to develop linguistic skills and cross-cultural understanding, helping to break down stereotypes and foster social cohesion.

Documents Supporting Multilingual Education:

The 2022-2025 Program for Implementing the Strategy for Strengthening Interethnic Relations in the Republic of Moldova for 2017-2027 (approved by Government Decision No. 1464/2016): This program addresses interethnic relations, including multilingual communication and education.

The National Program on Learning the Romanian Language by National Minorities, including the adult population, for 2023-2025 (approved by Government Decision No. 115/2023): This program specifically focuses on supporting the acquisition of the Romanian language among national minorities.

Key Competences for Lifelong Learning (Brussels, 2018): This document includes multilingual competences as an essential part of the skills required for lifelong learning.

The Framework Convention for the Protection of National Minorities: This convention promotes the rights of national minorities, including access to education in their mother tongue and the establishment of multilingual learning environments.

These documents reflect the Republic of Moldova's commitment to fostering a multilingual educational environment that respects linguistic diversity and promotes inclusion.

Since gaining independence in 1991, the Ministry of Education and Culture (MECC) has implemented a linguistic education policy based on the Education Code 11a. This policy emphasizes that the official language, Romanian, must align with international standards and be a core component of the school curriculum.

The education system represents a key pillar in the development and promotion of a country's cultural and linguistic diversity. The Republic of Moldova, as a multiethnic state, faces both challenges and opportunities in ensuring an adequate educational environment for all its students.

According to data provided by the National Bureau of Statistics of the Republic of Moldova, for the 2022-2023 school year, the education system in the Republic of Moldova comprises a total of 1,218 schools, categorized according to the language of instruction used in the educational process. Thus, 958 schools provide instruction in Romanian, 202 schools offer instruction in Russian, and 57 schools provide instruction in both Romanian and Russian. Additionally, there is one school where instruction is conducted in three languages: Romanian, Russian, and English.

It is also important to note that in general education institutions, students from various ethnic backgrounds are present, including Russian, Bulgarian, Gagauz, Ukrainian, Roma, Jewish, Azerbaijani, Belarusian, Armenian, Arabic, among others. Romanian and Russian are the languages of instruction in the Republic of Moldova. The languages of national minorities are taught as separate subjects.

In the Republic of Moldova, the assessment of learning outcomes is regulated by the Education Code No. 152/2014, Article 44, paragraph (1). The primary purpose of this assessment is to determine the level of development of students' competencies in accordance with national educational standards.

According to the same article, paragraph (5), in educational institutions where a language other than Romanian is used as the language of instruction, students are required to take a mandatory examination in the Romanian language upon completion of both middle and high school education.

The national testing in the Romanian language is mandatory and is conducted in written form for all levels of education, while national testing in Ukrainian/Gagauz/Bulgarian language and literature is only carried out in written form at the primary and high school levels, but not at the middle school level.

Jewish schools in the Republic of Moldova (particularly two in Chişinău) are authorized to teach Hebrew under the supervision of the state and the Ministry of Education. These classes are financially supported by the Israeli Ministry of Education. Moldova's education system has undergone significant reforms, with policy documents developed (Appendix 1) that emphasize the importance of adapting educational practices to the needs of contemporary society.

The language education policy in the Ministry of Education in Israel (MOE):

Teaching Arabic - the "second official language" in Israel, spoken by a fifth of the country's population, as of 2020, Arabs number about 21% of the total population in Israel. Arabic is taught in Hebrew schools as a second foreign language, in addition to the English language. There is a CEO's circular defining it as a compulsory subject in middle schools as of 1985.

Arabic is not defined as a core language but as a compulsory second foreign language. Although only about 21% of the population are Arabs, it established that Arabic should be taught as a second language due to security risks in Israel. Arabic is defined as a compulsory subject in grades 7-9, being allocated 3 classes per week. One class is financed by the Ministry of Defence as an encouragement policy.

The curriculum for Arabic language in schools in Israel is designed to provide students with the basics of the Arabic language and culture. The program is based on the official

educational framework of the Ministry of Education in Israel and may vary according to the school and students' varying levels.

The program includes learning to write, read, speak, and listen in Arabic, as well as translation, culture, and history of the Arab people. Students are given the opportunity to learn the Arabic alphabet, traditional Arab stories and experience the modern Arab culture. In general, the program gives the students the opportunity to understand and appreciate the Arab culture, and language, thereby stimulating cultural sensitivity and social awareness.

Currently, there are plans to pursue practical goals that strengthen business and occupational ties with both the business sector and Arab culture. Within this framework, additional Arabic language skills, such as diplomatic language and translation, may be developed. The Arabic curriculum in Israeli schools is a valuable tool for promoting cross-cultural understanding and fostering better relationships between communities, creating a more inclusive society that is not only aware of Arab culture and language within Israel but also engaged with the broader Arab world (Appendix 2).

The teaching of English - English was designated as a “second foreign language” in Israel’s linguistic policy for language instruction in schools (1996). It is associated with international communication, higher education (under the guidance of the Council for Higher Education – CHE), tourism, and electronic media. In the Israeli education system, English instruction begins in the third grade and continues through the twelfth grade, culminating in the matriculation exam in English.

English study programs in Israel are conducted within the official curriculum established by the Ministry of Education. Instruction begins in the first grade and continues through the twelfth grade. In the second half of high school students can choose from distinct levels of English studies, tailored to their academic tracks and faculties.

The curricula focus on acquiring the basics of the language, developing the skills of speaking, reading, writing, and understanding, and understanding the Anglo-Saxon culture and society. The studies include diverse content such as stories, songs, films, and work on primary sources in the language. In recent years, with the strengthening of English curricula and the updating of teaching approaches, a variety of teaching programs and methods have developed, including the use of technology, educational and with advanced pedagogical methods.

The main goal of the English curriculum is to provide students with linguistic and cultural foundations, so that they are prepared to communicate with English speakers and use the language in the future as part of their career or hobby. The programs are suitable for students

from all social and academic levels and serve as a useful tool for promoting understanding and communication in the contemporary world [168].

In today's interconnected world, the influence of geopolitics and economics on motivation in language education cannot be underestimated. All speakers must navigate a complex web of political, economic, and social factors in order to make informed strategic decisions and achieve excellence and success. Understanding the implications of ongoing conflicts, economic interest groups and emerging trade routes is essential for a student to grow and succeed in the global world.

Geopolitics refers to the influence of geographical factors, territorial disputes, and relations between countries on the motivation in linguistic education, while geo-economics refers to the influence of economic tools with national interests, such as agreements and economic sanctions, on the motivation for multilingual education. The effects of both overlap each other in practice and affect the learner's motivation.

Human migration and immigration situations in the last two decades have led to a considerable increase in the number of people acquiring a second or a third language. There are many examples of bilingual or multilingual populations, such as Russian speakers in Israel who acquire Hebrew as a second language.

In the Republic of Moldova, the language of instruction in schools is complemented by English as an additional language, which is integrated into the daily routine. Similarly, structured learning of foreign languages has become increasingly popular as our world grows more globalized. Effective communication across different communities via another language is necessary in the world, placing and emphasis on learning English as a foreign language in Israel and around the globe.

There are complex interactions between geopolitical and economic influences in the international arena and motivation for multilingual education all the time. The opportunities presented by the changing balance of power between the major economic powers, the emergence of new trade routes and markets, and the ongoing political conflicts shape and contribute to the development of motivation in multilingual education in order to successfully navigate the many challenges.

The ongoing conflict in Ukraine and the current hostilities in Israel against terrorism are two examples of geopolitical conflicts that can directly impact the motivation of learners regarding the language associated with the opposing side.

Recognising these effects, the process of learning multiple languages and the motivation behind it necessitates empathy and patience in navigating such language-based struggles,

exposing the student to international perspectives on global issues, fostering the development of graduates from multilingual education as citizens equipped for meaningful global interactions.

The geopolitical and economic effects are evident in several forms (all of this must be examined when we come to work to increase motivation in multilingual education and to understand the considerations that must be included in the curricula and the teaching process):

- *Study programs adapted to the needs of the market* - the teaching may adapt the study programs to meet the demands of the local and global labour market.
- *Impact on the most complex subjects in teaching* - economic issues may affect the promotion of certain subjects in education, such as technology, computer science, and the fields of engineering.
- *Development of new and economic study programs* - it is possible to provide effective education that is coordinated with the local and global economic needs while the country develops its economy.
- *Development of study programs to focus on priority areas* - the state's ability to influence study programs in areas such as innovation, entrepreneurship, and computer science, in order to promote areas where it has a competitive advantage.
- *Impact on study programs and careers* - the state may influence the study programs to direct students to professions and fields of study that may contribute more to the country's economy in the future.
- *Influence on external education policy* - the state may act at the international level to promote economic and geopolitical matters through external education policy.
- *Impact on education budgets and financing* - movements in economic policy can affect education budgets, and directly on the level of educational services and the economic weight of education in the country.

The influence of the economic and geopolitical factors on teaching is central and variable and can change the paths and directions of the education system in the country. Therefore, an in-depth examination was carried out by many researchers in the context of the significance of geopolitical and economic factors in shaping the motivation to learn languages.

It was revealed that the motivation to learn new languages is not solely motivated by personal or educational interests. It is also significantly influenced by wider geopolitical relations and economic opportunities, setting the stage for examining how these factors interact to encourage or discourage language acquisition. All this with the understanding that in the

constantly evolving landscape of multilingual global classrooms there is an essential tool for fulfilling the diverse needs of students from different linguistic backgrounds.

1.4 Conclusions to Chapter 1

Based on the analysis of policy documents and both international and national educational practices, as well as the specialized literature on the subject, we have drawn the following conclusions:

1. Historical, social, and political developments have exerted a major influence on language ideologies, generating notable changes in the contours of language policies, both at a general level and in the context of educational language policy.
2. The comparative study of monolingualism, bilingualism, multilingualism, plurilingualism, and polyglossia highlights the cognitive, social, and cultural benefits of using multiple languages. While monolingualism provides deep mastery of a single language, bilingualism and polyglossia offer superior advantages such as enhanced cognitive flexibility and improved executive function, contributing to the development of cultural empathy and intercultural skills. Therefore, exposure to and proficiency in multiple languages support both personal development and social and professional integration in a globalized world.
3. As stated by G. R. Tucker, multilingualism has become the norm in much of the world, with many citizens speaking two or more languages in their daily lives. This approach is also observed in European countries, where students learn two or three languages simultaneously.
4. The comprehensive analysis of the presented approaches and methods indicates that the acquisition of a second language is a complex process, involving a combination of methods. Contemporary teachers strive to find a harmonious balance between key factors, avoiding possible conflicts between content and form, exposition and interaction, input, and output, as well as between student focus and teacher focus.
5. The European Union's Education Council's policy on teaching multiple languages underscores a commitment to linguistic diversity and multilingualism. The 'Strategy for Multilingualism' aims to promote foreign language learning, enhance linguistic diversity, support a multilingual economy, and ensure citizens can interact with government in their native languages. The long-term goal is for every European citizen to gain practical skills in at least two languages beyond their mother tongue.
6. The Republic of Moldova's approach to multilingual education demonstrates a commitment to promoting cultural diversity and ensuring equitable opportunities for all students, irrespective of their linguistic or ethnic backgrounds. The integration of multiple languages

into the education system, including the adoption of multilingual curricula and initiatives to support language acquisition, plays a critical role in fostering social cohesion and enhancing intercultural communication. Through its educational policies and strategic programs, reinforced by both national and international frameworks, the country seeks to meet the linguistic needs of its diverse population while equipping students with the skills necessary for active participation in an increasingly globalized society.

7. The language education policies in Israel, particularly regarding Arabic and English, reflect a complex interplay between geopolitical, cultural, and economic factors. The inclusion of Arabic as a compulsory second foreign language underscores the significance of fostering cultural understanding and addressing security concerns, while simultaneously promoting social cohesion within Israel's diverse population. This approach not only enables students to develop linguistic skills but also enhances their cultural awareness and prepares them for engagement with both Arab culture and the broader Middle Eastern context.
8. Similarly, the emphasis on English as a second foreign language aligns with Israel's internationalization goals, supporting communication, higher education, and global business opportunities. The English curriculum is designed to equip students with essential linguistic and cultural competencies, enabling them to thrive in a globalized world.
9. Together, these policies highlight the critical role of multilingual education in promoting cross-cultural understanding, responding to geopolitical and economic demands, and preparing future generations for meaningful participation in an interconnected global society. The evolving nature of these educational frameworks reflects the dynamic geopolitical and economic realities, demonstrating the importance of adapting language education strategies to meet both national needs and global challenges.

2. CONCEPTUAL AND METHODOLOGICAL FRAMEWORK OF MULTILINGUAL EDUCATION OF STUDENTS FROM A MOTIVATIONAL PERSPECTIVE

2.1. General Psycho-Pedagogical Aspects of Multilingual Education

Psycho-pedagogy is concerned with the learning process, aiming to understand the complex factors that influence education. It investigates and addresses learning difficulties through dynamic interventions, focusing on conflicts that impact the educational experience, particularly in the context of multilingual education.

Previous research has demonstrated that failures in foreign language learning in certain schools cannot be attributed solely to individual student factors but also to teachers who fail to consider students' learning styles, socio-cultural context, psychological aspects, as well as the strategies and methods employed in teaching.

Analysing learning as an individualized process is essential, as it connects an individual's knowledge and skills with the cultural context in which they develop, while emphasizing their unique characteristics. Learning is an active and personalized process in which the individual not only assimilates information but also reflects on it and understands it in a way that is influenced by the cultural context and the engagement of critical thinking.

According to Slama-Cazacu T., the so-called 'sense of language' represents evidence of conscious language learning, reflection upon it, and the involvement of thought, which is sometimes achieved through abstraction and, in any case, through generalization based on analysis, rather than syncretism, in the process of assimilating the phonemic, lexical, and grammatical system used by the adults around them [182,183].

A teacher must understand students' physical and sociological development as integral aspects of human growth. Furthermore, each student possesses unique characteristics and psychological traits, particularly in relation to their general activities [49].

Understanding the psycho-pedagogical foundation of multilingual education is important for justifying the effectiveness of the educational process. This foundation is based on principles and processes that govern not only the acquisition of language competencies and the development of cognitive flexibility in multilingual learners but also the enhancement of motivation for learning multiple languages.

Multilingual education encompasses both the study of multiple languages and their use in various educational contexts. It includes not only formal language learning but also the integration of languages in teaching, learning, and social activities. In a more specific sense, it

refers to an educational system where multiple languages are used for instruction and communication, aiming to develop functional linguistic competencies in both the native and foreign languages within an official curriculum [27, 28, 31, 47]. While *multilingual education* focuses on the broader educational framework and integration of languages, *multilingual learning* examines the individual cognitive processes and strategies that support effective language acquisition, such as immersion, repetition, and contextual learning, all of which are essential for fostering multilingual competence in students. [55, 56, 62, 63, 91, 93].

Multilingual education significantly improves *cognitive development*, by increasing cognitive flexibility. This flexibility allows people to move seamlessly between different tasks and mental challenges, a skill rooted in the ability to manage multiple linguistic systems simultaneously.

When students learn to navigate and communicate in more than one language, they train their brains to process information more dynamically. This adaptability is essential in a rapidly changing world, where problem-solving skills in different contexts are essential.

The improvement in cognitive flexibility is complemented by improved executive function in multilingual individuals. Executive functions, which comprise skills such as planning, focusing attention and controlling impulses, are more developed in those who speak multiple languages.

These skills are essential in academic settings where students are often required to prioritize tasks, manage their time efficiently and engage in complex thought processes. The constant mental juggling between languages improves these abilities, providing multilingual students with a cognitive advantage [88].

Another critical aspect of cognitive development through multilingual education is the improvement of working memory. Students who are proficient in multiple languages often show superior working memory abilities, which are essential for following instructions, solving complex math problems, and understanding reading passages. The cognitive exercise of switching between languages and retaining information from different linguistic contexts strengthens memory circuits and improves both short- and long-term memory functions.

There is also evidence that multilingualism supports better attention control and reduced distraction. In environments where multiple languages are used, students must often shift their attention between different linguistic inputs, a practice that improves their overall ability to concentrate and stay focused. This skill is especially useful in busy or distraction-rich environments common in modern educational and professional landscapes.

Finally, the long-term cognitive benefits of multilingual education include the potential for healthier cognitive aging. Studies indicate that people who engage in regular multilingual communication may experience a delay in the onset of age-related cognitive decline and neurological diseases such as Alzheimer's. The rigorous mental activity involved in managing multiple languages provides a kind of cognitive reserve that maintains the flexibility of the brain and efficient functioning into old age [144].

Exposure to multiple languages provides significant cognitive benefits, harnesses the brain's ability to adapt and strengthens various mental abilities [105]:

- Multilingual people often excel at *multitasking*. Constantly switching between languages trains the brain to manage multiple streams of information, leading to improved multitasking skills and better coping with complex tasks.
- Multilingualism fosters mental *flexibility* and *problem solving*. Multilingual people have the ability to approach challenges from diverse linguistic and cultural angles, enabling innovative and effective solutions.
- Switching between languages practices *cognitive flexibility*. This skill, associated with better cognitive control and adaptability, allows people to switch between tasks, contexts, and mental frames effortlessly.
- Multilingual people demonstrate *improved memory* retention. The constant engagement in different languages strengthens the memory pathways and helps in retrieving information and details.
- Multilingualism increases executive *functions such as attention control, task switching*. These skills are essential for managing complex situations and regulating impulses.
- Learning multiple languages *sharpens awareness of linguistic structures, grammar rules and nuances*. This heightened sensitivity to language fosters analytical thinking and a deeper understanding of communication dynamics.
- Exposure to multiple languages contributes to *cognitive reserve*, which may delay cognitive decline and offer protection against neurodegenerative disorders later in life.
- Multilingual people often demonstrate *greater creativity*. Their ability to use diverse linguistic and cultural resources leads to *innovative thinking* and *innovative approaches*.

Benefits of Multilingualism in Learning a New Language:

- Multilingual individuals tend to have greater *cognitive flexibility*, allowing them to switch between languages and adapt to new linguistic contexts more easily. This flexibility can

facilitate the learning of additional languages by enabling learners to approach language learning from different perspectives.

- *Knowledge and skills acquired* in one language can be transferred to the learning of a new language. For example, grammar rules, vocabulary, and pronunciation patterns from languages you already know can serve as a foundation for learning a new language. This transferability accelerates the language learning process and enhances retention.
- Multilingualism fosters a *heightened awareness* of language structures, functions, and usage. As you navigate between multiple languages, you become more attuned to linguistic nuances, such as grammatical rules, idiomatic expressions, and cultural connotations. This increased awareness deepens your understanding of language and facilitates the acquisition of new languages.
- Exposure to multiple languages from an early age can *improve pronunciation skills* and *reduce foreign accents* when learning a new language. Multilingual individuals develop a greater sensitivity to speech sounds and phonetic variations, allowing them to mimic and reproduce sounds more accurately in the target language.
- Multilingualism promotes *cultural competence* by exposing learners to diverse cultural perspectives and communication styles. Learning multiple languages enables individuals to engage more deeply with diverse cultures, fostering empathy, cross-cultural understanding, and appreciation for linguistic diversity. This cultural competence enriches the language learning experience and enhances communication skills.

Techniques for Leveraging Multilingualism in Language Learning:

Compare the new language with languages you already know, identifying similarities and differences in vocabulary, grammar, and sentence structure. This *comparative analysis* helps you recognize patterns and make connections between languages, facilitating the acquisition of new linguistic concepts.

Practice translating texts, sentences, or phrases between languages to reinforce vocabulary and grammar while honing your translation skills. *Translation exercises* provide valuable exposure to real-life language usage and help *bridge linguistic gaps between languages*.

Embrace code-switching as a natural part of the language learning process, alternating between languages as needed to express yourself effectively. Additionally, transfer knowledge and skills from one language to another, applying grammar rules, pronunciation patterns, and vocabulary learned in other languages to the new language you are acquiring.

Engage in language exchange partnerships or *collaborative learning environments* with speakers of the target language and other languages you know. Practice conversation in both languages, providing mutual support and feedback while gaining exposure to different language varieties and communication styles.

Immerse yourself in the culture associated with the new language through exposure to authentic cultural content, such as movies, music, literature, and media. *Cultural immersion* enhances language learning by providing context and relevance to linguistic concepts while fostering a deeper understanding of *cultural contexts* and *societal norms* [90].

By leveraging one's multilingual background and employing these techniques, one can harness the benefits of multilingualism to enhance the language learning journey and achieve proficiency in new languages more efficiently and effectively.

The approaches discussed contribute to the creation of an *inclusive* and *intercultural learning* environment, which facilitates students' engagement with and acquisition of multiple languages, thereby enhancing their linguistic competence and cognitive flexibility.

Multilingual, plurilingual and intercultural education is guided by the following founding principles: recognition of linguistic and cultural diversity as guaranteed by *Council of Europe Conventions*; everyone's right to use their language varieties as a medium of communication, a vehicle for learning and a means of expressing their affiliations; every learner's right to gain experience and achieve a command of languages (language of schooling, first language, foreign language, etc.) and the related cultural dimensions according to their personal needs and expectations, be they cognitive, social, aesthetic or affective, so as to be able to develop the necessary competences in other languages by themselves after leaving school; the centrality of human dialogue, which depends essentially on languages. the experience of otherness through languages and the cultures they carry is the precondition (necessary but not sufficient) for intercultural understanding and mutual acceptance [49, p.118].

Experts acknowledge that a lack of *cultural competence* among learners is a significant limitation of non-communicative approaches to language teaching, such as grammar-translation methods. It is also important to note that familiarity with the culture of the target language may result in more positive attitudes towards it, thus improving the learning experience and, as a result, academic achievements.

Furthermore, in areas of conflict, the effect of the negative attitude towards the "other" group on reading comprehension is evident. Research by Abu-Rabia from the University of Haifa indicated that a negative attitude toward the language being learned serves as a barrier to successful language acquisition and performance in comprehension tasks. The scholar examined

the relationship between attitudes, prior knowledge of the target culture, and reading comprehension in a second language, in three different contexts: Israeli Arabic with Hebrew as a second language, Israeli Hebrew with Arabic as a second language and Canadian Arabic with English as a second language.

The findings showed that with both Jewish and Arab Israeli students, reading comprehension improved when the story was related to their culture and not the target culture, while among the Canadian students there was no apparent effect of the content of the stories on reading comprehension [3, 66].

Significant importance is attributed to the multitude of variables in the phenomenon of acquiring multiple languages within a school environment. At the same time, the factors that affect success and the favourable attitude towards acquiring additional languages are the nature of the lesson and the learning experience, along with the teacher-student relationship. Research indicates that a teacher's instructional abilities and positive classroom experiences have a profound impact on the learning experience in multilingual settings [117].

The more the student enjoys the lesson and the more he/she connects to the material being taught and to the teacher, the more his motivation to learn the target language increases [3].

Similarly, a study conducted on the teaching of spoken Arabic in Hebrew schools within the Jewish sector in central Israel compared institutions where spoken Arabic is taught alongside English to those where only English is offered as a foreign language. One of the findings was that in schools where Arabic was studied, the students' attitudes towards the Arabic language, culture and population were more positive than the students' attitudes in schools where the language was not taught [55].

Another finding, which supports the importance of the quality of teaching, was the difference between the attitudes of two groups of students learning Arabic. In a class where the Arabic teacher was charismatic, assertive, and effective the students' attitudes were more positive than those of their peers with an Arabic teacher, whose personality was less captivating and more dominant.

D. Crabbe discusses the issue of the quality of teaching from a different angle. He argues that while the variety of factors influencing the acquisition of a second language is significant, the quality of the learning experience should be placed at the centre of focus. According to the researcher, despite the prevailing discussions in magazines and in teachers' rooms, it is rare to see or hear a breakdown of parameters by which quality is measured [43].

To address this situation, he offers a list of “*components*,” or “*learning opportunities*,” each of which must be present in the learning experience to maximize the chances of success. These components include:

1. Input - reading or hearing the language and ability to understand with limited effort.
2. Output - an opportunity to express yourself in the language being studied.
3. Interaction - an opportunity to hold a dialogue or multi-dialogue in a real situation, or a simulation of a real situation.
4. Feedback - receiving information about the performance of communication actions by the learner. The feedback can be direct, such as correcting grammar errors or indirect, where a speaker may notice their message is not understood.
5. Rehearsal - Engaging students in activities that emphasize the deliberate repetition of material - especially oral practice - helps train various aspects of the language, such as intonation, pronunciation, and fluency.
6. Understanding language - awareness of language comprehension.
7. Understanding learning -awareness of the learning processes.

In this context, to effectively support the process of learning multiple languages, it is essential to apply the fundamental psychopedagogical principles of multilingual education. These principles guide educational practice and contribute to achieving educational objectives. Both general and specific, these principles play a crucial role in creating an educational environment tailored to the diverse needs of students, fostering active and collaborative learning essential for the development of linguistic and intercultural competencies.

The *general principles* of education include: the principle of student-centered education, the principle of valuing age-related characteristics, the principle of free choice (or intrinsic motivation), the principle of active learning, the principle of education as interaction, and the principle of ensuring continuity and transition. These principles are especially important in multilingual classrooms, where instruction must be tailored to meet the diverse needs and learning paces of students.

For example, student-centered education emphasizes the importance of adapting teaching methods to individual learners, while valuing age-related characteristics ensures that practices align with students' cognitive and emotional development. Promoting intrinsic motivation and active learning supports deeper engagement with the material, which is crucial for language acquisition. The principles of education as interaction and ensuring continuity between educational stages further strengthen the collaborative and communicative aspects of learning.

These principles facilitate smoother transitions between different stages of language proficiency and overall educational progression [179].

These are complemented by *specific principles* aimed at optimizing instruction, such as: the principle of the illustrative nature of teaching materials, the principle of accessibility of content, the principle of contextual adaptation, the principle of individualized and personalized approaches, the principle of active knowledge and skill acquisition, the principle of communicative and intercultural approaches, the principle of collaboration and active student participation, the principle of integrating information and communication technologies into the educational process, and the principle of success orientation.

For example, principle of the illustrative nature of teaching materials ensures that materials are designed to be engaging and accessible, providing students with real-world contexts to enhance language understanding. The principle of contextual adaptation and personalized approaches emphasizes the importance of adjusting content and teaching strategies to meet the specific needs of multilingual students, recognizing their unique cultural and linguistic backgrounds. The principle of active knowledge and skill acquisition encourages active participation in language learning, while communicative and intercultural approaches foster an understanding of cultural nuances and communication strategies, essential for effective multilingual competence [23, 49, 178, 180].

Collaboration and active student participation create a cooperative learning environment where students share knowledge and collaborate with peers, further enhancing language acquisition. The integration of information and communication technologies (ICT) supports the use of digital tools to promote language learning and increase student engagement.

Success orientation ensures that learning outcomes are focused on achieving tangible improvements in language proficiency, with an emphasis on both cognitive and affective aspects of education. This revised structure places the definitions of multilingual education and multilingual learning at the beginning, providing a clear foundation for the subsequent principles.

Practical applications include the following example: In a classroom where students exhibit varied learning paces, a psycho-pedagogical approach would involve assessing individual student needs and employing differentiated instruction strategies. Methodologies might include flexible grouping, personalized learning plans, and adaptive learning technologies to ensure that each student progresses effectively.

To implement these approaches, strategies were developed. Content-based instructional language learning is based on the understanding that language development and cognitive

development occur at the same time, therefore language should not be separated from its contexts and meaningful content. The principle that guides the construction of the curriculum is the content, or a particular subject, and not the language in its many components [141].

Characteristics of content-based teaching:

1. The content is the starting point of the teaching.
2. The contents are related to the nature and interests of the learners.
3. The materials and tasks are as authentic as possible.
4. The language must be adapted to the learner's level of control.

Moving on, situations and opportunities leading to the acquisition of the target language will be created, through a combination of content and language. Therefore, in a class conducted according to the principles of content-based teaching, the presentation of the subject is done with a clear effort to convey the material in a language understandable to the student and adjusted to his/her level of control in the target language. Teachers using this approach, which is similar in principle to the Whole Language approach, seek to give learners the opportunity to acquire knowledge in a certain subject, and indirectly, lead to the acquisition of the target language [57].

Despite this clear premise, researchers interpret the term "content-based teaching" in several ways. The differences in perception are due to divergent views regarding the doses of language teaching in an explicit way and dealing with the content in the target language. Despite these differences, the many characteristics of curricula that combine language and content may help place a variety of methods on an axis that describes the role of language and content in language teaching [54].

In addition, topic-based teaching is common and appropriate in the field of foreign language teaching, that is, when exposure to the target language is not available in the learner's immediate environment. In these cases, the curriculum is organized according to topics or content, such as grocery shopping, public transportation, etc. The goal is to learn how to communicate around a certain topic, while learning the language in the process.

Learning the content, in these cases, is the priority, while the language is acquired indirectly. This contrasts with structuralist approaches, according to which the curriculum is built according to grammar topics. Given the diverse contexts in which foreign languages are learned, research on content-based teaching often emphasizes environments where there is exposure to the target language, such as bilingual schools [154].

Many researchers point to significant shortcomings in content-based teaching, a drawback was discovered by learners in controlling linguistic aspects of the language. That is, the emphasis on the content comes at the expense of the form. These researchers sought to increase the

centrality of the form component to the approach and called their approach instruction enriched content. According to this approach, teachers do not shy away from directly teaching linguistic subjects, such as grammar; instead, they enrich their lessons by anchoring them in meaningful content contexts.

This teaching strategy is also adapted to many international contexts, where there is no exposure to the target language, beyond the school hours. T.L. Ballman for example, discusses a curriculum that adapts the principles of content-based teaching to the reality of a foreign language and emphasizes the importance of the content related to the culture and world of the target language [15].

The scholars adds that the vocabulary, grammar, and content must be integrated, to reflect, or discuss a certain topic. The student uses the target language to acquire new knowledge and relate this knowledge to his private life. He even points out that any current information should be directed to the linguistic, cognitive, and emotional needs of the learner.

This contrasts with structuralist approaches, according to which the curriculum is built according to grammatical topics. Since the contexts in which a foreign language is learned are diverse, and since the research on content-based teaching often refers to contexts in which there is exposure to the target language, such as bilingual schools [15].

The processes involved in the effective learning of a second foreign language and the methodological features in language teaching and bilingualism began to receive attention and importance among linguists, educators, psychologists, and sociologists in the 1970s and 1990s.

In Europe and Canada, scientific research has gained momentum in the fields of trilingual education and third language acquisition, particularly through the development and implementation of innovative study programs. These include bilingual schools that teach a third language, as well as monolingual schools that offer two additional languages simultaneously [66, 126]. The use of the students' linguistic repertoire contrasts with approaches that saw the "native speaker" is to be achieved in multilingual teaching. A perception that has changed in the last decade about the controversy of native speakers in the context of multilingual teaching.

Today, the field tends to behave in a variety of ways, including combining the mother tongue with other languages in the students' language repertoire during classes, indicating the advantages of intelligent use of the learner's mother tongue. This is manifested in the teaching of a second or foreign language, transferring components of literacy knowledge from language to language, thereby contributing to the development of academic language competence in additional languages [77].

The use of various frameworks for multilingual awareness as a pedagogical and educational tool aims to enhance awareness of the existence of different languages in both local and global contexts, fostering an understanding of the complex linguistic realities that shape these environments.

Multilingual education makes it possible to use the linguistic landscape as an effective tool for enriching the multilingual awareness of students, which communicates directly with social involvement and with possibilities of action in the social-linguistic field.

These aspects of involvement and activism are reflected in the development of literacy and the meta-linguistic thinking of the learners. This concept has a significant impact on the multilingual awareness of educators and students, since it needs to redefine, what language is, and in fact replace the observation of the individual language with a view of the overall linguistic competence of the individual or group. From the wide variety of approaches and concepts in the field, the examination of linguistic landscape in the public sphere is one of the most promising directions for language learning, tolerance, and multilingual awareness in context [30].

Language in space strategy, or *linguistic landscape* refers to the presence of languages as well as images, colours, and other linguistic and semiotic means in the public space. In fact, languages are present in several contexts in the public sphere - in street names, ads, advertisements, warnings, road signs and more. There is a great awareness of language in the region as a socio-linguistic means of understanding the power relations in society, and as a means of learning a language.

In recent years, the interest in the linguistic landscape as an educational tool to increase awareness and critical multilingual literacy has been increasing. Students can study a linguistic landscape in the public sphere to expand their understanding of the socio-political context in which they live and as such may be a tool for increasing multilingual awareness from a critical angle [120].

According to meta-linguistic strategy, the students who learn two multiple languages have an advantage expressed in a wide range of essential skills for acquiring additional languages. The factors involved in learning two multiple languages effectively include the selection and correct use of study materials, student attitudes, the quality of teaching, and other factors. There is a connection between the motivation to learn one, two or more multiple languages and the students' academic performance and achievements. Those who deal with tri-lingualize, focus on the ability to acquire a third language among *bilingual speakers*. Studies show that students who learn two languages have an advantage expressed in a wide range of essential skills for acquiring additional languages, a concept known as meta-linguistic awareness.

Meta-linguistic awareness is the ability to identify, analyse and apply linguistic forms [89]. Acquiring additional languages increases the development of meta-linguistic awareness and is also supported by it.

Therefore, developing bilingualism among school students is a factor that facilitates the acquisition of additional languages. In other words, knowledge of one language helps the speaker process and create another language. Professional literature refers to metalinguistic awareness as the speaker's consciousness of the structures of languages. This understanding suggests that learning a third foreign language can be easier than learning a second language or a first foreign language, and that proficiency in one foreign language facilitates the acquisition of additional languages [133].

Multicompetence strategy. Researchers studying multilingualism highlight that it is not necessary to lead students to the same level of achievement in all the languages they learn. The argument relies on the fact that a *trilingual speaker* is not equally proficient and should not be equal to „three monolingual speakers within one body, therefore, even during teaching, the diversity of multilingual abilities must be considered.” Moreover, the concept of multiple abilities was mentioned to emphasize the dynamic nature of multilingualism [41].

Multilingual speakers will not be required to demonstrate the same competence in all languages, that is, they will not be measured on a *monolingual* scale [67]. Multi-competence is one of the qualitatively different skills available to the multilingual speaker compared to the monolingual speaker.

For example, A. S. Canagarajah emphasizes the special strategies and methodological characteristics that develop among speakers in multilingual contexts. One of them is constructive interaction, or the skilful use of different communication resources at the same time, usually characteristic of speakers in multilingual contexts who are required to bridge linguistic gaps on a day-to-day basis [24].

Another unique strategy is openness to serendipity. It means adopting an attitude of openness and curiosity towards different linguistic codes held by different speakers. It is essential to support the focus on objective measures of communicative and expressive abilities that are tailored to the unique needs of the language learner. This emphasis should consider the specific context of the language being studied and its practical application within the relevant social environment. Thus, as already mentioned in the definition of multilingual education, skills in different languages do not have to be equal in level. Rather, they should serve the different specific contexts of the required use of each language. For example, the European Union has stated the goal of promoting diversity in general and in language use in particular [117].

In *educational contexts*, similar attempts were made within the framework of the policy of language in education in post-apartheid Africa. In fact, there is no validity to the claim relating to language such as, English as a unique linguistic object, since according to this claim languages do not have purely linguistic characteristics that define them as different from each other. For instance, linguistic characteristics that define the English language as different from the Hebrew language. Moreover, according to this statement, the boundaries that differentiate between the languages are based on social and cultural determinations and conventions and do not exist by themselves as an objective reality which turned from a monolingual ideology to a multilingual ideology [131].

Certain researchers pointed out the complexity of linguistic practices among multilingual speakers and thus raised the level of these practices that indicate a rich and integrative linguistic repertoire. Common cognitive resources, for example, common grammar structures are used in all the linguistic codes available to the multilingual speaker, alongside cognitive resources associated with each language separately [103].

It should be noted that the concept of common cognitive resources across different languages challenges prevailing ideologies in linguistics that influence perceptions of language use and learning. The skills of multilingual, bilingual, and even monolingual speakers develop through frequent interactions among various linguistic codes. This interaction provides empirical support for the assertion that a bilingual speaker cannot be equated with two separate monolingual speakers; rather, they represent a unique linguistic competence that exists within a single individual.

Although social constructions play an essential role in the formation of different languages, this does not mean that there are no linguistic-structural differences between these languages, nor does it mean that bilingual or multilingual speakers have a single cognitive system that does not have the corresponding distinctions to these structural differences. Precisely multilingual practices such as code-switching show that, at least for certain grammar structures, there are clear cognitive distinctions between languages, distinctions that parallel the structural-linguistic distinctions between languages, and without it is not possible to explain the systematicity and consistency that emerges.

In fact, the only way to explain the unique and consistent ways in which code-switching occurs is by understanding the multilingual cognitive system as one in which there are clear distinctions between linguistic structures belonging to different languages, alongside cognitive resources common to all languages [103].

It should be noted that in the educational context, linguistic educational policy is of enormous weight in determining the methods of teaching, learning and assessment in all that has been said in linguistic education, and has a decisive effect on the linguistic practices of students, on the ideologies behind these practices and the chances of these students in leadership.

Therefore, language learning practices and linguistic didactics designs that prioritize certain codes over others can exclude and harm speakers of marginalized languages and exacerbate tensions between ethnic groups in conflict contexts. This highlights the urgent need for educational language policies that recognize the linguistic rights of speakers of marginalized languages throughout the education system.

2.2. Concept of Multilingual Education from a Motivational Perspective

In the contemporary era marked by globalization and cultural diversity, *multilingual education* becomes increasingly important in the formation of the modern individual, prepared to navigate successfully in an interconnected world. *Motivational approaches* in this area are essential to capture and maintain students' engagement in their multilingual learning process. The integration of effective motivational strategies not only stimulates interest in various languages, but also significantly contributes to the development of students' linguistic and intercultural competences in a deep and lasting way [157, 158].

Multilingual education continuously adapts to the specific needs and challenges of different social and educational contexts, ensuring a flexible and personalized approach for local and global communities. Furthermore, in a society characterized by rapid changes, multilingual education not only encourages linguistic diversity, but also facilitates understanding and mutual respect between diverse cultures and languages, thus promoting harmonious and collaborative coexistence in a globalized environment.

Students' motivation in learning new languages at school is significantly driven by a combination of intrinsic and extrinsic motivations. Intrinsic motivation stems from students' internal desires to learn due to genuine interest or personal satisfaction. In contrast, extrinsic motivation refers to external rewards such as academic grades or public praise. Effective educators increase motivation by incorporating engaging, culturally relevant content and using diverse teaching methods that resonate with different learning styles.

Technological tools such as language learning applications and interactive software provide personalized learning experiences, further stimulating students' interest. Supportive classroom environments, where students feel valued and understood, encourage risk-taking in language practice.

In addition, practical applications of the language, such as through projects or real-world interactions, make learning more tangible and relevant. Regular feedback helps students identify their progress and areas for improvement, while keeping them motivated. The professional development of teachers is also essential, as it keeps the teaching methods fresh and effective, while aligning with the latest educational trends and technologies [138].

There are two main goal orientations that motivate students when dealing with tasks in multilingual education [165]. The first, the learning goal orientation, makes students strive to improve their abilities. While the second, a performance goal orientation, makes people strive to receive positive feedback on their performance. Learning goal orientation is linked to the response pattern so that people characterized by this type of orientation often perceive their abilities and tend to see challenging assignments as an opportunity for self-improvement.

The performance goal orientation is linked to the maladaptive response pattern, so that people characterized by this goal perceive their abilities as fixed and tend to avoid challenging tasks. This goal is subject to the influences of external factors. To effectively increase motivation for learning multiple languages, we must address the diverse needs of both types of students. This tailored approach ensures that all learners feel supported and engaged in their language acquisition.

When we come to examine the motivation for language learning, we find that students are motivated by different goals while dealing with learning tasks and evaluations among them [59]:

- *Cultural appreciation* - learning a language opens a window to understanding and appreciating the culture associated with this language in a deeper way. It can enhance the student's experiences of enjoying books and movies in their original form and deepen connections with people from divergent backgrounds.
- *Career opportunities* - being bilingual or multilingual can significantly increase your career prospects. This can open up job opportunities in foreign countries, multinational companies, and industries such as tourism, diplomacy, and international business.
- *Cognitive benefits* - studies show that learning a new language can improve cognitive functions such as memory, problem solving skills and critical thinking. It also delays cognitive decline and can improve multitasking abilities.
- *Personal satisfaction and confidence* - achieving proficiency in a new language is a significant personal achievement that can increase a person's confidence and self-esteem. It is also a continuous learning process, providing opportunities for lifelong growth.

- *Improved communication skills* - learning a new language also improves overall communication skills, including better listening and speaking abilities in one's native language.
- *Social relationships* - It can also help build new social relationships and strengthen existing ones, foster better understanding and tolerance towards others, reduce language barriers and improve one's social network.

The issue of motivation in general, and that of learning motivation, is broad and complex. The various approaches have produced multiple definitions, theories, models, and conceptions. The circulation of these ideas across different scientific fields, along with their mutual interrelation and occasional reappearance in updated forms, can complicate their identification.

This chapter reflects the theoretical approaches to the researched problem and includes the analysis of the numerous definitions of the concepts motivation and reasoning. It identifies the structural and processual aspects of motivation from various perspectives and explores the evolution of classical, modern, and integrated motivational theories that have an impact in the educational field.

This section refers to the complexity of the issue of motivation for learning, widely reflected in this paper, considering that we undertook a multidimensional, integrative-functional approach. This approach delineates several essential dimensions in motivation research, knowledge of which significantly contributes to the professional training of any specialist in the educational field. In the context of the abovementioned, we would emphasize the productivity of multidimensional, integrative-functional approaches in learning motivation, which highlight the fact that the various aspects and components of motivation cannot and should not be treated and established independently.

At the same time, the multidimensional approach evokes the presence of several factors/dimensions likely to intervene in the examination, stimulation, and development of learning motivation. These dimensions must be included in a logical system that orders them in relation to the intended purpose and makes clear their operation, taken as a whole or regrouped, in relation to this purpose. It is important to find the links that unite the targeted dimensions, while also evaluating the consequences of their interaction.

The term "motivation" originates from the word "movement" and is used to describe the various motivations that drive human behaviours toward specific goals. Most people recognize its role in guiding choices among options, goals, and means, and they can often identify situations where their motivation is high or low. Teachers place significant importance on their

students' levels of motivation, leading many to explore various aspects that can help enhance it. [16, 151, 152].

In general, there is a vast array of literature that references various aspects related to the research variables. Both to the variable of motivation for learning, in general and motivation in multilingual education, in particular. The concept of "motivation" refers to the set of processes that arouse, direct, and sustain human behaviour toward a specific goal [161].

Building on the concept of motivation, the theory of motivation extends further into the exploration of individual and organizational factors, as seen in H.V. Vroom's theory of expected performance, which integrates these elements to explain motivational dynamics [143]. For example, hygiene factors in F. Herzberg's theory may satisfy basic needs in A. H. Maslow's theory, while motivational factors may satisfy higher-order individual needs [106].

The idea is that individuals make a certain decision about their behaviour in the hope of satisfying some need or desire. The relationship between behaviour and desired results is affected by a complex of individual factors (needs, ability, etc.) and organizational/educational factors (control organization, reward system, performance, etc.).

The behavior-performance relationship is characterized by three dimensions: the effort-performance ratio (expectancy), the performance-reward ratio (instrumentality), and valence (satisfaction), according to H.V. Vroom's theory [143].

Students learn multiple languages more easily when they have a positive attitude towards those languages, compared to languages for which their attitude is less favourable. R. C. Gardner [62, 63], a major researcher in the field, argued that, in addition to the contribution that comes from the positive attitude towards learning a new language, there is an effect on the degree of success in learning the language and its culture, and the parents' attitude. At the same time, an opposite relationship was also identified, namely that learning a foreign language improves students' attitudes towards the language and its culture [96].

There is also a clear relationship between attitudes towards the language and the motivation to learn it. Another factor related to the emotional aspects of acquiring additional languages is motivation. R. C. Gardner proposed a model in which attitudes toward achievements in second language acquisition are influenced by motivation [64].

The heterogeneity of motivational theories and models persuaded various researchers to try and integrate them into a complete and functional model with the possibility of its validation in managerial practice. Scientists have built a model that integrates attitudes, motivation, and performance, thus combining the needs theory, expectancy theory, goal theory, and the inverse relationship given by reinforcement.

In the decades since R. C. Gardner's model was proposed, teachers, psychologists, and linguists have continued to explore the relationship between motivation for learning a language and the process of language acquisition. These studies summarize the findings indicating a clear relationship between the level of new language motivation of a learner and the level of his achievements. That is, a learner with a positive attitude towards a language or a certain language-speaking community will have a high motivation to invest in language studies, and in the end, motivation is the factor that will make a person learn a language successfully [64].

R. C. Gardner and P. D. MacIntyre define a motivated person as a person who “wants to achieve a certain goal, invests a significant amount of effort to reach this goal, and his experiences related to achieving the goal give him pleasure”.

In addition, R. C. Gardner specifies other characteristics, stating that a person is persistently motivated until they achieve their goals, ambitions, and desires. They see satisfaction and interest in their attempts to achieve the goal, are disappointed by failures, and finally, adopting remediation strategies.

Researchers highlight the impracticality of measuring all of the aforementioned factors individually, leading them to categorize these into three metrics. Each index has attributes that represent all mentioned factors. The first metric is motivational intensity, which assesses the effort invested in learning the language. The second is the desire to learn the target language, which gauges the learner's aspiration to achieve an important level of proficiency. The third metric, attitudes towards the language, examines the emotional aspects of the language learning experience, distinguishing clearly between motivation and orientation.

The scholar argues that motivation, consists of several factors, as described above. Orientation, on the other hand, refers to a variety of reasons for learning additional languages within the broader concept of motivation [65].

R. C. Gardner states that there are two types of orientations:

- The first, called an integrative orientation, refers to the learner's desire to learn about the community that speaks the target language, to get closer to it, and to be a part of it. The combination of a positive attitude, an integrative orientation with the desire to learn the language, to know it, and the willingness to invest effort for the purpose of learning, are what make up the concept of integrative motivation. It is possible, for example, that the learner has an integrative orientation, but without the desire to learn and succeed in learning the language, he has no integrative motivation.
- The second type of orientation in learning additional languages is an instrumental orientation which refers to the practical reasons for acquiring an additional language, such as success in

studies, an aspiration to get a respectable job, or a higher salary. There is no connection between this type of orientation and the speaker's desire to get closer, or to be an integral part of the community of language speakers. Instrumental orientation, then, is the result of the combination of external factors. Instrumental orientation, in the context of language teaching in a school setting, refers to practical reasons for success at the local level, of what is carried out in the classroom.

Although the research focused on the social and pragmatic dimensions of the motivation to acquire additional languages, other studies sought to expand the model proposed by Gardner. These added elements such as external motivation, stating that the learner is motivated by various external factors, for example:

- The expectation of receiving an external reward, for example, good grades.
- Intellectual curiosity.
- The need for achievements.
- Self-confidence.

Additionally, researchers have identified other elements related to the learning situation, including classroom assignments, the atmosphere in the classroom, student dynamics, course content, study materials, grades, and rewards. Another type of motivation is motivation is task motivation, which refers to the learner's drive to succeed in a specific task assigned by the teacher. This motivation typically manifests during classroom activities or as part of homework assignments.

There are interrelationships between the knowledge of multiple languages and the familiarity with their culture. On the one hand, knowing the cultural background of populations that speak the target language contributes to understanding the language. On the other hand, as the level of skills in the language increases, so does the level of knowledge and understanding of the culture associated with it [90, 135].

Familiarity with the target culture enhances the learner's communicative abilities by providing tools for understanding sociolinguistic rules, including pragmatics. Pragmatics is the field that examines language use in its social context, highlighting the need to understand and convey messages. Effective communication often requires knowledge that extends beyond the correct use of words. The speaker must demonstrate familiarity with the social laws reflected through the words.

For example, when a Hebrew speaker says "*don't ask what happened there today*" he means the opposite. Likewise, an Arabic speaker who receives a compliment on a garment, may respond by offering the shirt for the complementors' use, when the actual intention is to say,

"thank you". Additionally, exposure to the target-language culture allows for an understanding of culture-dependent motives and behaviours [128].

Moreover, in a curriculum that adds the study of the target culture as an inseparable part of foreign language studies, the learner is perceived, not as a tool that absorbs and recycles linguistic knowledge, but as an entity located in a socio-cultural space [91].

Additionally, the cultural background of the learner must be considered, providing them with the tools necessary for successful participation in the new linguistic dynamics associated with learning the target language.

Classical motivational theories A. H. Maslow's needs theory [106] is one of the most well-known, providing a systematic view of workplace needs and classifying distinct levels on a pyramid. A. H. Maslow, a behavioural psychologist, initially established a widely recognized theory of the hierarchy of needs, which has since been extensively applied in organizational contexts.

His theory answers the question that underlies the individual's motivation. A. H. Maslow believes that human behaviour is driven by satisfaction – the origin of needs, given that humans are instinctive, biological, and fundamental. He classifies human needs into dissimilar categories and establishes a hierarchy presented in a pyramidal form

Five groups of needs are distinguished:

- Physiological needs (food, shelter, air, etc.);
- Security needs (protection and stability, protection against pain and threats);
- Belonging needs (needs for camaraderie, love);
- The need for fulfilment (to become all that one is capable of being);
- The need for recognition (needs for esteem, respect).

According to A. H. Maslow's research, a person is sensitive to the parameters of a certain level only if the previous levels of needs are met.

The "*motivation to learn*" is an internal force that motivates a person to learn, to an educational activity that has results that reward him [78]. This variable is regarded as a means for building identity. Internal motivation enables individuals to identify and understand their genuine interests, the activities they resonate with, and the contexts in which they feel most comfortable.

Therefore, the study of the existing effect on learning motivation may provide significant conclusions and insights to questions related to personal identity forming. Among them, questions like "Who am I?" "What do I want to focus on in the educational framework, in my

free time and in different areas of life?” Also, for questions as “Which social and cultural group do I want to belong to?” [160].

Dealing with these questions helps in the process of forming the building block of self-identity and the sense of internal discipline for learning. For, a student who gets to experience many and deep experiences of internal motivation during the occupation of a certain field of study, may want to make the occupation in that field one of the bases of his developing identity.

As evidence and research support, the type of internal motivation, cognitive and integrative ones, is found to be of value and contribution to promoting and driving the process and actions that form one’s personal identity, since it enables and assists in the realization of values or goals. As a result, it accelerates the process of engaging, examining, and deciding on the personally important considerations and places them in a high order of importance in the hierarchy of values and the goals that are at the centre of personal identity [167].

Intrinsic motivation refers to the investment of effort and time in an activity for its own sake in the absence of reward or external pressure, while extrinsic motivation refers to engaging in a certain activity to achieve another goal. The internal, including perseverance in the task, investment of cognitive effort that involves creativity and deepening, as well as the absence of anger, anxiety, and stress during the execution. For, the individual does not experience a threat to basic needs of security, belonging, competence and autonomy. In this way, he feels free to try new ways of thinking and activity and experiences feelings of interest and enjoyment from the activity.

Research has shown that interest in a task is positively correlated with achievement, as well as with the use of deeper cognitive strategies among children. This includes enhanced learning, persistence in maintaining attention, and engagement among educators. There are different theories, approaches, and concepts in relation to the factors and the existing contribution to motivation.

Some scholars place the student as the main factor, some regard the task as a motivating factor, and some see the school influence as a driving factor. The research and development of theories in this field began in the past and continues to evolve today. In the modern era, this field incorporates factors from various domains of thought.

Processes form the basis and definition for the field of educational psychology in general. In recent decades, due to advancements in research and a deeper understanding of the factors and motives influencing motivation, there has been a growing recognition of the benefits and contributions of motivational processes to students' learning and adaptation. These include improvements in managing interruptions, dealing with difficulties and failures and more.

Therefore, various intervention programs and methods are implemented in schools. The field of learning motivation refers to the understanding of processes that may improve it among students. The theories comprise points of similarity and points of difference due to the perceptions, views, and various processes on which they are based. Therefore, there is great diversity in the ways and solutions being offer.

Researchers agree that motivation comprises three dimensions: direction, intensity, and quality. The dimensions serve as a foundation for understanding various motivational theories and approaches, helping to identify their differences. This framework also applies when examining multilingual education. Therefore, we will focus on pedagogical approaches with an emphasis on multilingual education.

The first approach and theory is the *personal approach* to motivation, which considers motivation as a personality trait. The approach was highly popular until the 1970s. According to this perspective, motivation is influenced by long-term personal motives, for instance investment and motivation to learn because of the need for achievement. Criticism of the approach highlights the aspirations of students who may not be focused on academic achievements but are motivated by goals in other areas, such as career advancement or the possibility of working abroad due to their language skills. In doing so, it raises the complexity in relation to the ability of personal motivation theories to classify and identify the level of motivation among students and the need to refer to the environmental characteristics [138].

Humanistic approach – self-direction theory sees motivation as stemming from basic human needs. It is based on the humanist approach. The father of the approach, Maslow, posits that individuals are motivated by a series of basic needs that drive them to develop their inherent potential. An example of theories based on this approach is “The theory of self-determination.” According to this theory, three basic needs direct human behaviour: the need for autonomy, the need for competence, and the need for connection and belonging. The level of satisfaction of these needs affects the level of an individual's motivation.

As a result, the satisfaction of the needs of learning, autonomy, connections and belonging, positively affects the quality of the student's motivation in the learning process. However, it depends on several factors: the language spoken in the student's home, the educational approach used at home and the educational methods at school. This theory served as a framework for interventions aimed at increasing the motivation levels among students.

The program focuses on promoting various elements aimed at transforming the school into a growth-oriented environment that provides significant support for the basic psychological needs of students and teachers. the key elements comprise:

- the perception of the teacher's role as an "ally" who facilitates student growth and provide support;
- fostering competence among all students in terms of skills and vocabulary;
- and strengthening self-regulation: internal attention and emotion regulation skills.

The rationale behind these elements is that teacher behaviours that support autonomy, a sense of competence, and language needs - highlighted in the intervention - promote intrinsic motivation for learning. This in turn, fosters positive associations, academic achievements, and investment in learning, as noted by IEA [166].

In this theory, the response to basic psychological needs underlies the internal motivation of students to invest efforts, persevere and show deep involvement in the language, essential for the student development and mental well-being as well as for the development of positive self-perceptions and positive perceptions of others [159].

In a study conducted on a sample of students from a low socioeconomic background in the 9th grade, it was found that the degree to which students appreciate the need for learning the foreign language and meet their psychological needs determines how involved they will be in learning.

This refers to the individual's need for feelings of desire, control, and choice that accompany their actions. When a student experiences a lack of belonging to the language and its culture, or feels disconnected from their peers and teachers, they are unable to fully engage in the learning process.

Positive relationships with others promote social, emotional, and intellectual functioning, and a positive sense of self-image and self-worth, being related to continuous achievement motivation. Finally, the need for linguistic competence expresses the need of the person to feel that he could successfully realize intentions, products and roles and face educational challenges and tasks. This need, of course, develops more during successful experiences that strengthen the sense of self-efficacy [162].

The third approach – *behavioural*, deals with the differences between intrinsic and extrinsic motivation. It is based on the "behavioural approach" and focuses on a person's internal needs around the factors that influence motivation. According to this approach, the environment affects the behaviour of the person in such a way that he is attracted to positive experiences and avoids negative ones. A person's tendency and motivation in a certain direction is shaped by the nature of the reinforcements he received for his behaviours [54].

Positive reinforcement of a behaviour will increase its frequency, while negative reinforcement will decrease it. Therefore, this approach, unlike achievement theory, focuses

primarily on the direction and intensity of motivation rather than its quality. The theory is one of the most important in the field of motivation, in general and in the field of motivation for learning languages, in particular. It presents external and internal motivation as two poles that contribute to an autonomous and meaningful sequence in learning.

The different motivations for behaviour are found on the continuum and, thus, help in understanding the source of the reasons for learning and the ability to classify them as internal or external motivational factors. It is used in various intervention processes that deal with increasing motivation in multilingual education in students [163].

The social cognitive approach assumes that human behaviour is influenced by cognitive processes which develop during interactions and social relationships. Additionally, they assume that there is a connection between these processes and the environment expressed in human behaviour. The approach deals with the perception of self-efficacy and is undemented on the awareness and understanding that motivational processes also include a person's expectations and therefore influence his behaviour.

Therefore, the concept of "self-efficacy", which is used to explain a person's perception of his ability to perform various tasks, is a factor influencing his direction, empowerment, and quality in the context of each task, all the more so in learning multiple languages. The theory is related to the field of social learning and was first developed in the 1970s.

Numerous studies and intervention programs examining the relationship between self-efficacy and task performance indicate a positive correlation between the perception of self-efficacy and the tendency to choose a task, persistence in completing the task despite tricky situations, the quality of their performance, and their evaluations of those tasks as enjoyable and significant.

Also, they refer to the factors that help strengthen the perception of self-efficacy in performing educational tasks. Among them are defining long-term goals, experiencing success in challenging tasks, competitiveness among peers, strengthening and supporting the students' abilities and imparting methods for solving tasks [48].

Another cognitive-social approach refers to the causal attribution of motivation to success and failure. The theory underlying the approach is called the "causal attribution theory". According to it, the person tries to find explanations for himself in the context of the causes of various events according to his experience of success or failure from them. Therefore, success in a test or task will relate to positive factors and reasons that led to success and vice versa.

The nature of the explanations and narratives attributed to an event significantly influences individuals' expectations of success in similar tasks in the future. This includes their

perceptions of control and the emotional responses they develop concerning themselves and their abilities to complete tasks. These factors, in turn, directly impact their motivation to engage in such tasks.

According to the "causal attribution theory", the reasons for a person's successes and failures can be attributed and characterized according to several dimensions.

Moreover, following this theory, it is possible to classify the several reasons for success and failure into three main dimensions:

- The locus of control helps identify and classify the cause as either internal or external to the student.
 - The second, the dimension of control, which helps understand the individual's perceived ability to exert control or the lack of thereof over the situation.
 - The third dimension, the stability which examines whether the cause is fixed or changeable.
- Each of these dimensions affects the cognitive and emotional processes of students, in the way that their combination helps to develop expectations and feelings accordingly.

The nature of the expectations and feelings affects the motivation and the degree of desire and investment of the student to succeed and deal with different tasks and situations. The most common reasons used to explain successes and failures among students can be identified as reasons related to effort, ability, luck, and difficulty in performing the task. Each of the reasons can be classified according to the three dimensions. For example, effort is an internal factor and cause, controlled and not constant, while luck is an external factor and cause, which is not controllable and changes.

There are differences among students regarding the classification of reasons across these dimensions. This classification is influenced by varying perceptions and cultural backgrounds, which can significantly affect the level of effort students exert. When a cause is attributed to factors perceived as beyond their control, it may lead to diminished motivation and effort in their academic pursuits [164].

According to this theory, when failure or success occurs, people analyse the situation to determine the perceived reasons for the result. The attribution style reflects the usual way in which the person evaluates and explains the reasons for positive and negative events in their life.

The perceived causes of events can be divided into three dimensions: stability - whether the cause is transient or persistent, locus - whether the cause is external or internal, and control - whether the mental cause can be controlled. The person's focus on the question of what caused success or failure explains specific psychological outcomes such as future expectations, self-efficacy, and emotion.

Various researchers applied the attribution theory in the context of school students and these results were later linked to behavioural results, such as involvement in learning and academic achievements. Thus, for example, adaptive attributions are associated with higher expectations for success and promote self-efficacy and positive emotion such as pride or hope.

These outcomes are linked to students' engagement, learning skills, and actual academic achievement. In cases of success, attributing the achievement to factors such as effort, talent, or the use of effective strategies can foster adaptive learning behaviours. Conversely, in situations of failure, it is beneficial to attribute the outcome to unstable causes, such as insufficient effort or the application of inappropriate strategies. This approach maintains the possibility of future success and helps the student preserve a positive self-concept.

On the other hand, attributing failure to low ability is related to low expectations and a decrease in persistence in academic tasks. Indeed, in a longitudinal study conducted among high school students, it was found that a dysfunctional attributional style is negatively related to engagement in learning and achievement. The assumption is that over time, children who attribute failure to a lack of ability may experience a feeling of helplessness. These children are characterized by low expectations, negative feelings, and ineffective strategies that will lead to harm in achievements.

Meanwhile, it is likely that children who see a connection between their efforts and success will respond to failure or problematic situations with hope and will engage in task-oriented strategic behaviour. When students encounter continuous failures despite significant effort, they may conclude that success is unattainable, which can harm their motivation.

Therefore, at the intervention level, it is important to avoid simply encouraging students to exert more effort. Instead, the focus should shift toward helping them change their learning strategies. While effort is essential, it is not the sole factor required for success [133].

Children who are convinced that they lack the necessary ability to learn a foreign language do not take responsibility for success and even underestimate their performance when they succeed. Instead, they should be provided with short-term goals and strategies for progressing toward the goals. For a child to feel a sense of competence, it is important that he succeeds and attributes his successes to internal factors over which he has control [84].

The role of the educational environment lies not only in fostering success but also in promoting a correct interpretation of success and supporting academic self-efficacy. While knowledge and cognitive skills are essential for academic achievement, they are not sufficient on their own. Even when students understand what they need to do, they may struggle to commit

the required effort to meet the complex demands of linguistic tasks. Therefore, it is crucial that students believe in their ability to act effectively to achieve their goals [147, 149, 156].

Another modern theory in the cognitive-social field is the "goal achievement theory". Developed over the past two decades, this theory has gained significant prominence and popularity in educational research for guiding the completion of educational tasks and assignments. It is based on insights from studies that tackled understanding motivational processes. One insight relates to students' perceptions of intelligence. When students view intelligence as a developing trait, they are more likely to invest energy, resources, and effort in learning. They perceive themselves as capable, which motivates them to adopt strategies that facilitate success.

Conversely, students who see intelligence as fixed may avoid challenges, fearing failure, and are less likely to engage in behaviours that promote growth and learning.

Another insight, which contributed to the development of the theory, is related to the understanding and recognition of the connection between the concept of competence and age, which helps distinguish between ability and effort.

Insisting on mediating and explaining differences to students helps them direct and invest effort in accordance with the desire to succeed in the task. Another insight is related to identifying the correlation between the motivational patterns in different teaching methods and the differences in meaning regarding success and failure among students from distinct cultures.

Each student has different goals and motives when it comes to the learning process. The differences are usually related to the student's interpretation of the educational environment. It can be divided into six dimensions that shape the educational environment and the importance of both expertise-oriented and ability-demonstration goals. These dimensions are academic tasks, the authority structure in the classroom, teachers' knowledge of their students, methods of group formation, assessment of learning, and the teacher's management of time.

The combination of intervention programs with this approach in schools suggests that the school environment plays a significant and decisive role in shaping students' achievement goals. Through culture, values, norms and beliefs teachers and students understand what is proper, acceptable, and valuable and worth investing in. Consequently, the importance of investing in and leveraging the environment and traditions in language learning becomes evident, particularly in emphasizing specialized goals.

Within the framework of the theory, it is important to understand that there are two types of approaches to the goals that individuals pursue when engaging in a language learning task. Expertise goals - mastery - encourage learners to develop new competences, deepen their

understanding of the material, improve their abilities, and attain a sense of expertise. In contrast, performance goals direct learners to focus on their abilities and self-worth, evaluate their skills in relation to others, compete for superior achievements or grades, and seek public recognition for excellent performance. When students focus on learning and using a foreign language, aiming to improve their current performance relative to their past, it can help them maintain a sense of self-efficacy in the face of failure, avoid negative emotions such as anxiety, reduce distracting thoughts, and enhance their cognitive efforts. The increased cognitive engagement fosters greater involvement in learning and the attainment of achievements. In contrast, when students are busy trying to be the best, get higher grades and outperform their peers, there is a possibility to get negative emotions, including anxiety and, distracting and irrelevant thoughts, worrying about what others are doing instead of focusing on the task, leading to reduced cognitive capacity.

Involvement in learning and performance - In a study conducted among 172 middle school students in Michigan, USA, it was found that those who reported higher levels of mastery goals employed a greater variety of processing and organizational strategies, as well as metacognitive and self-regulation techniques. These students aimed to learn the material not to have high academic performance; they believed that schoolwork was interesting and important to them. Additionally, they were more cognitively involved and persisted in their work. For these students, learning, understanding, solving problems, and developing new skills are goals in themselves.

Achievement goals may significantly impact students' mental well-being. In a study involving 161 students in grades 6-7 in Michigan, it was found that mastery goals were associated with positive mental well-being, whereas performance goals were linked to negative mental well-being. Mental well-being was defined as an evaluation based on general patterns of behaviour, coping strategies and emotional control.

Regarding the relationship between achievement goals and social factors, it was found that several social variables such as a sense of belonging to the school, setting goals with social responsibility, the desire to be accepted by peer groups, and attempts to achieve social status help predict the types of student achievement goals.

Consequently, it was found that students who experienced a sense of belonging and pursued goals related to social responsibility were more likely to adopt mastery goals and fewer performance goals. In contrast, students who prioritized the development of social relationships and the attainment of social status tended to adopt performance goals.

Finally, to encourage the students to set mastery goals, it is advisable to use tasks that are meaningful and challenging to them, provide opportunities for autonomy, and conduct personal, non-public evaluations that focus on the students' efforts and their individual learning progress

2.3. Methodology of Motivating Students to Learn Multiple Languages as a Dimension of Multilingual Education

Over the years, various models of motivation have been developed and empirically established, offering a variety of motivational structures that promote or hinder achievement and learning in general and language in particular, including academic self-efficacy, attributions, achievement, and intrinsic motivational goals.

We will review these structures to demonstrate that students can be motivated in several ways and that it is accurate to categorize students as simply motivated or unmotivated. Different structures present distinct ways through which achievement motivation can be stimulated. This suggests that motivation may change based on the situation, context, class, and school environment.

Therefore, instead of focusing on the distinction between high and low motivation in learning multiple languages, it is important to define adaptive and maladaptive motivation models to understand why and how these patterns develop over time [7].

For instance, research has shown that adaptive motivation beliefs in language, such as self-efficacy promote achievement, whereas non-adaptive motivation beliefs, such as the fear of failure, negatively impact performance and achievements [59].

Academic self-efficacy - improving cognitive skills. Although knowledge and cognitive skills are necessary for language achievement and its absorption, they are not sufficient. Even when students know what they must do, they sometimes find it difficult to bring themselves to invest the necessary effort to deal with the complex demands of a task. To do this, students must believe that they can act effectively to achieve a goal or deal effectively with challenging situations.

In the academic context, we focus on the student's beliefs regarding their ability to control linguistic aspects in the language learning process, successfully perform specific tasks in the language, and regulate learning and activities. These beliefs can lead to adaptive educational outcomes, such as higher levels of effort and persistence when faced with difficult linguistic tasks [144].

Both experimental and correlational studies have examined students across various age groups and genders. These studies found that high self-efficacy at age 13 was positively associated with higher grades in high school and negatively correlated with the likelihood of

dropping out. Additionally, high school students' sense of competence was found to be positively related to engagement in learning.

A longitudinal study conducted among 436 students focused on the contribution of personality variables, self-esteem, and foreign language achievements. The data was collected from students in 8th grade, 10th grade and at the end of high school. The findings revealed that students rated themselves positively; those who exhibited high self-efficacy and excelled in their academic performance were more likely to achieve better academic outcomes compared to their peers who did not possess these characteristics. These students are persistent and tend to better assess their ability to master the target language as well as their ability to regulate their motivation and learning activities. Indeed, it was found that there is a positive relationship between the students' beliefs that they can regulate their learning and their academic achievements [88]. The study also highlighted that, among a sample of 113 high school students, personal goals and a sense of self-efficacy were significant predictors of academic achievement.

Research findings show that the more positively the child perceives their academic abilities, the more they engage in learning the new language, resulting in higher academic achievements. Failure can also lead students to feel that they are unable to meet academic requirements, resulting in difficulties and fostering a negative attitude toward the language being studied. This disconnection may sometimes lead to their decision to drop out of school.

Self-efficacy has a predictive effect on academic performance across various subjects within the school context. Consequently, one goal of intervention programs may be to enhance performance by increasing self-efficacy. In multilingual education, students are often motivated to improve their cognitive abilities; individuals who speak multiple languages are not only perceived as more intelligent but often possess enhanced cognitive skills.

Learning a foreign language makes it possible to develop one's cognitive abilities, learn new competences and refine the existing ones. By learning a foreign language, memory can be improved, since by learning unfamiliar words, we expand the limits of human memory. Therefore, learning a new language helps to improve one's way of thinking and sharpen one's attention to intricate details. In the end, it is important to remember that like other muscles in the body, our brain is also a type of muscle, and the more we train it, the more successful it is [58].

Methodological strategies and didactic linguistic approaches to maintain motivation adapted to learning multiple languages [136]:

1. Setting significant goals for language learning - encouraging students to set specific and achievable goals for each language they learn. These goals can include passing a proficiency exam, participating in a language exchange program, or traveling to a country where the

- language is spoken. By setting goals that are personally relevant and meaningful to them, students are more likely to stay motivated and committed to their language learning journey.
2. Providing authentic learning opportunities - creating opportunities for students to use the language in authentic contexts. This can include real-life role-playing scenarios, such as ordering food at a restaurant, asking for directions, or participating in mock job interviews. Authentic learning experiences help students see the practical value of the language and motivate them to continue learning.
 3. Providing positive reinforcement - recognizing and marking the students' progress and achievements in their language learning journey. Offer praise, rewards, and recognition for their efforts, whether it is mastering a difficult grammar concept, expanding their vocabulary, or successfully communicating in the target language. Positive reinforcement increases students' confidence and self-esteem, motivating them to persist in their language learning efforts.
 4. Cultivating a growth mindset - encouraging students to adopt a growth mindset towards learning a language, emphasizing the importance of effort, practice, and persistence. Help them understand that mistakes are a natural part of the learning process and an opportunity for growth. Encourage a supportive classroom culture where students feel comfortable taking risks and learning from their mistakes.
 5. Promoting autonomy and choice - empowering students to take ownership of their language learning journey by providing autonomy and choice in choosing learning activities, materials, and topics. Allow students to pursue their interests and explore aspects of the language that resonate with them personally. By giving students a sense of control over their learning, they are more likely to feel motivated and engaged.
 6. Integrating multimedia and technology - Integrating multimedia resources, such as videos, songs, and interactive websites, in language lessons. Use technological tools such as language learning apps, online quizzes, and virtual reality simulations to make learning more engaging and interactive. Multimedia and technology appeal to different learning styles and provide students with varied and stimulating learning experiences.
 7. Creating a supportive learning community - fostering a sense of belonging and brotherhood among language learners by creating a supportive learning community. Encouraging peer collaboration, teamwork and mutual support through group activities, discussions, and peer feedback sessions. Building strong relationships with classmates and feeling connected to a learning community can improve students' motivation and enjoyment of language learning.

8. Connecting language learning to personal interests and goals - helping students see the relevance of language learning to their personal interests, passions, and future goals. Encouraging exploration of how language proficiency can open up new opportunities, whether it is a career abroad, connecting to family heritage or engaging with global issues. By aligning language learning with students' aspirations and interests, to inspire them to stay motivated and invested in their language learning journey the new foreigners and develop skills to interact in the global world.

The operative strategies for maintaining student motivation while learning multiple languages [87]:

- Building personalized learning paths - recognize that each student has learning preferences, interests, and unique goals. Adapt language learning activities and materials to suit their individual needs and preferences. Provide students with choices in choosing learning resources, topics, and activities to increase their engagement and motivation.
- Integrated Gamification - Incorporate game-like elements into language learning activities to make them more interactive and enjoyable. Use language learning apps with built-in gamification features such as: rewards, badges, leaderboards, and progress tracking. Gamification improves student motivation by creating a sense of competition, achievement and fun.
- Project-based learning - implement project-based learning tasks that allow students to apply language skills in real contexts. Assign projects such as creating multimedia presentations, writing blogs or articles, filming skits or interviews, or organizing cultural events. Projects provide students with meaningful and authentic language learning experiences, fostering inner motivation and creativity.
- Collaboration and Peer Support - Encourage collaboration and peer support by integrating cooperative learning activities into the curriculum. Pair students with language study peers or create small group study sessions where they can practice speaking, provide feedback, and share learning strategies. Interaction with peers promotes a sense of community, camaraderie, and mutual encouragement among students.
- Cultural immersion activities - Organize cultural immersion activities that expose students to the customs, traditions, and lifestyles of different language-speaking communities. Invite guest speakers, organize cultural festivals or workshops, or organize field trips to cultural landmarks, museums, or ethnic neighbourhoods. Cultural immersion increases students'

appreciation of linguistic diversity and motivates them to learn languages as a means of connecting with other cultures.

- Technological integration - integrate technological tools and digital resources in language teaching to improve student engagement and motivation. Use interactive multimedia materials, virtual reality simulations, language learning apps, and online language exchange platforms to complement traditional teaching methods. The technology provides students with access to authentic language input, immediate feedback, and personalized learning experiences.
- Monitoring progress and setting goals - Implement progress tracking systems that allow students to track their language learning achievements and set achievable goals. Provide students with regular feedback on their language proficiency, identify areas for improvement, and celebrate their successes. Setting goals fosters a sense of purpose, direction, and achievement, and motivates students to continue their language learning journey.
- Fostering a positive learning environment - Create a supportive and inclusive learning environment where students feel valued, respected, and encouraged to take risks. Cultivate a growth mindset by emphasizing the importance of effort, persistence, and resilience in language learning. Celebrate diversity, cultural competence, and linguistic achievement within the classroom community.

By applying these methodological strategies, educators can effectively foster student motivation and engagement in learning multiple languages. By realizing students' intrinsic interests, fostering collaboration, providing authentic learning experiences, and leveraging technology, educators can create dynamic and stimulating language learning environments that inspire students to become lifelong language learners [87].

The most significant factor in learning the new language is the quality of time engaged in the process, rather than the duration of that engagement. The amount of time students devote to a task does not accurately reflect their attentiveness or how effectively they process information.

This factor, often referred to as “engagement,” is a central element that reflects a student's motivation for learning. Emotional involvement is expressed as positive attitudes towards school, the language being studied, its speakers, and so forth. It includes two interrelated structures: positive evaluations of the school and positive educational intentions.

Positive evaluations reflect the extent to which the student sees learning the new language at school as a pleasant and satisfying experience, while positive intentions refer to the interest the student discovers and the desire for continued involvement.

Table 2.1 Combination of Three Assignment Parameters [146]

Cause	Stability	Controllability	Variability	Associated emotions
Internal	Stable	Controllable	Learning strategies	Gratitude/anger
Internal	Stable	Uncontrollable	Intellectual skills	Pride/shame, despair
Internal	Unstable	Controllable	Effort	Pride, guilt
Internal	Unstable	Uncontrollable	Disease	
External	Stable	Controllable	Attractive course	
External	Stable	Uncontrollable	Difficulty level of the task, the program	Disinterest, anger
External	Unstable	Controllable	The teacher's perception	
External	Unstable	Uncontrollable	The teacher's mood	Gratitude, surprise

It should be noted that the student's perception of this causal attribution more important than the actual causality. For example, one student may believe that regardless of his actions, the teacher will consider him incompetent (uncontrollable perception of the teacher), while another student may believe the opposite.

This perception of causality is therefore entirely personal, even for identical activities, two students will be able to attribute different properties. On the other hand, these varying situations generate different emotions. If a student fails an exam for the first time, they may experience feelings of despair if they believe they lack the skills to pass such tests (an internal, stable, and uncontrollable cause). Conversely, if they attribute their failure to the difficulty of the task (an external, unstable, and uncontrollable cause), they are likely to feel disappointment.

Finally, if we closely examine the table above, we will see that certain parameters can be classified into other categories: learning strategies, for example, may not be a stable cause for all students. A student who experiences repeated failure may develop a sense of learned helplessness, wherein they perceive themselves as incapable of finding a favourable resolution to their situation and thus passively resign to their circumstances. In this state, they attribute their repeated failures to internal, stable, and uncontrollable causes, often believing that their mediocre performance is due to an unchangeable intellectual disability. Such attribution of failure impacts student performance. In the study, students were asked to complete a task that was intentionally designed to induce a sense of "failure" towards the end.

Table 2.2 Typology of Students According to Success Motivation and Failure Avoidance [146]

The motivation to avoid failure	The motivation for success	
	Weak	Strong
Weak	Acceptors of failure	Focuses on success
Strong	Failure avoiders	Overloads

These definitions allow us to classify students into four categories according to their motivation to succeed and their fear of failure.

- "Success-focused" students are actively involved in school activities, they are not anxious and bored with work.
- "Failure avoidant" students are very anxious, exhibit low motivation for success, often trying to avoid challenging tasks.
- "Overworked" students are simultaneously motivated for success and anxious about failure. They work extremely hard; however, they are stressed and pessimistic, too.
- "Failure accepting" students are little concerned with school assignments and/or assessment methods.

Additionally, students with positive attitudes toward the language and the school tend to display greater adaptation and fewer emotional difficulties.

Some see emotional involvement as the student's emotional reaction (happiness, anxiety, interest in learning activities and the people involved). Due to the significant role that school has in the lives of teenagers, it is argued that students who are more emotionally involved in learning experience a higher level of mental well-being compared to anxious, bored, or apathetic students.

Furthermore, it was found that the latter are at risk of underachieving and dropping out of school. In fact, the emotional involvement in the new language learned on all sides predicts the behavioural involvement having a direct effect on their performance. Behavioural involvement includes participation in various activities that promote learning, including homework, class behaviour and participation. Additionally, positive correlations were found between the students' persistence in tasks, their level of engagement and the effort they exert to complete educational tasks, as well as their overall academic achievements [146].

The important variables in examining the motivation for success are:

Positive emotional functioning at school is necessary for success in learning a foreign language, or multiple languages. The school is an environment where students experience a variety of emotions every day, including pleasure, pride, curiosity, anxiety, anger, jealousy, and boredom.

There is an emerging view that emphasizes the importance of emotions and moods that support the students' involvement and their achievements. Emotions may play a key role in the way students experience school, in their relationships with friends and teachers, in their adaptation to class and school, in cognitive processes, in their academic achievements, in motivation and in their involvement in learning [71].

Availability of information in the *reciprocal relationship between mental well-being and academic performance*. A sense of personal well-being refers to a person's cognitive and affective assessment of his life and is defined as the individual's assessment of his quality of life. School mental well-being can be seen as the degree to which the student feels good at school, is satisfied with various aspects of his situation at school related, among other things, to the teachers, the peer group, and the school organization, feels safe and protected at school and is free from feelings of fear and psychological problems.

As evidence, students who learn multiple languages recognise that success in multilingual studies contributes to their future mental well-being beyond, along with various associated benefits. It is evident that a student's mental well-being is also influenced by their socioeconomic status and a range of environmental factors. Exposure to a broader range of information can enhance a student's well-being; knowledge of multiple languages provides access to a wider range of resources available in different languages. This advantage extends beyond students, as learning a new language enables individuals to access a greater diversity of information and programs, an especially important consideration in the information age in which we live [60].

Emotional intelligence is a cognitive ability that includes various skills related to processing emotional information, including recognizing emotions in oneself and others, using emotion to promote thinking, understanding emotions, and regulating emotions to promote effective behaviours. Numerous studies have found positive relationships between academic achievements learning multiple languages, and emotional intelligence. It was found that young people with strong abilities to recognize and understand emotions, assess emotions accurately, when necessary, differentiate their opinions about the speakers of the foreign language being studied. They are also capable of isolating stigmas associated with them, thereby enhancing their investment and multilingual learning [132].

A study conducted among 372 9th-10th grade students revealed that emotional intelligence is related to healthier psychological functioning, good social ability, and better academic performance in the subject of English. In addition, emotional intelligence allows gifted students to deal with various stressors in the educational environment, including assessment, social and emotional demands, continuous effort, managing time and academic pressure, working together, and social coping. It was found that the ability to express emotion and understand the emotions of others is positively related to academic achievement. In a study involving 392 8th-grade students, it was determined that problem-focused coping significantly mediates the relationship between emotion regulation and academic achievement. Furthermore,

awareness, appreciation, and understanding of emotions are essential for creating a positive climate that fosters effective learning. Consequently, emotional knowledge serves as a long-term predictor of social behaviour and strong academic performance [116].

To be academically successful, students need the skills to effectively deal with pressure, academic load, and various academic challenges. *Resilience* is a process of successfully adapting to difficult or threatening situations, and the ability to persevere and be positive and adaptive in challenging situations, in light of the belief that effort and challenge lead to success more than one can. Many studies have shown that resilient teenagers succeed academically.

A study conducted among high school students in Türkiye found a clear positive relationship between academic resilience, self-esteem, and academic achievements. It showed that students with academic resilience could maintain a cheerful outlook while dealing with frustrating academic challenges showing higher levels in internalization and education [125].

Social functioning and academic achievements in school play a significant role in the lives of young people in every society. At school they acquire an education and are given the opportunity to acquire personal and interpersonal skills to be used later in life. The class constitutes a social context, since the students do not learn alone but rather in the presence of many members of the peer group. Integration into peer groups and success in academic studies are two central aspects of positive development during early adolescence.

Positive relationships with significant others serve as the foundation for students' ability to function effectively in emotional and academic domains. When examining academic achievements in multilingual education and development, it is important to consider predictors of social functioning, such as acceptance within a social group and a sense of belonging. A comprehensive review that examined the importance of interpersonal relationships for learning and achievement in numerous studies and among different age groups, demonstrated the ways in which various structures of motivation and achievement are influenced by relationships built. Attributions are learned through feedback received from significant others and through imitation.

Additionally, the need for belonging, as emphasized in the theory of intrinsic motivation, is fulfilled through interactions with supportive, warm, and nurturing individuals. The review showed that quality interpersonal relationships in students' lives contribute to promoting various aspects of their academic motivation, involvement in learning and achievements. Positive relationships with the peer group at school contribute to a sense of belonging at school, which is a key to success, investment, and academic motivation [105].

Sense of belonging refers to the need to feel loved and accepted by others within the school environment. In a multilingual learning, this sense of belonging can foster a connection

with the acquired foreign language and enhance overall well-being. People strive to establish and maintain meaningful interpersonal relationships with speakers of the target-language; when this need is fulfilled, it generates positive emotional responses.

These emotional reactions affect the students' achievement behaviours, including their reactions to the challenge, self-regulation, and participation. A sense of belonging to the language and its speakers helps students to equip themselves with the beliefs and values necessary to function effectively in educational environments. These beliefs direct behaviour in a way that promotes persistence, goal attainment and self-regulation.

In addition, to stimulate this emotion within the framework of dedicated projects, relationships with the acquired foreign language natives are established. These projects promote social, emotional, and intellectual functioning, as well as the positive sense of self-image and self-worth, all being related to continuous achievement motivation for learning a foreign language.

The acquisition and learning of a language primarily depend on the individual's exposure to that language. The more the individual is exposed, learns, listens, reads, and speaks the language, the better his verbal skills will be. This point is also valid for learning another foreign language, beyond the mother tongue acquired in childhood. In fact, the more the individual is exposed to the additional foreign language in diverse contexts and experiences it, the more effectively he will learn to master it. The student recognizes the importance of understanding a new culture, as it facilitates the development of social and professional relationships that are beneficial not only for employment opportunities but also for social interactions.

Proficiency in a new language allows individuals to enrich their lives through an appreciation of diverse cultures. Even within the Western world, numerous cultures offer perspectives accessible only to those who speak the language. One can gain insights into human experiences through cultural knowledge, as many literary works in languages such as Spanish, French, and Russian remain untranslated into Hebrew or even English. Through these and other means, the speaker of the language can get to know the culture much more thoroughly, enrich the knowledge and thus build a much broader and more realistic worldview. To know the world as it is, one also needs to know its inhabitants and the language they speak [87].

A feeling of hope is another variable that links the students' feelings and evaluations with educational outcomes. Hope reflects individuals' perceptions of their ability to achieve their goals. Research has shown that students with higher levels of hope set more ambitious goals for themselves, resulting in better academic performance [145].

In a two-year longitudinal study involving 629 seventh-grade students, the impact of variables related to positive thinking on academic achievement was examined when the students reached tenth grade. Among the various variables, it was found that hope most significantly predicted performance studies throughout the three years. In a study conducted among 714 high school students, the effect of positive thinking styles on academic achievements, psychological adaptation and mental well-being was examined. Furthermore, it was found that hope had a positive effect on the general grades at school and grades in certain subjects (English, Mathematics, and Science) as well as the level of positive emotion experienced. The hope model emphasizes the importance of defining personal goals, identifying ways to achieve them and the individual feeling that the student has the ability, energy, and competence to carry them out. Students who possess a sense of hope for achieving their personal goals are likely to demonstrate a strong willingness to concentrate and invest effort in their studies.

In a study conducted at the Centre for Learning Skills, researchers examined the relationship between students' achievements and factors such as self-perception, perceptions of competence, emotional and social emptiness, and their internal resources, including a sense of coherence, hope, and effort. The study collected data from a large sample of 1,167 students from 12 schools, comprising seventh graders in middle schools and tenth graders in high schools.

The findings revealed a clear connection between hope and the effort invested in learning, as well as personal resources, self-perceptions, and measures of adaptation and success in academic performance and emotional and social well-being. Notably, the students' sense of hope was identified as a predictor of their willingness to invest effort in their studies.

The learner in multilingual education is also aware of the development of employment potential, which is particularly important, especially in underdeveloped countries. Each of us aspires to find our dream job, and to achieve this, we need well-crafted and impressive resumes that align with job requirements.

Proficiency in another language is highly valuable in today's globalized world, where establishing relationships with colleagues from various countries is often a key component of many roles. Consequently, knowing another language can facilitate day-to-day work interactions. As a result, many employers consider candidates with strong verbal skills during the decision-making process.

Knowing a foreign language paves the way for more opportunities. Those who are interested in a rental car or a temporary job abroad, will have to be able to speak the language of the locals, and thus will be able to fulfil his role properly and move forward.

Furthermore, the multilingual learner is interested in developing business and social relationships around the world. Nowadays, our world is getting smaller and smaller, and learning a new language is a wonderful opportunity to get to know the people who speak it. Thus, through the acquisition of another language, it is possible to communicate with many people from around the world, get to know them, get to know their way of life, and learn from their experience.

Advantages for developing motivation to multilingualism. Knowing multiple languages will help create a more positive impression among people in the society one lives in. The more languages a person knows, the more intelligent and communicative he is. Therefore, proficiency in another language not only helps create a positive impression in various environments but may also contribute to a more successful life overall. [105].

In the context of *motivation in education*, it is important to highlight that acquiring new tools for learning multiple languages has become a key goal for many contemporary educational frameworks. These frameworks aim to equip students with comprehensive language skills through a variety of strategies that are compatible with multilingual education.

The importance of language learning stems from the fact that all over the world people communicate with each other in a wide variety of languages. Multiple researchers have also shown that learning multiple languages at an early stage in children's lives significantly affects their brain structure. Furthermore, indicates that for foreign language learning to be effective, it is essential for students to be motivated to learn the language.

Learning a foreign language has many advantages and the more the individual controls the languages he knows, the more his cognitive skills are perfected [22]. It was found that even short-term learning of another language affects different brain processes and structures. The research findings revealed that learning a second language affects brain areas responsible for control processes, response inhibition, focus of attention, executive functions, and motor control. Additionally, another study found that children who are proficient in two different languages exhibit advanced cognitive processes, such as knowledge accumulation, problem-solving, and symbolization. These skills, in turn, contribute to higher academic achievements in school. In the studies conducted, it was demonstrated that the age at which children learn a second language has a significant effect on the brain structure when they mature. Most people learn a second language at some point during their lives. Many of them succeed, especially those who learned the second language at the same time as learning the first language or at an early stage of their development.

Research indicates that the brain develops similarly in individuals who learn one or two languages from infancy. In contrast, those who acquire a second language later, after fully

mastering their mother tongue, experience structural changes in the brain. Specifically, the lower part of the frontal lobe, particularly the left side of the inferior frontal cortex, becomes thicker, while the right side becomes thinner.

The cerebral cortex, composed of multiple layers of nerve cells, plays a significant role in various cognitive functions, including thought, language, awareness, and memory. According to the study, learning a second language after infancy causes the development of new nerve cells and the creation of new connections between nerve cells, as happens while learning complex motor skills such as juggling.

The authors of the study hypothesize that the difficulty experienced by people trying to learn a second language later in life lies at the level of brain structure. Dr Denise Klein, a researcher in the research unit of the cognitive neurologist and one of the authors of a specialised article published in the magazine "*Mind and Language*", explains that, as the second language is learned later in childhood, the changes in the lower part of the frontal lobe increase.

The results of our research indicate that the age at which a second language is learned plays a critical role in establishing a foundation for future language acquisition, as evidenced by the structural changes observed in the brain. Furthermore, the study examined the extent to which bilingualism influences the learning of a third foreign language.

The research findings revealed that literate mastery of the mother tongue L1 and the second language L2 has a positive effect on the learning of a third foreign language L3. Therefore, while the language acquisition process may be similar for both monolinguals and bilinguals, bilingual individuals are likely to learn an additional language more efficiently, quickly, and effectively.

Another of the advantages of bilingualism can be understood through the cognitive approach to language acquisition. According to this approach, the learner is seen as having limited capacity. To understand and respond to the latest information, the learner must activate control processes that require a lot of effort and time. In contrast, automated processes are faster and more efficient. Bilinguals, due to their skill in language acquisition, have developed automatic learning processes and are therefore considered to be more effective language learners.

Additionally, the advantages of the bilinguals stem from the meta-linguistic awareness they develop as a result of being fluent in two different languages. Prominent levels of meta-linguistic awareness, which arise from exposure to literacy in both languages, enable bilinguals to focus on the patterns that characterize the foreign language and to deal with relevant features. This awareness, in turn, facilitates more effective language learning [136].

In the modern world, many people turn to various treatments in order to improve their mental state. It turns out that language studies have positive effects on both mood and self-confidence. Learning a new language is a training for our brain that increases the levels of dopamine and serotonin, the hormones that have a positive effect on our mood and motivation. In addition, the skill of speaking a language includes several aspects: pronunciation, retrieving words from memory and constructing grammatically and syntactically correct sentences. All these factors that are activated when speaking (among others) impact the way individuals perceive themselves. Achieving a goal that was once viewed as impossible enhances confidence and self-image, as it reflects the success that has been attained [156].

Barriers related to the potential generators of motivation for multilingual learning.

Barriers in motivation for learning a foreign language can be diverse and differently affect the learners' interest and focus levels. of the barriers are outlined below [139]:

1. *Lack of a clear goal or goals* - when the learner does not understand the learning goals in the foreign language, they can face challenges in finding inspiration to focus and keep interested. Studies show the importance of setting clear goals and focusing on specific ones in the process of learning a foreign language.

2. *Lack of interest or experience of success* - when learners do not feel successful in acquiring a new language or find it uninteresting, their motivation can decrease. Studies show the importance of creating a positive success experience and its effect on the motivation to learn.

3. *Fear of loss and fear of failure* - fear of failure may reduce the motivation to face challenges in learning the foreign language. A sense of dealing with failure as part of the educational process may render learning a more groundbreaking and interesting experience.

4. *Lacks autonomy and control* - when learners do not feel in control of the learning process or the methods used for learning, their motivation may wane. The importance of the feeling of self-control and autonomy in the learning process is proven in studies.

5. *Lacking a sense of connection* - studies examine the importance of the connection between the teacher and the student, as well as the teacher's investment in the learners' ability to succeed in acquiring a foreign language. A feeling of support and a personal relationship with the teacher may make learning an interesting experience and ease the learning challenges.

These barriers form the basis for programs designed to promote motivation and assist learners in overcoming obstacles in their journey to acquire a foreign language [139].

Motivators for learning multiple languages focus on developing desire and passion for learning and improving ability in the new language.

They are based on various psychological and educational theories that lead to a better understanding of the dynamics of motivation and the development of tools to strengthen it. Some of the popular generators and theories that originate from the study of psychology and education are [160]:

1. *A. Bandura's Expectancy Theory*. According to this theory, the motivation to learn is measured by three factors: expectations, value, and results. Expectations reflect the learner's belief in his ability to succeed, and whether he has succeeded in the past. The results reflect the potential benefits of success, while the value represents the significance of the task to the learner. A. Bandura's "*expectancy theory*" posits that motivation to learn is derived from the interplay of three main factors: expectations, value, and outcomes. The expectations refer to the learner's belief in their ability to succeed in a given task, as well as the challenges associated with problem-solving or feelings of isolation when faced with a ceiling of progress. The value refers to the importance of the task for the learner, and the results refer to the potential benefit from success in the given task. When all three factors function together, they can stimulate strong motivation to face learning challenges. However, significant importance is placed on the outcomes, as they influence the learner's evaluation and feelings of success or failure.

2. *C. Dweck's Mindset Theory*. This theory offers insight into how individuals experience and respond to failure. Mishna Damion argues that every person has the potential to enhance their abilities and outcomes. A person with a fixed mindset believes that their abilities are static and unchangeable.

In contrast, *C. Dweck's* theory states that one's positive or negative perception of their capacity for growth can influence their motivation to tackle learning challenges. When a person believes in their ability to improve and develop, they maintain a growth mindset, which enables them to face difficulties more effectively. On the other hand, those who view their abilities as fixed are likely to adopt a fixed mindset, resulting in less effective responses to challenges. By fostering a positive perception of imagination, it is possible to enhance motivation and improve coping with challenges in learning.

3. *E. L. Deci & R. M. Ryan's Self-Determination Theory*. This theory focuses on the importance of autonomy, belonging and competence in the context of motivation. The research conducted by E. L. Deci and R. M. Rain emphasizes the importance of the learner's sense of self-control and belonging in the learning process. Their theory is based on assumptions that certain intrinsic factors drive motivation. When learners receive appropriate support from their environment, their motivation can flourish and enhance their learning experiences [50, 51]. The first factor is autonomy, which is an internal desire to perform a certain activity without using an

external view of reality. Another factor is belonging, a feeling of security within the environment, the person's contribution being significant and important. The last factor is competence, namely the desire to integrate and progress within the learning framework, while strengthening and promoting one's abilities.

4. *Z. Dornyei's Motivational Strategies.* Z. Dornyei presents a range of strategies to increase motivation to learn, including creating clear goals, the use of positive feedback, and the creation of a supportive learning environment. His theory emphasizes fostering internal motivation by cultivating an intrinsic desire to learn, which can significantly influence learning outcomes [53].

Among the suggested strategies are the formulation of clear and challenging goals, the use of positive feedback and self-encouragement, and the development of a supportive environment that fosters a sense of belonging and autonomy. By encouraging an internal desire to learn and progress, educators can improve motivation and encourage learners to deal with learning challenges. Studies highlight the importance of using motivation generators grounded in varying theoretical frameworks to promote the learners' desire to learn a foreign language. Maximizing the use of these tools can improve students' focus, transparency, and resilience in overcoming learning obstacles.

The motivation for *multilingual education* requires a substantial investment of time and effort, making it essential for students to possess sufficiently strong motives to achieve their goals. Studying the sources of motivational strategies is extremely important for developing programs aimed at fostering motivation in multilingual education, including:

Integrative orientation - a desire for familiarity and cultural proximity to the foreign language being studied, and the perception of the language as a means to be admitted to higher studies or to obtain a higher salary.

An integrative orientation in multilingual education is an approach that integrates and upgrades the appreciation and respect for different languages and cultures in the education system. Instead of seeing the linguistic background as a matter of course or valued only as a way to convey content, it recognizes and respects the cultural richness of every language.

This principle fosters the ability to engage in dialogue, understanding, and respect toward others who differ from us in a diplomatic manner. It is grounded in the values of linguistic equality and respect. It awakens the desire to learn and understand different worlds, and strengthens the concept that language is an interactive tool for communicating with others and understanding the world from a variety of perspectives.

Within its framework, each language and culture receive equal status and is considered an essential value in education, and thus the educational system participates in creating a multicultural environment that encourages multiple dialogues and collaborations. As part of this orientation, we use tools and approaches that strengthen the target language and culture in the learning environment, by using stories and literature in various languages, creating activities and tasks that arouse interest and the desire to learn, and developing a learning environment that offers respect and appreciation to all speakers.

In summary, an integrative orientation in multilingual education is an approach that recognizes and appreciates the cultural and linguistic richness of each culture, and promotes dialogue, understanding and respect for the otherness. Through the use of tools and approaches that promote multiple perspectives and the use of different languages in the learning process, it contributes to the creation of a soft and acceptable learning environment, which encourages multiple ways of perceiving and understanding the world.

Instrumental orientation - studying the nature of learning and the learning itself which indeed contributes to foreign language studies. Instrumental orientation in multilingual education is an approach that focuses on the use of the foreign language as an educational tool and a means of conveying content and explanation, without emphasizing any cultural. Instead of presenting language as a value in itself, it is used merely as a technical tool for practical purposes such as learning academic content or imparting instruction. This approach is based on the functional criteria of the language, that is, on the way the language is used as a tool for conveying a message and communication, solely for its professional purpose.

In doing so, it places great emphasis on the learning and teaching processes, rather than on cultural or emotional values. In this instrumental orientation, teachers use the foreign language primarily as a tool for conveying messages and facilitating learning, without prioritizing the development of cultural language or employing it as a means of fostering a sense of belonging and cultural identity.

Consequently, the culture and cultural values of the students are not adequately acknowledged within the learning environment. In summary, an instrumental orientation in multilingual education focuses on the use of the deviant language as a functional tool to convey content and message, while downplaying the importance of cultural values. This approach focuses on the learning and teaching processes rather than the cultural or emotional influence in the education system [163].

Building on the theoretical considerations outlined and the necessity of fostering motivation for learning multiple languages among students in schools, we present the motivation process for learning more than one language (see Figure 2.1).

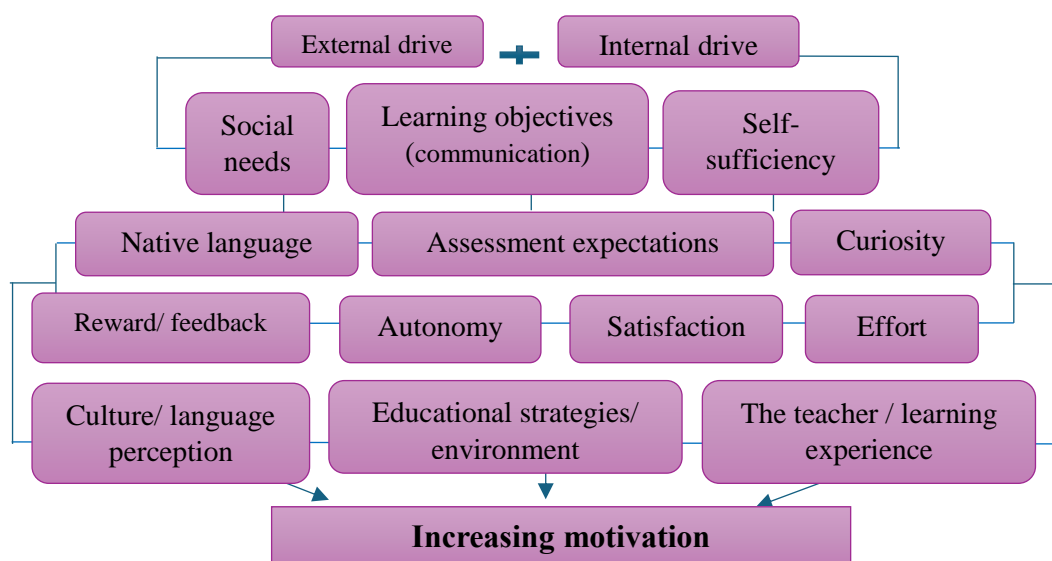


Fig. 2.1 Process of Motivating to Learn Multiple Languages

The theory components are:

Internal drive – intrinsic - a condition for motivations related to the person or the action in which he is engaged. Internal drive is considered a more stable drive. Therefore, the internal drive (motivation) is actually a motivation to perform an action based on "pure" motives, that is, a clean action and not an external interest [60].

External drive – extrinsic - refers to motivations that are influenced by environmental factors, which may depend on the individual or be related to specific actions, such as rewards or the avoidance of punishment. Utilizing external structures, such as providing rewards, tends to have a short-term effect; once the reward loses its impact, it can lead to superficial or rote learning [46]. Therefore, individuals may prefer to be motivated by external rewards while avoiding actions that result in punishments.

Social needs - environmental motivations consist of the influence of the environment and external factors on human behaviour. Praise or punishment that will be given will cause a repetition of such behaviour, its cessation, or a decrease in its frequency. There is a decisive factor with an effect on the level of learning motivation.

Therefore, the school, particularly the classroom, serves as the primary setting for external motivation. The effectiveness and sustainability of education and instruction depend on the mutual readiness of both students and teachers, indicating a relationship characterized by reciprocity. As much as the environment adds encouragement and support, the child will be able to realize and reach the inherent powers [157].

To address the fundamental needs of learners, it is important to provide solutions that meet these needs within the learning materials. These needs can be categorized into five levels: physiological, safety, social, self-esteem, and personal growth. Fulfilling these needs is crucial within the educational environment [90]. A student who enjoys learning will try to find peer students to develop educational relationships to further develop into social relationships.

We can see the *purpose of learning* as finding predictors events with precise motivational meaning. Accordingly, motivation optimizes learning and motivates the person to persist in concentration and performing actions to achieve the established goal. Motivation in the field of education is examined by the question of whether students are willing to invest time and effort to understand the material or achieve their goals.

The driving force behind this investment is the motivation that propels individuals toward their set objectives. When students possess a positive self-esteem and optimistic expectations for success, they are more likely to invest greater effort. Consequently, this investment leads to success, which in turn reinforces their positive self-image.

Conversely, a sense of failure can be frustrating and diminish the willingness to attempt a task again. In other words, motivation instinctively decreases when students experience failure in an area where they previously struggled, making it more challenging to reengage with the learning process. *Learning objectives*: give the students clear goals and an analysis of the expected achievements.

The psychological motives are secondary needs acquired over the course of life and play a role in shaping individual behaviour. While these motives, such as the need for positivity, love, beauty, security, and self-actualization, are influential, humans can survive without fully satisfying them. There are two basic needs: the need for self-determination and the need for self-sufficiency. Satisfying these needs will bring the person to real, independent involvement and a sense of being engaged in activities.

These motives lead individuals to perceive their behaviour as driven by internal rather than external factors. They also encompass social motives, such as social pressure, which often play a key role in decision-making.

Additionally, personal motivations, such as *curiosity*, the need for connection, a sense of immediate accomplishment, and even a sense of duty, drive genuine learning and effort. These internal motivations enable individuals to unlock their full potential and realize the strengths inherent in their 'self' (I) [166].

The child will try to fulfil his parents' *expectations* (of whom he expects love). This concept is reflected in the phrase, „The child learns for his parents”, which contrasts with the

moral reminder, „You don't learn for me but for yourself". On the other hand, behaviour can also be shaped by the desire to avoid unpleasant consequences, requiring the individual to make decisions about whether to confront or avoid disturbing or threatening situations [7].

The concept of expectations addresses the impact of expectations and planning on motivation. It is one of the key components of motivation, involving the perceived value of a task, the underlying goals, the influence of personal beliefs, group dynamics, and the perceived chances of success. This framework also offers strategies to enhance expectations and foster motivational planning, helping learners stay engaged and committed to their goals [72].

A *positive emotional experience*, feelings of interest and pleasure, a sense of freedom, choice, self-perfection, peace, self-realization and satisfaction, and perhaps even an answer to existential questions such as “Who am I”, contributing to the construction of *self-identity*, as a result of lack of pressure, anxiety loss, and the willingness to try new things. Strength of mind plays a role in sustaining motivation. While financial rewards can significantly enhance motivation, especially for tasks beyond expressions of gratitude, the importance of appropriate *rewards* cannot be underestimated. Meaningful rewards serve as powerful incentives, reinforcing effort and commitment [102].

In order to raise the internal motivation among students, the sense of *autonomy* must be nurtured. Students who are given a choice and positive feedback regardless of the mark display higher motivation, self-esteem as well as better academic results.

Students have higher autonomous motivation when they create an environment that supports their psychological selves. Therefore, the teacher should give a choice of things to ask for, increase the sense of the option of an addition as well as accept the sense of suitability of a client to their class. However, the teacher must also provide a clear and non-permissive framework [86].

Perception of language and culture - a positive attitude in the field of language and its culture. Appreciation for cultural diversity, respect for the personal linguistic profile of each language speaker, appreciation for the official languages of the country as a basis for interaction as well as for the mother tongue of people who belong to an immigrant minority.

The teacher plays a significant role in conveying and developing motivation in the learning environment. Therefore, it is important to train teachers who can effectively organize student activities, making learning more engaging and appealing.

The teacher should be a prominent figure who leaves a positive impression on the class, breaks down social barriers, and strengthens students' sense of belonging. Finding common ground and fostering a collaborative spirit is paramount, along with integrating innovative

technologies to enhance scientific knowledge and presenting it in ways that are relevant to students. In addition to professional expertise, the teacher must be empathetic, recognizing the potential of each student and providing continuous, consistent support tailored to their needs.

The learning experience and enthusiasm to create links between the study material and areas of interest. In this way, the personal appeal and interest of the reference materials are adjusted, helping them to concentrate on learning. The experience and emotion method are aimed at creating interesting and fascinating learning experiences.

An active educational environment that stimulates action and experience. The promotion of practical and focused experiences through practical activities, original ideas and processes of discovery and experimentation.

Social-emotional learning in language: students' acquisition of the skills to identify and manage emotions, to develop concern and care for others, to make responsible decisions, to establish positive relationships and to deal effectively with challenging situations in the foreign language. A process by which students acquire and effectively apply the knowledge, attitudes, and skills necessary for communication and understanding in a foreign language. In language-socio-emotional learning, we deal with five cognitive, emotional, and behavioural skills that are linked together in the learner' social skills:

Social awareness - problems identification and situations analysis, problem solving, evaluation and thinking, and personal, moral, and ethical responsibility in foreign language learning.

Decision-making - to promote students' self-awareness, self-management, social awareness and relationship development and the ability to make decisions responsibly, while improving students' attitudes and beliefs about themselves, others, and the educational setting.

Interpersonal skills - student's social awareness in the ability to adopt a perspective on social situations, good empathy for others who speak a foreign language, appreciation of diversity and heterogeneity in the interpersonal space and respect for other children who speak the new foreign language.

Self-management - impulse control and stress management, self-motivation and discipline, goal setting and organizational skills during foreign language learning.

Satisfaction - the student is aware of the advantage of learning a foreign language as a means of communication for future interests in life (economic, political, social), and any success in language learning will foster a good sense of satisfaction.

Below, we present the *Methodological Aspects of Students' Motivation for Learning Multiple Languages* (see **Figure 2.2**).

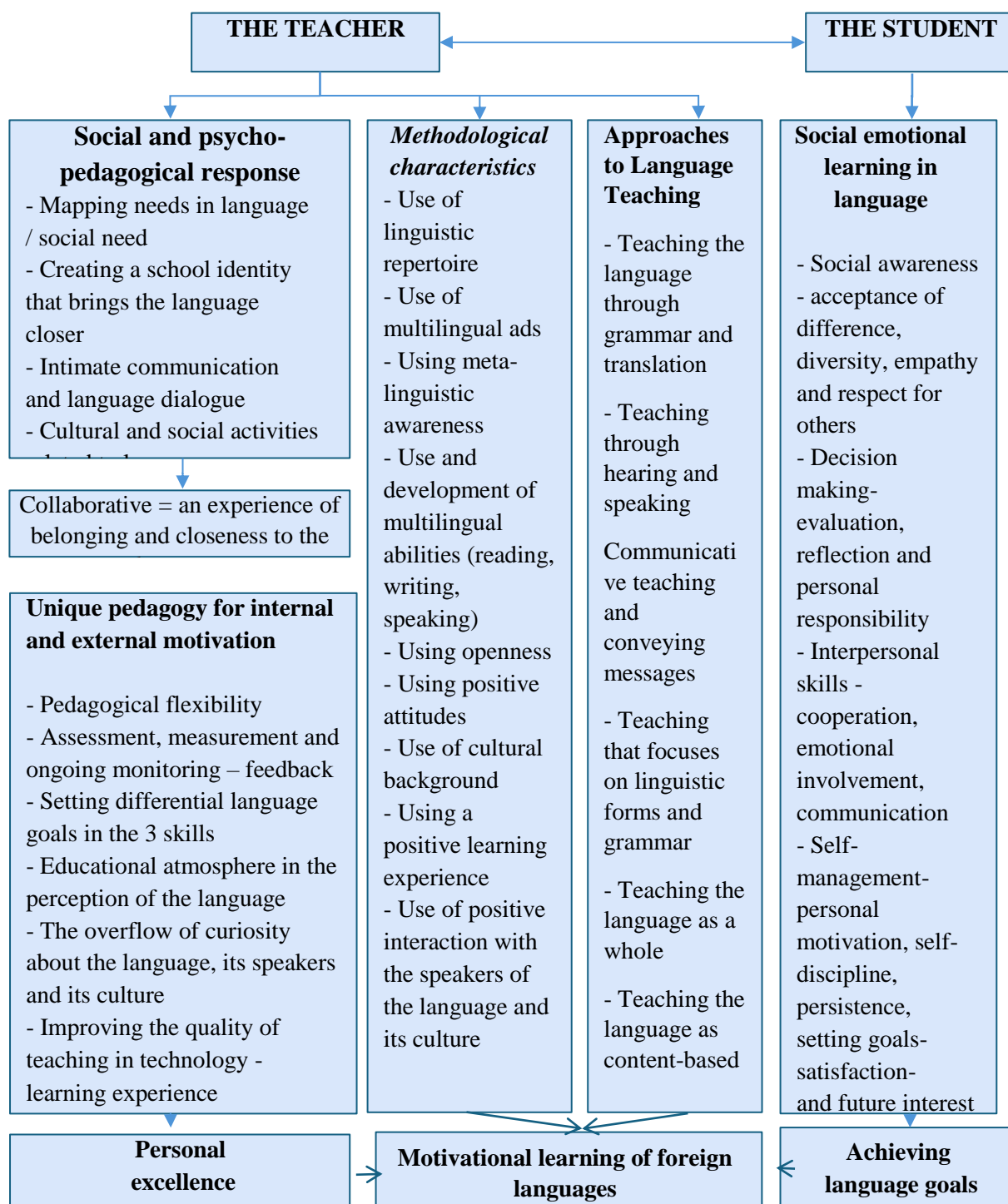


Fig. 2.2 Methodological Aspects of Students' Motivation for Learning Multiple Languages

Social and psycho-pedagogical response - mapping language needs:

The progress a student experiences while learning a language serves as a key motivator to continue their learning journey. The sense of advancement fuels their commitment to further develop their language skills.

Language needs mapping - there is no better way for a student to feel that he is making progress than to map the needs he can fulfil during foreign language acquisition. Setting goals

and achieving them enables students to accumulate small victories, fostering a sense of accomplishment and progress.

Creating a school identity- Integrating a pleasant school environment into the language learning process will make it easier to keep on track with their foreign language goals. If the material bores the student, they are unlikely to engage with it further. Finding ways to make language learning enjoyable (bringing a smile to their face) could be all they need to stay motivated and keep progressing.

Learning to pronounce a phrase correctly in a new language is exciting, but sometimes we all need some external motivation to keep going. Attaching incentives to language milestones and a pleasant mood can provide a pleasant state of perseverance in language study, as maintaining motivation is one of the biggest obstacles in anyone's way when trying to master a foreign language.

Cooperative acquisition and learning of a language depend on the cooperation and exposure of the individual. The more the individual is exposed to the language, learns it, listens to it, reads, and speaks the language, the better their verbal skills will be. This is also valid for learning another foreign language, beyond the mother tongue already acquired in childhood. In fact, the more the student shares the additional foreign language in various contexts and experiences it, the more effectively he will learn to master it.

It is important to engage the students in the studied language and encourage them to think and communicate directly in this language. A sense of belonging and closeness_of the learner to the foreign language or studying the culture of the speakers of the language is important. This can be achieved through a learning environment that engages the child in the language and through cooperative projects between language speakers and the students.

The interrelationship between knowledge of a foreign language and an understanding of its culture, including its cultural background and the populations that speak it, is significant. Familiarity with the target language enhances comprehension, and a deeper understanding of its culture can foster more positive attitudes toward the language itself. And it will even improve the learning experience and, as a result, academic achievement, because in conflict zones, the effect of the negative attitudes towards the "other" group on achievement in foreign language learning is evident.

Unique pedagogy for internal and external motivation:

Pedagogical flexibility - the desire is to imitate the learning processes used by children when learning their mother tongue, using the pedagogical flexibility of a direct method while

assessing and providing feedback on the progress of language learning. Based on the belief that learning a foreign language should be natural and not alienated.

Differential objectives in language skills will be taught and assessed with a belief in the development of intuitive understanding of language: the emphasis being placed on the direct connection between words and their meaning, as well as learning grammar, which encourages the development of an intuitive understanding of language. Instead of memorizing grammar rules and vocabulary lists, students learn to use the language naturally, in the same way they understand their mother tongue. There will also be conversational skills enhancement to help learners develop strong conversational skills. Regular practice in speaking the language being studied will not only improve pronunciation and fluency, but also increase confidence in using the language.

The focus on listening comprehension will help learners better understand spoken language in real-life situations. In addition, encouraging students to think directly in the foreign language being studied can enhance their learning process. By removing the translation step, learners are compelled to process thoughts and ideas directly in the new language. This ability to 'think' in the target language is a key step toward achieving fluency and effective communication.

The approaches and processes that characterize the study of a foreign language in a school setting stimulate the need of the teachers to expand the learner's knowledge in addition to the formal knowledge of the language. The need to find a balance between all the essential elements in the curriculum, in the teaching of an additional language was established.

Grammar and translation techniques are commonly employed by both teachers and students in the learning process. Grammar is studied as a subject and will be used to understand classical texts. The learning experience is limited to reading comprehension and writing in multiple languages, with no emphasis on speaking and listening comprehension. Lessons are conducted in the mother tongue and translated into the target language. The approach to grammar and translation is in a controlled and not excessive manner, given the new communicative approaches to language teaching.

Teaching by hearing and speaking - (Audio-Lingual Method) the student hears the language, through a demonstration by the teacher or an audio device, and immediately repeats what is heard. The method is based on the fact that the student repeats the teacher's words orally, when they constitute a set of grammatical structures. The assumption is that grammatical knowledge will be assimilated indirectly through repeated practice. Reading and writing skills are also developed by practicing grammar structures and reading comprehension exercises.

Communicative Approach - Language structure is not the main subject of the lesson; it will rather be taught for communicative needs. Furthermore, the ultimate goal of learning is successful and fluent expression on the part of the learner, which may come at the expense of linguistic accuracy. The assumption is that a native speaker succeeds in acquiring a language in its entirety even without learning grammatical rules, whereas in second language learning, there are few learners who succeed in reaching an important level close to that of a native speaker, despite the emphasis on grammatical rules.

Therefore, to effectively learn a second language, the learner must engage in meaningful and relevant communication that resonates with their life experiences, presenting a level of difficulty slightly above their current linguistic ability. This approach allows for a more natural acquisition process, akin to how one learns their mother tongue. The goal is that the process of creating meaningful messages will lead the learner to acquire the grammar of the target language, with the belief that fostering interaction opportunities shall be sufficient for the learner to achieve full control of the language.

Focus on language forms and grammar- teachers must be careful not to focus exclusively on meaningful communication, while omitting language rules, structures, and grammar. Communication approaches should combine content and form, without highlighting one at the expense of the other.

Methodological characteristics of learning multiple languages:

Use the students' linguistic repertoire- teachers must take care to integrate the mother tongue and other languages into the students' linguistic repertoire during classes, highlighting the benefits of intelligent use of the learner's mother tongue in teaching a second or foreign language, transfer of components of language-to-language literacy knowledge that contribute to the development of academic linguistic competence in other languages.

Use of a linguistic landscape and multilingual awareness - teachers will use different frameworks of multilingual awareness as a pedagogical and educational tool, with the purpose of promoting awareness of the existence of different languages and understanding of the complex linguistic reality locally and globally.

Multilingual education will make it possible to use the linguistic landscape as an effective tool to enrich students' multilingual awareness, linked with social involvement and action possibilities within the socio-linguistic field. These aspects of involvement and activism will be reflected in the development of learner's metalinguistic literacy and thinking.

Meta-linguistic awareness - students who learn two languages have an advantage that is expressed in a wide application of skills essential for the acquisition of additional languages.

Didactic staff involved in effectively teaching multiple languages must consider several factors, including the correct selection and use of study materials, student attitudes, and the quality of instruction. Moreover, language acquisition not only enhances the development of metalinguistic awareness but is also supported by it.

Therefore, the development of bilingualism in school students is a factor that facilitates the acquisition of additional languages. The knowledge of one language helps them to be more attentive to the structures of the new languages.

Using and developing multilingual abilities (reading, writing, speaking)

The teachers will engage in developing these abilities by adhering to the following principles:

- establishing clear objectives derived from the curriculum; presenting necessary resources and inputs for application;
- referring to co-workers; using principles for planning teaching and learning processes;
- implementing recommendations on teaching methods to achieve established goals;
- creating learning opportunities for all students to engage in;
- designing teaching actions to support both struggling students and outstanding students; promoting language goals in the learning environment.

Throughout the process, the teachers will emphasize multilingual abilities while: developing and streamlining reading processes; promoting fluency and accuracy; extracting meaning from texts from the world of theoretical discourse; teaching through reading for pleasure, expanding the vocabulary enhancing expressive writing skills; developing metalinguistic knowledge and integrating literacy skills within the areas of knowledge being studied.

Achieving language goals:

The overarching goal of teaching a foreign language is to ensure that at the end of the process, students who learn not their mother tongue will be able to use it intelligently orally and in writing in a wide variety of language types in different social contexts at the level of children of the same age who speak this language as their mother tongue.

The teacher and the students will understand that in acquiring a second language the approach is primarily functional-contextual, emphasizing the understanding and production of language texts in different meaningful contexts alongside with formal study of the language structure.

Motivational learning of multiple languages:

Acquiring new tools for acquiring multiple languages is the goal of many educational frameworks nowadays and their ambition is to give students all the language skills through various strategies. The importance of language learning on the part of the teacher and the student stems from the fact that all over the world people communicate with each other in a vast variety of languages.

Additionally, learning multiple languages at an early stage in children's lives significantly influences their development and progress in today's literate and globalized world. Those involved in education recognize that for foreign language learning to be effective, it is key for students to be motivated to learn the language.

Personal excellence of the teacher and the student:

Nowadays, excellence has become a lifestyle of striving for constant improvement and maximizing personal potential. This is a prominent level of understanding, thinking and application. The teacher and the student strive to excel in acquiring knowledge of the language, developing learning skills, and cultivating communicative qualities in the language, including the value of personal responsibility for the student's learning and, on the other hand, for the teacher's teaching. The personal excellence of the teacher is important for creating quality language instruction. A proficient teacher possesses extensive knowledge of the language and demonstrates confidence in their teaching. They exhibit excellence in their professional conduct, stay updated with innovations in the language field, engage with pedagogical literature, participate in conferences and seminars, and actively write and run projects with students and the foreign language-speaking community. If there is a combination of all the components in the model while learning a foreign language, it will lead to the excellence of the teacher and the student and increase the motivation of the learner of the foreign language, while achieving the goals in the language.

The motivational aspects of learning multiple languages are particularly important, as they inspire both teachers and students to strive for excellence and continuous improvement. By aligning pedagogical practices with the personal and cultural interests of learners, educators can significantly enhance the language acquisition experience. The synthesis of the components and elements presented in the *Psychopedagogical model for stimulating students' motivation to learn multiple languages*. (see Figure 2.3) fosters a dynamic learning environment in which both teachers and students can excel, cultivating a generation of competent multilingual communicators prepared to thrive in an increasingly interconnected world.

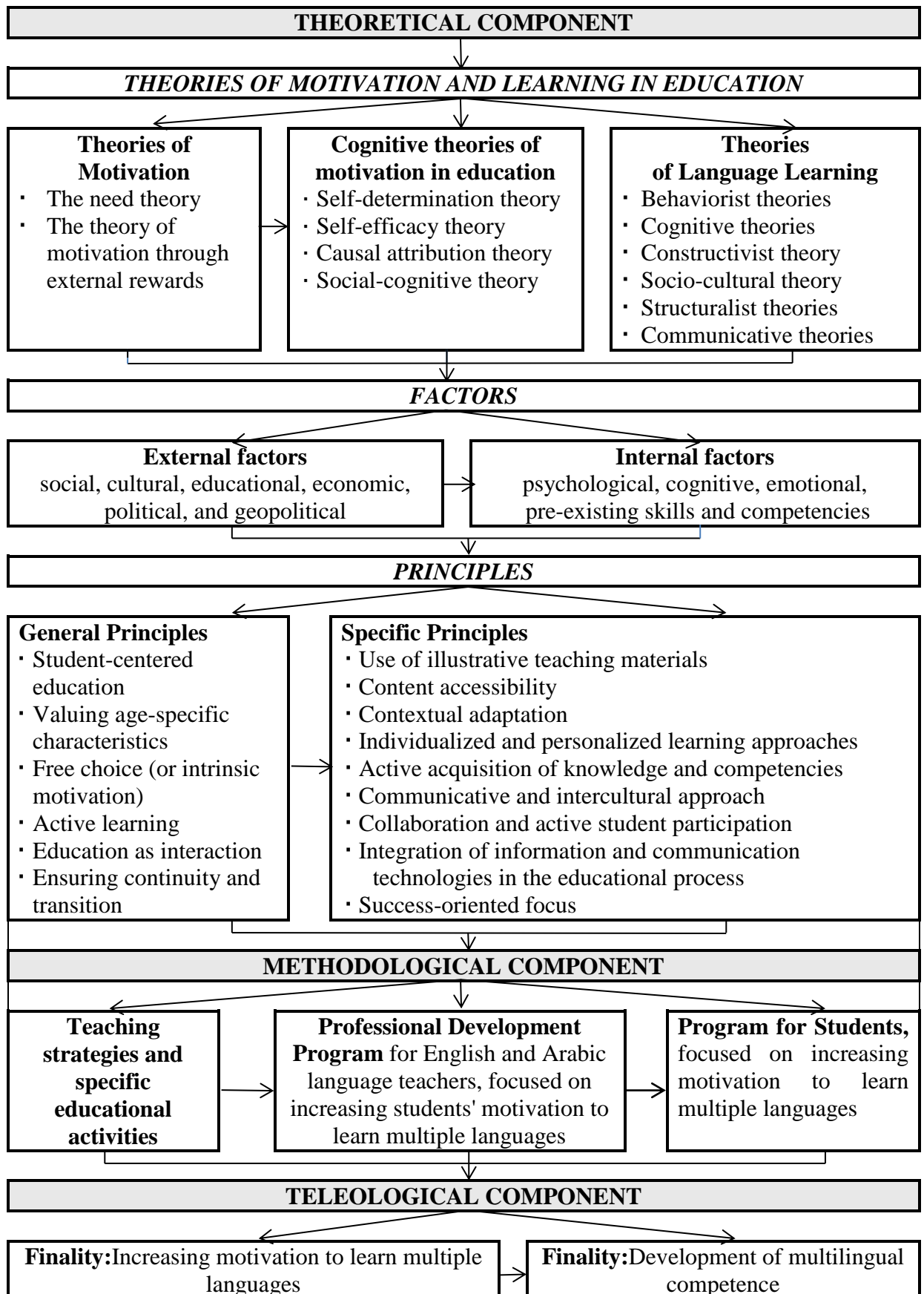


Fig.2.3 Psychopedagogical model for stimulating students' motivation to learn multiple languages.

The multidimensional approach forms the basis for the development of a formative approach aimed at increasing motivation in foreign language teaching. Next, we will present the elements of this formative approach, along with a description of the teacher's and students' activities in integrating foreign language teaching into the new psychopedagogical model.

1. *Direct method*: creating a dynamic and fascinating learning environment for the explanation of the experience of language studies and achievements, thus stimulating motivation.

- No translators: monolingual approach. That is, only the language taught in class is used. An idea that direct exposure to the language being learned without translation fosters a more intuitive understanding of the language. It encourages thinking in the language being learned instead of translating back and forth between the mother tongue.

- Speech actions: Strong emphasis on speaking and listening skills. From the very beginning, the student is encouraged to communicate orally in the language being learned. This is how the pronunciation skills, fluency and listening comprehension of a message will develop. (Reading and writing skills will be introduced later, after a solid oral foundation has been established.)

- Learning from the context: vocabulary of the foreign language being studied will be learned through demonstration, play, objects, or visual aids. This will help students associate words and phrases in the new target language with their meanings, without having to translate it into their own language.

- Learning grammar from inference: to promote the learning of the rules of grammar through the use of language. An institution will expose them to grammatical bricks within the context and expect them to deduce the rules from the examples they are exposed to. All this to promote a more natural and intuitive understanding of grammar, similar to the way children acquire grammatical rules in their first language.

- Immersive learning environment: students will be constantly exposed to the language through technology that mimics natural language use. This approach accelerates language acquisition and helps students become comfortable with the sounds, structures, and rhythms of the language.

- Development of intuitive language understanding: instead of memorizing grammar rules and vocabulary lists, students will learn to understand the new language and use it naturally, in the way they understand their own language.

- Improving conversation skills: Production will develop strong conversational skills. Regular practice in speaking the new foreign language being learned will not only improve pronunciation and fluency, but also build confidence in using the language. The listening

comprehension aspects will help students to be better at understanding the language in real life situations.

- Encouraging thinking in the target language: the goal is to encourage students to think in the language being studied. Removing the translation step from the learning process forces the processor to process thoughts and ideas in the new foreign language. This ability to 'think' in the language being studied is a crucial step to achieving fluency, and effective communication in the language.

2. *Content-integrated language teaching*: (Integrated content and language learning - CLIL) language learning through learning content. The principle of the method is to achieve positive results - both in learning a language, and in learning a field of thought - through the combination of both. An example of the use of CLIL could be, for example: a class at school studying geography (field of knowledge) in class all conducted in the English language (foreign/second language). As well as the possibility of teaching a poem, which was taught in a literature class in an Arabic class.

3. *Teaching language in a natural way*: Emphasize the spoken language according to the natural learning order of the language, which is: listening, speaking, reading, and writing, an order that emerges both within the linguistic development of the child and within the linguistic-cultural development of human civilization in general. Interest: "imitating" the natural course of learning a language.

Three structured stages: 1. Hearing-speech (or "speech" for short) 2. Reading 3. Writing (= the ability to write is a performance technical skill of putting writing marks on paper).

In this way, of course, the learner must be taught the corresponding system of writing marks. Also, in the first steps it is important not to exaggerate the enrichment with words and not to overload the memory too much - instead to impart a minimal number of necessary words and basic linguistic patterns that will later serve as a kind of "templates " for the vocabulary that will gradually expand. This way will make it easier for the student to feel a quick connection to the foreign language, and a desire to continue to deepen it.

4. *The methodological basis for projects*:

The teacher will be tasked with learning about the cultural competence of the foreign language, areas such as heritage, family lifestyles, gender relations, intergenerational relations, health customs, community institutions, rituals, history, folk tales, leisure and many other.

Learning about ways of dealing with the language community: understanding its organization, the various roles within it, relationships with the surrounding environment, guiding concepts for action, and the behaviours that characterize individuals in the community.

The teacher's research work is essential for collecting data. Additionally, the teacher will engage in consultations, learning from shared experiences and collaborative processes in the field to seek assistance in addressing challenges. Training sessions will expand their perspective and provide support, legitimacy, guidance, and knowledge to tackle issues. Throughout and at the end of the projects, teachers will reflect on the materials collected and the processes implemented, using predetermined milestones as a framework for this reflective practice.

5. The purpose of the projects- the vision:

The goal is to increase motivation and foster a passion for learning a new foreign language among students while deepening their connection to the community of speakers and its heritage. The projects will enhance social and emotional learning, promote a greater understanding of similarities and differences, and help students practice essential interpersonal skills such as active listening, respectful communication, intercultural dialogue, collaboration, and language use. Additionally, students will gain experience with digital pedagogical tools and critical thinking skills relevant to the 21st century.

The motivational aspects of learning multiple languages are particularly important, as they inspire both teachers and students to strive for excellence and continuous improvement. By aligning pedagogical practices with the personal and cultural interests of learners, educators can significantly enhance the language acquisition experience.

Ultimately, the synthesis of the components and elements presented in the *Psychopedagogical model of students' motivation to learn multiple languages* fosters a dynamic learning environment in which both teachers and students can excel, cultivating a generation of competent multilingual communicators prepared to thrive in an increasingly interconnected world.

Increasing motivation for learning multiple languages is a critical factor in developing multilingual competence, with profound implications for effective communication in intercultural contexts and for diversifying personal and professional experiences. In a globalized world, the ability to interact fluently in multiple languages becomes not only a competitive advantage but also a necessity, facilitating the exchange of ideas, an understanding of diversity, and collaboration in multicultural environments.

Enhancing motivation, and consequently elements of multilingual competence, also supports the development of critical thinking and empathy—fundamental aspects in the context

of intercultural interactions. Openness to learning foreign languages fosters individuals' willingness to accept and understand diverse perspectives, thereby promoting social inclusion and openness to other cultures. Thus, a positive and motivated attitude toward language learning facilitates the formation of a more integrated community receptive to cultural differences.

At the same time, heightened motivation for language learning enhances adaptability in a globalized society, where academic and professional mobility is increasingly valued. Multilingual education thus serves as a foundation for international careers and a long-term development opportunity. Individuals with multilingual skills benefit from greater adaptability to diverse cultural and professional contexts, preparing them well for the challenges of the global job market.

In conclusion, genuine motivation for foreign language learning not only supports linguistic and intercultural competence but also contributes to building a modern, open, and inclusive society. This process promotes international collaboration and mutual understanding, essential elements for multilingual education and sustainable global development.

2.4 Conclusions to Chapter 2

1. *Multilingual Education* refers to the structured system of teaching and learning that incorporates multiple languages. It encompasses the educational policies, curriculum, and pedagogical approaches used by institutions to promote language diversity and proficiency. It is broader in scope, involving the overall educational framework, including curriculum design, teaching methods, and assessment practices. Its aim is to provide students with education in multiple languages, often integrating language instruction as a core component of the program. Multilingual education thus encompasses the broader educational environment and policies that support language learning.
2. *Multilingual Learning* refers to the process through which individuals acquire and use multiple languages. It focuses on the personal and cognitive aspects of learning languages and the way individuals develop language skills. It is more specific to the learner's experience, including the methods and strategies used to learn and use multiple languages effectively. It emphasizes the learning process itself, including techniques and practices that facilitate acquiring and using multiple languages. Multilingual learning, therefore, focuses on the individual processes and strategies used to acquire and use multiple languages.
3. Understanding cognitive, emotional, and social processes enables educators to create tailored teaching strategies and personalized learning approaches, which enhances student engagement, motivation, and emotional well-being, leading to better educational outcomes. This understanding also supports the development of effective assessment methods and

accommodations for learning disabilities and informs teacher training to ensure educators are well-prepared to apply these insights in their practice.

4. Implementing content-based teaching approaches integrates language development with cognitive growth by focusing on meaningful content. These methods are particularly useful in contexts with limited exposure to the target language, organizing learning around specific topics to facilitate communication and indirect language acquisition.
5. The "Language in Space" strategy, or "linguistic landscape," highlights how languages and other semiotic elements in public spaces such as street names, advertisements, and warnings, reflect and shape societal power dynamics and language learning.
6. The metalinguistic awareness, acquired through learning multiple languages, enhances students' ability to acquire additional languages by improving their understanding and application of linguistic structures, making the learning process more efficient. The multicompetence strategy highlights that multilingual individuals should not be expected to achieve the same proficiency level in each language as monolingual speakers, recognizing instead the unique and dynamic nature of multilingual abilities and the use of diverse communication strategies.
7. The constructive collaboration between various research methods and theories strengthens knowledge from multiple perspectives, promoting a holistic understanding of learning motivation. This approach enables the development of personalized strategies to support students in different contexts and at different learning levels.
8. Recognizing the importance of educational and political factors in the education system underlines their essential contribution to the learning process and the development of multilingual skills.
9. The education system is shifting from quantitative assessments toward qualitative approaches centred on student motivation, reflecting a growing focus on emotional, social, and identity development in addition to academic performance.
10. An increased awareness of the impact of educational and political authorities on the internal motivation for learning multiple languages underlines the essential involvement of these factors in the development of students' identity and autonomy.
11. Emotions, moods, and emotional skills have a significant impact on motivation and, implicitly, on student achievement. This awareness represents a significant step in the development of an educational model adapted to support academic success and the construction of a solid identity.

12. It is important to emphasize the need for a balance between cognitive and emotional skills in learning English as a second language. Contrary to popular opinion, the research emphasizes the close connection between the success of learning and the emotional state of the students.
13. Positive emotions, such as motivation and a positive attitude, enhance the effectiveness of cognitive skills in second language learning. The teachers are called to pay attention to the emotional state and the emotional ability of the students to improve the learning process. Findings from the analysis of factors such as student reluctance, perceived difficulty, and classroom dynamics underscore an interconnected network of influences. These can be overcome by positive reinforcement, and the classroom context plays a crucial role in the effectiveness of the learning process.
14. Learning a second language has a significant impact on the student's identity, shaping not only external communication, but also internal perception. Teachers play a key role in creating adapted contexts to support students in identity development in various situations.

3. EXPERIMENTAL VALIDATION OF METHODOLOGY FOR MOTIVATING STUDENTS TO LEARN MULTIPLE LANGUAGES

3.1. Design and General Description of Pedagogical Experiment

The experimental research focused on the results of the theoretical investigation regarding the concept of multilingual education and motivation for learning multiple languages. For this purpose, the objectives were established:

- Identification of the existing state at the time of the initiation of the experimental investigation regarding the initial level of motivation for learning multiple languages of the students involved in the research sample;
- Utilizing the methodology of motivating middle school students in Israel to learn multiple languages.

The study deals with the differences between bilingual students learning foreign language, and monolingual students learning a foreign language. The study is relevant in view of the current situation in the Republic of Moldova.

Students in two Jewish schools in Chisinau, where Russian and Romanian are spoken, are required to learn Hebrew as a foreign language. Similarly, in Israel, Hebrew-speaking students are required to learn Arabic as a foreign language. This reflects the relationship between bilingualism and foreign language learning.

The intermediate goal of the research is to identify the existing gaps, whether they can be bridged and also to perfect the learning program according to the findings, and guide the teachers accordingly, with reference to communication and literacy skills to increase motivation.

The study is based on the concept of second language acquisition, and refers to the acquisition of a language that is not the learner's native language, but is spoken in his bilingual environment. When it comes to a foreign language (foreign language acquisition), it means a language that is not spoken in the learner's place of residence and is not their mother tongue.

The research will focus on an empirical investigation of claims that can be confirmed or disproven through the collection and testing of data. It will not address evaluative questions or moral considerations, nor will it deal with matters that cannot be restored. The research is quantitative and will apply to the field of multilingual learning, where sufficient information exists to derive quantitative models.

The quantitative research presented here posits that the world is objective, meaning it can be measured independently. It relies on numerical data and performs consistent measurements, categorizing the research as quantitative. This involves a systematic scientific investigation of quantitative (numerical) properties and the testing of variables.

The research is empirical and quantitative, allowing for the quantification of data and the application of statistical analysis. It entails a systematic, controlled, empirical, and critical investigation of hypothetical claims about relationships among variables.

The research aims to explain phenomena in rabbinical education, focusing on linguistic aspects as well as causal relationships. It will include hypothetical claims, and an attempt will be made to prove their existence in reality through the collection and statistical analysis of data.

Attention will be given to inclusions, prioritizing generalizability, and using data extracts. The aim is to explain as thoroughly as possible. The study will attempt to identify correlations among the relevant variables. Reproducibility will be a key focus; the research will be conducted under consistent conditions to ensure that comparable results can be generalized or extrapolated from the research sample to the larger population.

The study is based on the research population while adhering to ethical considerations:

1. *Voluntariness* - Individuals should not be forced to participate in research.
2. *Scientific consensus* - Before they participate in the study, they must fill out a form giving their consent.
3. *Reduction of harm* - we will ensure that research participants (the students) are not harmed, and that respectful language is used. Questions will be posed in a straightforward manner, using simple wording.
4. *Confidentiality* - requires maintaining anonymity and preventing the leakage of information that could reveal the identities of study participants. We will ensure the highest quality of data handling and promise that the research will be conducted in a completely professional manner.
5. *Ensuring reliability* - refers to the extent to which the measurement tool consistently assesses the knowledge or skills.
6. *Reproducibility* - the research is conducted under the same conditions and obtaining equivalent results in Israel and in Republic of Moldova at contrasting times, including a control group.
7. *Stability* - involves retesting to assess how sensitive the measurement tool is to changes over time.

8. *Traceability* - involves examining the dimensions that reflect the reliability of the measurement tools, specifically the consistency between values obtained from different items measuring the same phenomenon.
9. *Validity* - refers to ensuring that the measurement tool accurately assesses what it is intended to measure within the framework of the study. A measurement tool that fulfils this criterion is considered to be more valid [9].

The research process included a structured and detailed setup and indicated all the execution details:

(1) The data - quantitative variables that could be activated and measured were presented.

(2) Research methods - the techniques of the experiment were employed to follow the experimental manipulations.

(3) Data processing was conducted professionally.

(4) The sample was large, well-defined, random, and representative.

(5) The variables were isolated and controllable.

(6) The research tools - the questionnaires consisted of a series of questions that had been planned, worded, and presented in a precisely fixed order.

The placement of a question within the questionnaire, or even its presentation, depended on the responses to previous questions. The questions were designed to identify the existing differences among students and to explore what factors contributed to optimal learning for both students and teachers. The research question was: "What was the relationship between multilingual education and student motivation?"

Examining the following variables:

Empirical variables - variables that are usually not difficult to distinguish. For example: Place of residence - if I am a student from the Republic of Moldova or Israel.

Theoretical variable - a variable that is difficult to define. For example: feelings, emotions, attitudes, certain behaviours, or poverty.

Independent variable - the variable which causes changes in the dependent variable. The change in the level of motivation depends on multilingual or monolingual education.

Dependent variable - A variable whose changes are influenced by the independent variable. In this study, we will examine how numerous factors affect the dependent variable, which is represented on the y-axis of the graph: Achievements in studying multiple languages (Hebrew and English).

In the given study there is a causal hypothesis regarding the independent variable and the dependent variable. Therefore, there is an explanatory variable.

Explanatory variable - one of the variables that can account for changes in the dependent variable observed in the study. In this research, the explanatory variable is represented on the x-axis of the graph: The students' mother tongue.

Conduct simple random sampling, that is, selecting participants for the sample from a list in a random way. This method allows for high representativeness and requires a reliable sampling frame.

The research process stems from a lack of understanding that leads to the definition of a problem: Why are students in multilingual education motivated to learn multiple languages?

The process is established, with the request and its wording being binding. These should be formulated as empirical implications derived from the general hypothesis. Ultimately, the existence of an examination and conclusion will determine whether the hypothesis is supported.

A positive correlation indicates that as one value increases, the other also increases (+), while a negative correlation indicates that as one value increases, the other decreases (−). The study will also include an empirical examination of the hypothesis, leading to conclusions based on the findings [32].

The psycho-pedagogical experiment was conducted at the Jewish school "Herzl" in the Republic of Moldova (in the initial phase of the experiment) and at the "Rupin" school in Israel (in all phases of the experiment).

In the first phase of the psycho-pedagogical experiment (at the beginning of the first semester of the 2022 academic year), students from grades 7-9 aged 12-15 filled out a general questionnaire on multilingual education and a motivation questionnaire (Appendix 3-6). A total of 200 questionnaires were sent. The data was collected and retrieved for statistical processing during 2022.

This research tool provides questionnaires. Each individual in the study/sample population has an equal chance of being included in the sample, meaning no individual has a certain chance (100%) or no chance (0%) of selection. The study will utilize closed questions with dichotomous answers, providing the most relevant responses to the research question. A quantitative tool in the form of a questionnaire was used (closed questions and statements). Statistical analyses were performed on the questionnaire data to ensure validity, reliability, and consistency.

The goal of the research is to meet the six fundamental conditions of scientific investigation: an organized procedure, systematic research processes that can be externally evaluated, and the ability to replicate the findings. Additionally, the research aims to facilitate internal feedback and

provide explanations for observed phenomena, ensuring that the results obtained can be trusted [9].

The purpose of the questionnaire is to establish the differences between bilingual and monolingual students in learning multiple languages, and an attempt to find out what helps these students, and teachers, to learn a foreign language optimally. Students' achievements, teachers' difficulties and students' difficulties will be examined.

The formulation of the research questions is grounded in a theoretical framework that examines the relationship between two key variables: the number of mother tongues spoken by a child and their capacity for learning an additional foreign language. The questions are designed to explore how these variables interact and influence each other.

Specifically, the hypotheses presented in the research define the nature of this relationship, positing that a greater number of mother tongues may positively affect the child's ability to learn an additional foreign language.

In formulating the research questions, we will refer to the types of inquiries commonly found in the social sciences: ontological **questions** concerned with understanding the nature of reality; epistemological questions focusing on how we learn from reality and seeking to understand the relationship between the learner and the learned. Finally, methodological questions assessing the best methods and approaches [42].

3.2 Initial Level of Students' Motivation to Learn Multiple Languages

There are differences between bilingual students learning a foreign language, and monolingual students learning a foreign language. The parameter is the native bilingual exposure, which is grounded in the concept of the linguistic revolution that humanity has experienced over the years. The linguistic revolution facilitated a social and genetic transformation, enabling humans to communicate with each other, being linked to the development of the brain, which evolved with the advancement of language.

A preliminary assessment aims to explore the that exist between the types of students regarding the relationship between bilingualism and foreign language learning, revealing personal and environmental discrepancies. Furthermore, the study will investigate how these differences can be leveraged to enhance student outcomes and improve teaching practices. By identifying the factors underlying these disparities, the research will determine whether the gaps can be bridged. The findings will inform the development of optimized learning programs and provide guidance for teachers, with a particular focus on enhancing students' communication and literacy skills.

The initial assessment related to working hypothesis 1 suggests that there is a cognitive language gap between bilingual and a monolingual student in the context of foreign language acquisition. This gap is reflected in differing abilities to learn an additional language. Language acquisition is a multidisciplinary field that intersects with education, teaching, brain research and cognition psychology.

The study draws upon theories, approaches, and processes associated with foreign language learning relevant to 'bilingualism,' which is re-examined in light of the hypothesis that there is a cognitive gap between these students. Based on the findings, it will be possible to refine and enhance learning programs to better meet the needs of both bilingual and monolingual learners.

The initial assessment departs from the outdated notion that bilingualism is detrimental to the speaker. The level of motivation among bilinguals learning a foreign language will increase, under the influence of the social and cognitive aspects of human development.

In general, it is widely accepted that exposure is a key element in the process of acquiring a mother tongue, a second language. A child learns their mother tongue through consistent exposure from infancy. This aligns with Chomsky's theory of universal grammar, which argues that every healthy individual possesses an innate mechanism enabling them to develop the grammar of the language to which they are exposed.

Another aspect of the initial assessment focuses on motivation level, which depend not only on exposure, but also on additional factors such as the learner's the readiness, the learning context, and cognitive processes that transform input into linguistic knowledge. These processes relate to both comprehension and production, consistent with the output hypothesis, which argues that language expression - whether through speaking or writing - plays a role in language acquisition when the conditions are favourable.

The assessment hypothesizes that students exposed to more than one native language in early childhood, both within the family and the broader environment, will be more motivated and less apprehensive about learning additional languages. These students will also demonstrate higher linguistic competence compared to those with only one native language.

In contrast, monolingual students may exhibit lower motivation, reduced interest, and greater anxiety when learning a new foreign language. Preliminary findings suggest that students in Israel, who study multiple languages such as English and Arabic, may struggle with language acquisition and show lower motivation in foreign language classes compared to students from the Republic of Moldova, where English and Hebrew are commonly studied.

In this study, two surveys were conducted among 200 students - 100 from Israel and 100 from the Republic of Moldova (Table 3.1). The sample was selected randomly, ensuring that participants were drawn from the entire population without bias.

Table 3.1: Socio-Demographic Properties of the Sample

Percentage	Number of participants		Sample
		Gender	Israel (<i>N</i> = 100)
54.0%	54	Male	
46.0%	46	Female	
		Grade	
%28.0	28	7	
%51.0	51	8	
%21.0	21	9	
		Country of origin	Moldova (<i>N</i> = 100)
97.0%	97	Israel	
%1.0	1	Netherlands	
%1.0	1	Taiwan	
%1.0	1	USA	
		Gender	
48.0%	48	Male	
52.0%	52	Female	
		Grade	
%42.0	42	7	
%24.0	24	8	
%34.0	34	9	
		Country of origin	
%88.0	88	Moldova	
%4.0	4	Ukraine	
%8.0	8	Russia	

Table 3.1 shows that the sample Israeli sample consisted of 54 boys (54.0%) and 46 girls (46.0%). Most participants (51.0%) were 8th-grade students, and the majority were born in Israel. In the Moldovan sample, 97.0% of participants were residents of the Republic of Moldova, with 48 boys (48.0%) and 52 girls (52.0%). Most were 7th-grade students (42.0%) and were born in the Republic of Moldova (88.0%).

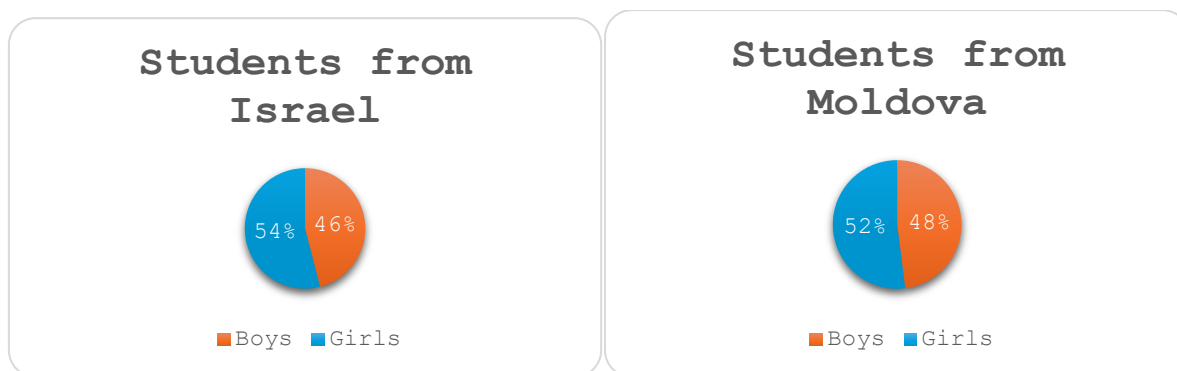


Fig. 3.1 Study Population from Israel and the Republic of Moldova, Segmented by Gender
Variables and level of reliability:

Table 3.2: Level of Reliability- The Values of the Internal Reliability Index
(Cronbach's Alpha)

Alfa value	Scala	Participant	Variable	Sample
0.925	1-5	1-11	Motivation for language learning	General (N = 200)
0.702	1-3	1-3	Language knowledge	
0.880	1-5	1-11	Motivation to first foreign language (Englis	
0.917	1-5	1-11	Motivation to a second foreign language	
0.759	1-5	1-11	Motivation for language learning	Israel (N = 100)
0.778	1-3	1-3	Language knowledge	
0.731	1-5	1-11	Motivation to first foreign language (English)	
0.587	1-5	1-11	Motivation to a second foreign language	
0.977	1-5	1-11	Motivation for language learning	Moldova (N = 100)
0.669	1-3	1-3	Language knowledge	
0.849	1-5	1-11	Motivation to first foreign language (English)	
0.804	1-5	1-11	Motivation to a second foreign language	

The internal reliability of the study variables was assessed, with reliability considered acceptable if it exceeds 0.7. Therefore, results indicate that the reliability for most variables is good, suggesting that the items measure consistent content for each rater. However, in the Israeli

sample, the internal reliability for the motivation for a second foreign language variable was found to be low.

Description and interpretation of results:

Dispersion indices

The motivation for language acquisition questionnaire (covering general motivation, first and second foreign language motivation) consists of statements rated by the participants on a 1-5 Likert scale (1- no agreement, 5- strong agreement). The language knowledge questionnaire uses a 1-3 scale (1- low, 3- high). The table below lists the data range by minimum and maximum values, the mean, and standard deviation.

Table 3.3: Descriptive Statistics of the Research Variables

Maximum	Minimum	Average (\pm Deviation standard)	Variable	Sample
5.00	1.00	(± 0.895) 2.991	Motivation for language learning	General (N =200)
3.00	1.00	(± 0.492) 2.263	Language knowledge	
5.00	1.27	(± 0.828) 3.363	Motivation to a first foreign language (English)	
5.00	1.00	(± 0.891) 3.026	Motivation to a second foreign language	
5.00	1.36	(± 0.581) 2.787	Motivation for language learning	Israel (N = 100)
3.00	1.00	(± 0.467) 2.143	Language knowledge	
5.00	1.00	(± 0.658) 2.794	Motivation to a first foreign language (English)	
3.00	1.00	(± 0.423) 2.272	Motivation to a second foreign language	
5.00	1.00	(± 1.091) 3.194	Motivation for language learning	Moldova (N = 100)
3.00	1.00	(± 0.489) 2.383	Language knowledge	
5.00	1.91	(± 0.538) 3.932	Motivation to a first foreign language (English)	
5.00	2.27	(± 0.516) 3.781	Motivation to a second foreign language	

Table 3.3 shows the descriptive statistics for the key variables (in the general sample). Therefore, for motivation to acquire a language the mean score is ($M = 2.991$) with a standard deviation ($S.D. = 0.895$); the mean falls near the centre of the 1-5 measurement scale (around 31-5), indicating that participants do not agree with the statements.

For the language knowledge variable, the mean is ($M = 2.263$) with a standard deviation of ($S.D. = 0.492$), the mean is above the midpoint of the 1-3 scale (around 2), suggesting that participants tend to report higher levels of language knowledge.

For the motivation for a first foreign language (English) variable, the mean is ($M = 3.363$) with a standard deviation of ($S.D. = 0.828$), indicating that the participants tend to agree with the statements. For motivation for a second foreign language the mean is ($M = 3.026$) with a standard deviation of ($S.D. = 0.891$), implying that participants do not agree with the statements.

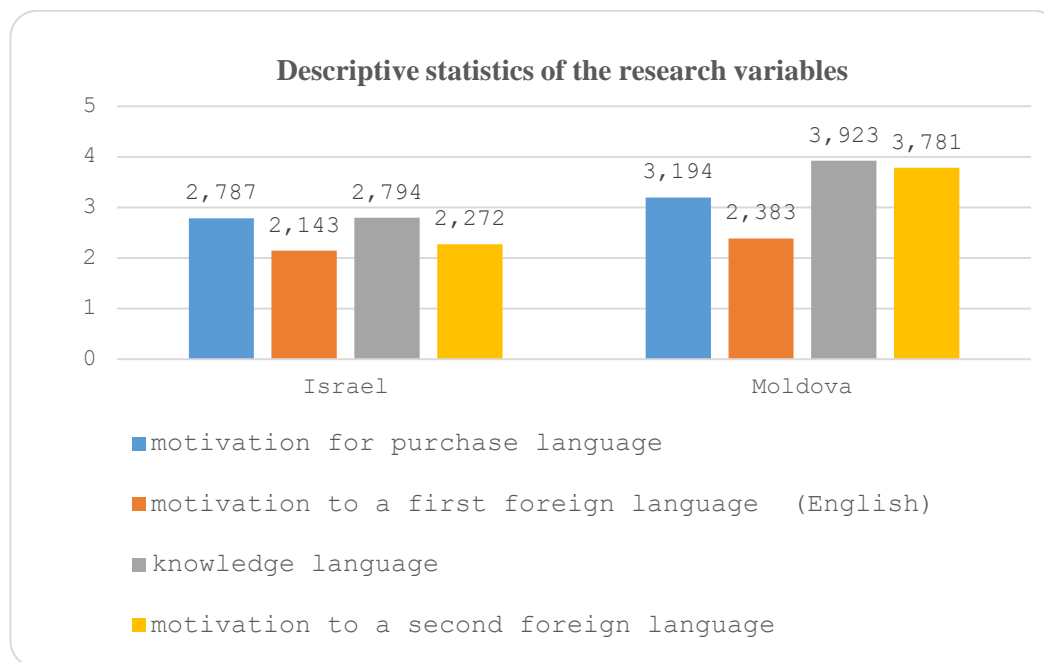


Fig. 3.2 Descriptive Statistics of Research Variables. Republic of Moldova vs. Israel

In a sample from **Israel**, for the motivation for language acquisition variable, the mean is ($M = 2.787$) with a standard deviation of ($S.D. = 0.581$), ranging below the 1-5 measurement scale (around 3), indicating that the participants tend to disagree with the proposed statements.

For the language knowledge variable, the mean is ($M = 2.143$) with a standard deviation of ($S.D. = 0.467$), the average is slightly above the midpoint of the 1-3 measurement scale (around 2), showing that the participants possess average language knowledge competences.

For the motivation for a first foreign language (English) variable, the mean is ($M = 2.794$) with a standard deviation of ($S.D. = 0.658$), highlighting that the participants tend to disagree with the statements.

For the motivation for a second foreign language variable, the mean is ($M = 2.272$) with a standard deviation of ($S.D. = 0.423$), indicating that the participants tend to disagree with the statements.

In the sample from the **Republic of Moldova**, for the motivation for language acquisition variable, the mean is ($M = 3.194$) with a standard deviation of ($S.D. = 1.091$), the mean is above the 1-5 measurement scale (around 3), suggesting that the participants agree with the statements.

For the average language knowledge variable, the mean is ($M = 2.383$) with a standard deviation of ($S.D. = 0.489$), the mean is above the midpoint of the 1-3 scale (around 2), indicating that the participants possess average language knowledge competences.

For the motivation for a first foreign language (English) variable, the mean is ($M = 3.932$) with a standard deviation of ($S.D. = 0.538$), suggesting that the participants tend to agree with the statements. For the motivation for a second foreign language variable, the mean is ($M = 3.781$) with a standard deviation of ($S.D. = 0.516$), indicating that participants tend to agree with the statements.

The language knowledge variable consists of three components: speaking and oral expression, writing and reading. Table 3.4 presents the range of data according to minimum and maximum values, mean and standard deviation, with the three sub-variables divided by country.

**Table 3.4: Descriptive Statistics of the Three Sub-Variables of Language Knowledge:
Speaking and Oral Expression, Writing and Reading**

Maximum	Minimum	Average (\pm Deviation standard)	Variable	Sample
3.00	1.00	(± 0.562) 1.740	Speaking and oral expression	Israel (N = 100)
3.00	1.00	(± 0.532) 2.280	Writing	
3.00	1.00	(± 0.588) 2.410	Reading	
3.00	1.00	(± 0.685) 2.340	Speaking and oral expression	Moldova (N = 100)
3.00	1.00	(± 0.642) 2.250	Writing	
3.00	1.00	(± 0.556) 2.560	Reading	

Table 3.4 shows that in **Israeli** sample from, for the speech and oral expression sub-variable, the mean is ($M = 1.740$) with a standard deviation of ($S.D. = 0.562$), the mean falls below the 1-3 measurement scale (around 2), implying that participants report an intermediate level for speech and oral expression components.

For the writing sub-variable, the mean is ($M = 2.280$) with a standard deviation of ($S.D. = 0.532$), indicating that participants tend to write at an intermediate level.

For the reading sub-variable, the mean is ($M = 2.410$) with a standard deviation of ($S.D. = 0.588$), indicating that participants tend to read at an intermediate level.

In the sample from the **Republic of Moldova**, for the speech and oral expression sub-variable, the mean is ($M = 2.340$) with a standard deviation of ($S.D. = 0.685$), the mean is above the midpoint of the measurement scale (2 on a scale ranging from 1 to 3), indicating that participants tend to demonstrate an average-level speech and oral expression.

For the writing sub-variable, the mean is ($M = 2.250$) with a standard deviation of ($S.D. = 0.642$), suggesting that participants tend to write at an intermediate level.

For the reading sub-variable, the mean is ($M = 2.560$) with a standard deviation of ($S.D. = 0.556$), indicating that participants tend to exhibit a prominent level of reading ability.

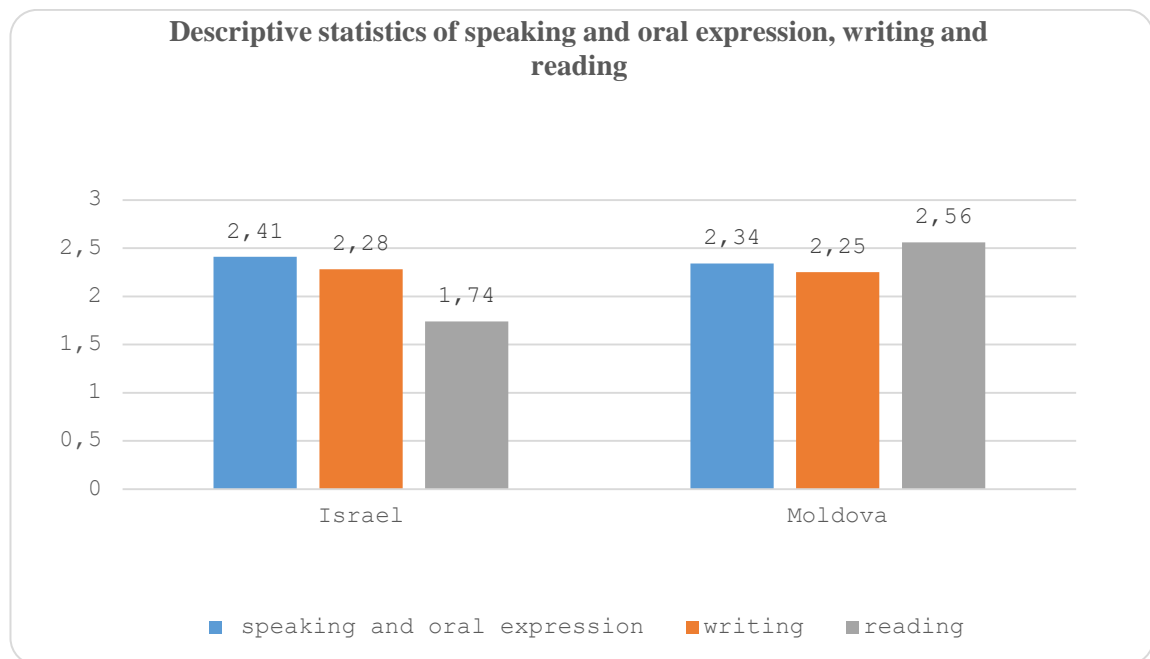


Fig. 3.3. Descriptive Statistics for Variables: Speaking and Oral Expression, Writing and Reading

Working Hypothesis 1: *There is a difference in the motivation to acquire a language between students in Israel (who have one mother tongue) and students in the Republic of Moldova (who have 2 mother tongues).*

To compare if there is a difference in the motivation to acquire a language between the students in Israel (who have one mother tongue) and the students in the Republic of Moldova (who have 2 mother languages), a t-test for independent samples was conducted. The dependent variable in this analysis is motivation to acquire a language, while the independent variable is students in Israel versus students in the Republic of Moldova.

Table 3.5. T-Test for Two Independent Samples for Motivation to Acquire a Language, by Country

	Israel N=100	Moldova N=100	t (150.926)
Average	2.787	3.194	-3.295**
Deviation standard	0.581	1.091	

**p<.01

According to Table 3.5, there is a significant difference in the motivation to acquire a language between students in Israel and students in the Republic of Moldova, as indicated by the results [$t(150.926) = -3.295$, $p < .01$]. Specifically, the average motivation for language acquisition among students from the Republic of Moldova was significantly higher ($M = 3.194$, $S.D. = 1.091$) than the average motivation for language acquisition for students from Israel ($M = 2.787$, $S.D. = 0.581$). Therefore, the hypothesis was confirmed.

***Working Hypothesis 2:** There is a difference in the motivation to learn a first foreign language (English) between students in Israel (who have one mother tongue) and students in Republic of Moldova (who have 2 mother tongues).*

To investigate whether there is a difference in the motivation to learn a first foreign language (English) between students in Israel (who have one mother tongue) and students in Republic of Moldova (who have 2 mother languages), an independent samples t-test was conducted. The dependent variable is motivation to learn a first foreign language (English) and the independent variable is students in Israel versus students in Republic of Moldova.

Table 3.6. T-Test for Two Independent Samples for Motivation to Learn a First Foreign Language (English), (rating 1-5) by Country.

	Israel N=100	Moldova N=100	t (189.127)
Average	2.794	3.932	- 13.389 **
Deviation standard	0.658	0.538	

**p<.01

According to Table 3.6, we note that there is a significant difference in the motivation to learn a first foreign language (English) between students from Israel and students from Republic of Moldova [$t(190.492) = -13.389$, $p < .01$]. That is, the mean for the motivation to learn a first foreign language for students from the Republic of Moldova ($M = 3.932$, $S.D. = 0.538$) was significantly higher than the average motivation to learn a first foreign language for students from Israel ($M = 2.794$, $S.D. = 0.658$). Therefore, the hypothesis was confirmed.

Working Hypothesis 3: *There is a difference in the motivation to learn a second foreign language between students in Israel (who have one mother tongue) and students in Republic of Moldova (who have 2 mother tongues).*

To assess whether there is a difference in motivation to learn a second foreign language between students in Israel (who have one mother tongue) and students in Republic of Moldova (who have 2 mother languages), an independent samples t-test was conducted. The dependent variable in this analysis is motivation to learn a second foreign language, while the independent variable is the group status of students in Israel compared to those in the Republic of Moldova.

Table 3.7. T-Test for Two Independent Samples for Motivation to Learn a Second Foreign Language (rating 1-5), by Country

	Israel N=100	Moldova N=100	t(198)
Average	2.272	3.781	- 22.579 **
Deviation standard	0.423	0.516	

**p<.01

According to Table 3.7, there is a significant difference in the motivation to learn a second foreign language between students from Israel and students from Republic of Moldova, as indicated by the t-test results [t(198)= -22.579, p<.01]. Specifically, the average motivation to learn a second foreign language for the students from Republic of Moldova (M= 3.781, S.D.= 0.516) was significantly higher than the average motivation to learn a second foreign language for students from Israel (M= 2.272, S.D.= 0.423). Thus, the hypothesis was confirmed.

Working Hypothesis 4: *There is a difference in language knowledge between students in Israel (who have one mother tongue) and students in Republic of Moldova (who have 2 mother tongues).* To assess if there is a difference in language knowledge between students in Israel (who have one mother tongue) and students in Republic of Moldova (who have 2 mother languages), an independent samples t-test was conducted. The dependent variable is motivation to learn a language while the independent variable is students in Israel versus those in the Republic of Moldova. This hypothesis will be assessed not only on the general variable of language knowledge but also on the three sub-variables: speech and oral expression, writing, and reading.

Table 3.8. T-Test for Two Independent Samples for Language Knowledge (rating 1-5), by Country

	Israel N=100	Moldova N=100	t(198)
Average	2.143	2.383	-3.550**
Deviation standard	0.467	0.489	**p<.01

According to Table 3.8, there is a significant difference in language knowledge between students in Israel and students in Republic of Moldova, as indicated by the t-test results [$t(198)=3.550, p<.01$]. That is, the average of the language knowledge variable for the students from the Republic of Moldova ($M= 2.383, S.D.= 0.489$) was significantly higher than the average of the language knowledge for students from Israel ($M= 2.143, S.D.= 0.467$). Thus, the hypothesis was confirmed.

Table 3.9. T-Test for Two Independent Samples for Speaking and Oral Expression, Writing and Reading (rating 1-3), by Country

		Israel N=100	Moldova N=100	t(190.698)
Speaking and oral expression	Average	1.740	2.340	-6.774**
	Deviation standard	0.562	0.685	
		Israel N=100	Moldova N=100	t(198)
Writing	Average	2.280	2.250	0.360
	Deviation standard	0.533	0.642	
		Israel N=100	Moldova N=100	t(198)
Reading	Average	2.140	2.560	-1.854
	Deviation standard	0.588	0.556	

** $p<.01, p>.05$

According to Table 3.9, there is a significant difference in speech and oral expression between students in Israel and students in the Republic of Moldova [$t(190.698)= -6.774, p<.01$]. That is, the average score for speech and oral expression among students from the Republic of Moldova was significantly higher ($M= 2.340, S.D.= 0.685$) than the average speech and oral expression for students from Israel ($M= 1.740, S.D.= 0.562$).

The hypothesis was confirmed. In contrast, no significant difference was found in writing between students from Israel and students from Republic of Moldova [$t(198)= 0.360, p>.05$].

Specifically, the average writing score for the students from Israel ($M= 2.280, S.D.= 0.533$) was similar to the average writing for students from the Republic of Moldova ($M= 2.250, S.D.= 0.642$), leading to a failure to confirm the hypothesis.

Additionally, there is no significant difference in reading between the two groups [$t(198)= -1.854, p>.05$]. That is, the average reading score for the students from Israel ($M= 2.140, S.D.= 0.588$) was comparable to the reading average for students from The Republic of Moldova ($M= 2.560, S.D.= 0.556$). Again, the hypothesis was not confirmed, although it is worth noting that the level of significance approached marginal significance ($p=.065$).

Working Hypothesis 5: *There is a difference in motivation for language acquisition between boys and girls, with language acquisition motivation being higher for girls than for boys.*

To assess this hypothesis, an independent samples t-test was conducted to determine whether there is a significant difference in motivation for language acquisition between boys and girls. The dependent variable is motivation to acquire a language, and the independent variable is gender, specifically comparing boys versus girls.

This hypothesis will be tested on the overall sample as well as on the distributions for students in Israel and the Republic of Moldova. .

Table 3. 10. T-Test for Two Independent Samples for Language Acquisition Motivation (rating 1-5), by Gender

The whole sample	Girls N=105	Boys N=95	t(189.037)
Average	3.564	2.440	-11.342**
Deviation standard	0.759	0.634	
Israel	Girls N=46	Boys N=54	t(98)
Average	3.077	2.540	-5.169**
Deviation standard	0.555	0.483	
Republic of Moldova	Girls N=59	Boys N=41	t(98)
Average	3.995	2.328	-11.765**
Deviation standard	0.648	0.759	

**p<.01

According to Table 3.10, there is a clear difference in the motivation to acquire a language between boys and girls [$t(189.037) = -11.342$, $p < .01$]. That is, the average motivation for language acquisition for girls ($M = 3.564$, $S.D. = 0.759$) was significantly higher than the average motivation for language acquisition for boys ($M = 2.440$, $S.D. = 0.634$). The hypothesis was confirmed.

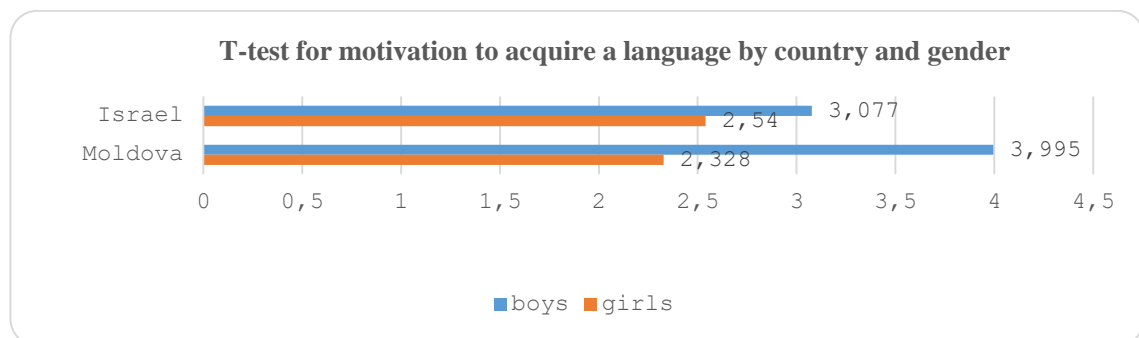


Fig. 3.4 Language Acquisition Motivation by Gender and Country

For the **Israeli** sample, there is a significant difference in motivation to acquire a language between boys and girls, as indicated by the t-test results [$t(98) = -5.169, p < .01$]. Specifically, the average motivation for language acquisition among girls was significantly higher ($M = 3.077, S.D. = 0.555$) compared to that of boys ($M = 2.540, S.D. = 0.483$). Thus, the hypothesis was confirmed.

Similarly, for the sample from the **Republic of Moldova**, a significant difference in the motivation to acquire a language has been found between boys and girls [$t(98) = -11.765, p < .01$]. In this case, the average motivation for language acquisition among girls was significantly higher ($M = 3.995, S.D. = 0.648$) than that of boys ($M = 2.328, S.D. = 0.759$). Therefore, the hypothesis was confirmed.

The comparative analysis of language acquisition motivation revealed significant differences between students in Israel and the Republic of Moldova. T-test results indicated that Moldovan students exhibited higher motivation for learning both the first foreign language (English) and the second foreign language compared to their Israeli peers.

Additionally, Moldovan students demonstrated greater language proficiency and enhanced oral expression skills. However, no significant differences were found in writing and reading abilities between the two groups.

Gender differences also emerged, with girls in both countries showing significantly higher motivation for language acquisition than boys. These findings highlighted the impact of linguistic environment and gender on language learning motivation.

3.3. Formative Pedagogical Experiment on Developing Students' Motivation to Learn Multiple Languages

In today's globalized world, proficiency in foreign languages is increasingly seen as an essential skill. However, many young people, particularly my students, show little interest in learning a second foreign language. This observation prompted me to explore various motivational models in the realms of work, education, and personal development to create a useful framework aimed at enhancing motivation specifically for learning a second foreign language. We grounded our research in several theories of motivation, focusing on how they drive individuals to act. From this foundation, we developed a model designed to increase motivation among school students in acquiring a foreign language. My objective is to identify the impact of various interrelated factors on language learning motivation.

For instance, we will examine how direct interest influences language proficiency beliefs and how these beliefs, in turn, affect student interest. Interest, particularly in the subject matter being studied, serves as a catalyst that can either activate or bypass other learning

factors, impacting students' educational achievements. Recognizing that demographic information such as gender, age, and educational background, as well as state policy, are beyond our control, I aimed to design a model that stimulates students' motivation to enhance their multilingual skills. .

Additionally, my goal is to motivate students to develop specific skills, such as the ability to comprehend messages and assignments in the target language, initiate conversations, and read and understand texts at varying levels of difficulty. This includes vocabulary and grammar knowledge, as well as verbal interaction in the foreign language. The model also encompasses understanding conventions, cultural aspects, and the diversity of the language.

The formative program in Israel focusing on projects:

This inter-linguistic and inter-cultural sharing is unique, the presented work plan caters on three principles: sharing knowledge between mother tongue studies and other languages, highlighting the common components in language learning and teaching; the perception of language as an integral part of society and culture; and the belief that multiculturalism is the foundation of a pluralistic and democratic society.

The program reflects the unique multilingual and multicultural reality of Israel today. In this context, language teachers form a group that shares knowledge and adopts an approach viewing language as a constructive and mediating factor across various social and cultural contexts, particularly in the field of education. Therefore, the program emphasizes the system of interrelationships of different languages and cultures, placing joint studies at the centre of all its specializations.

Program Structure:

The organizing element of the various projects consists of 'super questions' which form the foundations of motivation such as, How does language motivate students and reflect the socio-cultural and professional-educational contexts of the participants in the educational process? And What is the relationship between language, society, and culture? In addition, in the various projects introduce common concepts that stimulate student engagement, such as: language-society-culture, multiculturalism, societal dialogues, the perception of the 'self' and the 'other', the importance of different perspectives and multiple points of view and more.

Objectives of the Program:

The projects aim to emphasize the joint training of the teachers as a foundation for a comprehensive understanding of the role language in society, and as an infrastructure for the collaborative action among language teachers within the school system. We view language as a central tool in personal and professional life.

Effective use of this tool may stimulate motivation in teaching and learning processes in the multicultural classroom, motivation in developing curricula and school projects in the fields of literacy and multiculturalism, motivation in solving personal and school problems, in understanding the 'other' and ensuring appropriate self-presentation in diverse circumstances.

- Encourage teachers of different languages in the Israeli school to adopt a multilingual approach as a guiding principle and as a foundation for their lifelong professional development.
- Motivate the students to examine the concept of multiculturalism in both society and school, as well as its impact on their personal identity and linguistic, literacy and social development.
- Motivate students enrolled in the program to take on roles as curriculum planners and researchers within their classrooms, schools, and communities.
- Motivate students enrolled in the program to develop skills that will enable them to be pluralistic and multicultural.
- Encourage students to cultivate personal, social, and cultural linguistic awareness, providing them with the tools to use language effectively outside of formal settings.

Duration of EACH project: Throughout the entire school year (9 months).

Table 3.11. Formative Program for Students Focused on Enhancing Motivation to Learn Multiple Languages

The Purpose of the Project	Project Description	Project's Name
Participation in the project: Students will engage in a variety of topics related to the State of Israel and its achievements in various fields. Following the learning experience, students will participate in competitions, including drawing contests, essay writing or recitation, etc. In May 2024, there will be a virtual event featuring recording contributions from all Haftzivah schools. This initiative will be conducted in both Arabic and English.	Participating in the project: students will be exposed to a variety of topics about the leaders and their achievements in various fields. As a result, suitable students will participate in competitions, which may include drawing contests, essay writing, recitation or other related activities focused on these leaders. - Given the sensitivity of the Jewish-Arab conflict, it is recommended to focus on leaders from the fields of science and art rather than political leaders.	Annual project "Jewish and Arab leaders forging a path"
The students will study the holidays and festivals of the people of Israel, as well as those of Muslims and	Students will learn about the holidays and celebrations of the Muslim-Arab community (Ramadan, Eid al-Fitr, and Eid al- Adha). This will be accomplished	Marking Muslim holidays and festivals

Christians, and getting an understanding of their traditions.	through <u>videos and informational clips</u> .	
The students will engage in in-depth research about their families, focusing on those with roots in Arab countries and European countries.	Students are encouraged to conduct in-depth research on their families, particularly those with roots in Arab countries. This involves <u>research, learning and documentation processes</u> to strengthen the relationship between the older community and school students. This will foster positive relationships and collaborative learning about the language, thereby enhancing motivation by reinforcing the connection between the communities and the new generations learning foreign languages. This effort promotes integration at home, involving parents in educational spaces and a new learning environment in the context of the foreign language, the community, and its heritage.	My journey to Israel - step one
to explore prominent Israeli and Arab singers while learning relevant vocabulary and chapters of history related to Israeli and Arab songs and bands. In preparation for the Ramadan holiday, an Arabi - Zion music video competition will be held.	Students will be introduced to the best Arab singers, Arab culture, and society both in Israel and globally, and familiarization with a contemporary Arabic work. Playing songs in the new foreign language during lessons.	Arab - Zion - music video and singing competition
The students will strengthen their connection to Israel through interpersonal relationships with Arab students from other schools and with peers from English-speaking Europe; Creating and strengthening the continuous connection online and offline between students who speak Hebrew as their mother tongue and students who speak the foreign language (for example - Arabic).	Develop educational ties with an Arab school and exposing students to the lifestyles of their Arab peers. The Yilmodu program provides a platform on the subject of interests and knowledge of partners, engages in the values and culture of two partners, develops skills, and provides learning experience across cultures and borders by means of virtual platforms, creating a unique sense of connection and belonging to the language being studied. The project will enable students to learn about each other in a formal context, communicate and maintain connections, learn about the respective communities and cultures. Each pair of schools will develop the work plan according to the unique needs of their context. The "twin" schools promote social and emotional learning, enhance understanding	The twinning of the schools - Creating and strengthening the continuous connection between external students and the Israeli students.

	<p>of similarities and differences, and help students practice skills such as cooperation, language use, critical thinking, experimenting with digital pedagogical tools and other 21st century skills. The vision is that acquaintance and learning will create the basis for understanding, expand the knowledge about the language and its speakers, and foster a positive attitude of the learner towards the language, which will increase his motivation.</p> <p>- Of course, this requires close supervision of the pedagogical staff by the relevant pedagogical centres.</p>	
The students will deepen their knowledge in the fields of history, culture, tradition, and vocabulary, both in Arabic and English.	To strengthen the connection and affinity to the Arabic language through competitions, <u>games, and quizzes, with prizes between the</u> classes learning the language.	A highlight day - school Olympiad deepening knowledge and a level competition between students in Arabic and English

The foundation of the work plan is grounded in the theory of attributions in education, where each student is central and individual, actively influencing their learning processes. In other words, the student is not just prone to influences from the environment but plays an active role in shaping their surroundings. In addition, the program emphasizes the importance of the connections and relationships between the teacher and the student, as well as the influence of the educational environment on the teaching and learning processes.

The work program is based on the theory of attributions in education, which supports the pragmatic approach, and focuses on matching the teaching and learning processes to the student's needs, and poses great importance on the student's social and emotional abilities, and encourages the use of pedagogical methods that arouse the student's interest and private outlook.

In the presented program, the student is considered a unique individual and the central figure in the learning processes. This perspective acknowledges that while students influence their environment, they also play an active role in their own learning. It is argued that the learning processes change and are built in relation to the relationships between the student, the teacher, and the educational environment.

However, in order to implement the presented plan, teachers must be flexible and able to tailor the teaching process to the specific needs of their students.

Additionally, they foster an open and encouraging learning environment that allows students to express their opinions, develop their individual abilities and influence the learning processes within various projects.

The continuous motivation in the context of the teacher-student relationship significantly impacts learning outcomes; therefore, this aspect has been carefully considered. Students who feel guided, supported, and directed by their teachers are more likely to engage in learning activities and make progress.

Teacher training in Israel:

In 2023, training sessions were conducted for the direct teaching staff of the participating students, encompassing 35 teachers from Israel (Table 3.2).

These training sessions were facilitated by the author in an online format via Zoom, with close guidance provided throughout the project implementation.

Table 3.12: General Data on Teachers Who Participated in the Study in Israel

Age	26-30	31-35	36-40	40+
Number of subjects	1	5	8	21
Percentage	2.8%	14.2%	22.8%	60%
Bachelor's degree (by specialty)	MA	BA	Not complete	without academic studies
Number of subjects	15	19	1	-----
Percentage	42.8%	54.3%	2.8%	0%
Teaching experience (years)	5-10	10-15	15-20	20+
Number of subjects	2	6	10	17
Percentage	5.7%	17.1%	28.5%	48.5%
Bachelor of Education	MA	BA	Not complete	without academic studies
Number of subjects	11	17	6	1
Percentage	31.4%	48.5%	17.1%	2.8%

The participating teachers underwent training (ITE) five sessions of 90 minutes each. These meetings were held after the workday, under our guidance and in coordination with the school principal. Additionally, an intensive, week-long workshop was conducted at the beginning of the academic year, after which the projects were implemented.

The purpose of the training sessions was to introduce the teachers to the research framework and the program's rationale, as well as to equip them with the main methodologies for working with students. During the training, professional development was conducted to foster

student's motivation to learn languages, with an emphasis on linguistic pedagogical training and intercultural communication.

Additionally, the training encouraged teacher to deepen their cultural awareness and sensitivity to the foreign language, with an emphasis on the integration of activities involving students from different language groups.

The sessions prioritised interactive methods that promote interaction and mutual understanding. The training fostered full cooperation with the teaching team, including discussions on future opportunities for peer learning to sustain the program's success.

Target population: 7th-8th-9th-grade students at Sharon "Rupin" school in Israel.

Lead teachers: the team of teachers, who received advance training on the research. Autonomy was granted to the action teams within each project, allowing them to in line with the project's objectives, following approval of their methodologies during the preliminary team meetings. Teacher training consisted of 5 sessions, delivered twice weekly in 90-minute segments via Zoom. These sessions focused on English and Arabic language teachers participating in the school's projects (Table 3.13).

Table 3.13: Professional Development Program for English and Arabic Teachers in Israel, Focused on Increasing Students' Motivation to Learn Multiple Languages

Stages	Objection - Requests	Methods and Techniques	Time
Presentation of the research and selecting a lead teacher for each project	Request for compensation for participation in the system	- Explanation of the research and presentation of the rationale in the model designed to enhance students' motivation for learning a foreign language. - Selection of a lead teacher – for each project.	90 Min
Revealing the research and selecting a lead teacher for each project	A request to balance the workload and pressure, including the pace of the project as part of integration into the overall program at the school.	The division of teachers into work teams according to the projects. -Development of work stages for combining pedagogical knowledge, content knowledge and technological knowledge of the teachers who operate the project. - Creation of a schedule and a detailed work plan	90 Min
Program implementation - integrating theory and practice	-Request for equipping the school with resources - physical planning and equipment.	Simulation - the presentation of the practical plan to all program teachers prior to implementation.	90 Min

Program implementation - exposure	Request to publish the project's results.	Documentation of the actions conducted in the project with students.	90 Min
Program evaluation and feedback.	A request to continue the projects next year, to use the results to enhance motivation now and in the future.	-Student assessment via a project presentation by the students, sharing their experiences. - Teacher evaluation and feedback in an open dialogue (on the entire process).	90 Min

Results of implementing the methodology developed by the author. The study was based on a questionnaire with 10 questions were formulated after the students spent a year with a professional foreign language teacher, following the model presented for enhancing motivation to learn multiple languages., administered to 50 students from a central regional division in Israel who studied multiple languages in school: Arabic and English, in addition to their native language, Hebrew.

The wording of the research questions is clear and focused, serving as the foundation upon which research develops. In the second stage, the discussion will delve into specifics, ensuring that all questions meet the following criteria:

- Relevance - is the question relevant to the experiment? Does the experiment, as designed, provide an answer to the question? What elements within the experiment assess whether it answers the research question?
- Operative ness - is the question scientifically grounded and based on technical knowledge? The practical way to test the question. You will know how to change the independent change and how to measure the dependent change.
- Relationship - Is the question formulated to express a relationship between the two variables?
- Novelty - Is the question new, or is there already an existing an answer?
- Interest - Is the question engaging and stimulating for research?

The purpose of the study was to examine the relationship between motivation and the variables of knowledge, skill and learning experience. The research hypotheses were tested using the Pearson correlation coefficient.

The research method chosen for data collection and analysis is the "quantitative" method (using a questionnaire).

The research question. How did the motivation model for acquiring a foreign language contribute to improving the learning process among students in schools specifically regarding enhancements in knowledge, skills, and learning experiences?

Research Hypothesis: the establishment of a comprehensive and contextualized approach to motivating students to learn multiple languages simultaneously will positively impact their motivation to study these languages and enhance multilingual education in general.

The Study Variables include: *Dependent variable:* the motivation model - motivation to acquire a foreign language. *Independent variable:* the learning process - improvements in knowledge, skills, and the overall learning experience. In the table below, we will present the reliability levels of the research variables.

Table 3.14: Reliability Levels - Internal Reliability Index Values (Cronbach 's Alpha)

The Alpha Value	Scala	Said	Variable
0.883	1-5	1-3	Motivation for acquiring a foreign language
0.821	1-5	4-6	Improving knowledge
0.785	1-5	7-9	Skill improvement
0.790	1-5	10-12	Improving the learning experience

Table 3.14 shows the internal reliability indices of the research variables. A reliability score higher than 0.7 is considered acceptable. Therefore, the reliability is deemed good for the four variables, indicating that the items assess the same content domain for each variable.

The Study Population. The research population consists of a representative sample of 50 students. The selection criterion requires that all the participants be 8th grades, born in Israel, and have Hebrew as their mother tongue.

The respondents include students who completed the initial questionnaire and are from the same school and classes in the division; thus, the sample is not random. The table below presents the socio-demographic characteristics of the students.

Table 3.15: Socio-Demographic Characteristics of the Sample (N= 50)

Percentage	Number of subjects	Variable
56.0%	28	Gender Male
44.0%	22	Female
100.0%	50	Class / 8
100.0%	50	Country of Birth / Israel
100.0%	50	Native language / Hebrew

From **Table 3.15**, we observe that 28 students (56.0%) are male, and 22 students (44.0%) are female participants in the sample. All participants are in the 8th grade (100.0%), were born in Israel (100.0%), and have Hebrew as their mother tongue (100.0%).

The questionnaire was administered to a sample of 50 students from Israel (Appendices 7-8). According to the results from the first phase, these students demonstrated an average to low level. The purpose of the questionnaire was to confirm the hypothesis that the model operates by

exposing students to the culture of the language being studied, thereby fostering an important level of motivation to learn it.

Statistical Findings of the New Model Experiment:

As mentioned, the main goal of this study is to examine the relationship between motivation and the variables of knowledge, skill and learning experience. Specifically, it seeks to understand how the motivation model contributes to the acquisition of a foreign language to improve the learning process among students in schools. That is, what is the model's contribution to the acquisition of a foreign language, in terms of enhancing knowledge, skills and the learning experience.

Three hypotheses were put forward for this study, and the process of confirming these research hypotheses is divided into several parts. The first part involves a descriptive statistics analysis of the research variables.

Dispersion Indices. The questionnaire consists of statements that the sample in the study can evaluate according to their level of agreement on a scale of 1 to 5 (1-no agreement, 5 - strong agreement). The table below presents the data range by minimum and maximum values, the mean of each variable, and its standard deviation.

Table 3.16: Descriptive Statistics of the Research Variables

maximum	minimum	Mean (\pm SD)	Variable
5.00	2.00	4.187 (\pm 0.629)	Motivation for acquiring a foreign language
5.00	2.00	4.027 (\pm 0.656)	improving knowledge
5.00	2.00	3.980 (\pm 0.714)	skill improvement
5.00	2.00	3.807 (\pm 0.735)	Improving the learning experience

From Table 3.16, it can be seen that for the motivation to acquire a foreign language variable, the mean is ($M = 4.187$) with a standard deviation of ($SD = 0.629$). The average is above the midpoint of the 1-5 measurement scale (around 3), indicating that the participants tend to agree with the statements. For the knowledge improvement variable, the mean is ($M = 4.027$) with a standard deviation of ($SD = 0.656$), suggesting that the participants also tend to agree with the statements. For the skill improvement variable, the mean is ($M = 3.980$) with a standard deviation of ($SD = 0.714$), indicating that the participants agree with the statements. For the improving the learning experience variable, the mean is ($M = 3.807$) with a standard deviation of ($SD = 0.735$), showing that the participants tend to agree with the statements.

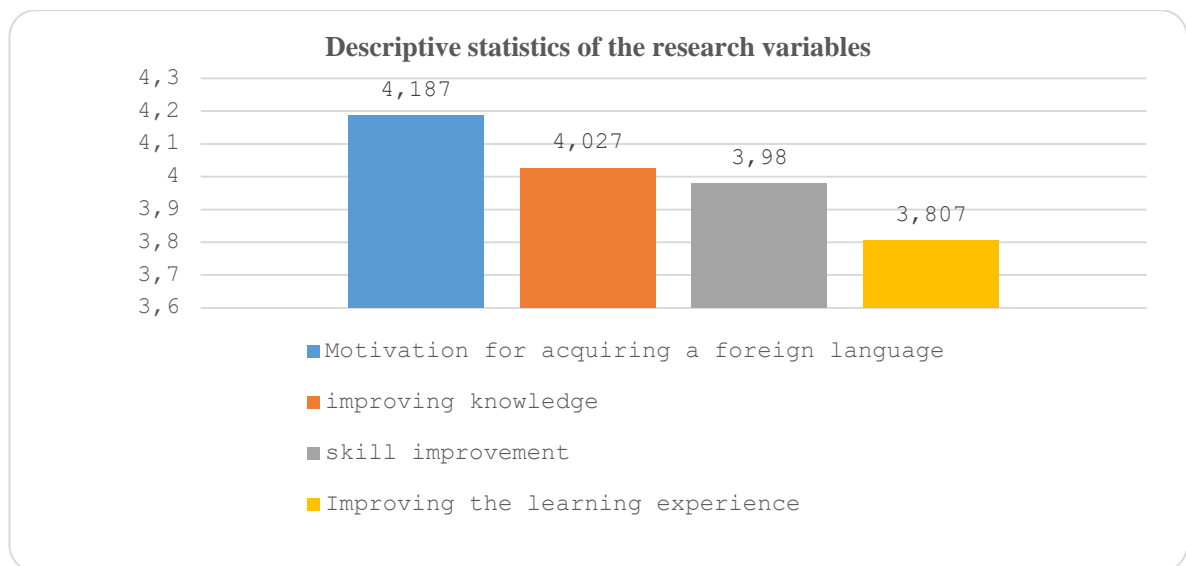


Fig. 3.5 Descriptive Statistics of the Research Variables Following Implementation of the Psychopedagogical Model

***Secondary Research Hypothesis 1:** A positive relationship exists between motivation to acquire a foreign language and the improvement of knowledge. That is, the higher the motivation to acquire a foreign language, the greater the knowledge gained.*

To test the hypothesis, a Pearson correlation test was conducted to examine the relationship between motivation to acquire a foreign language and knowledge improvement.

Correlation Between Motivation to Acquire a Foreign Language and Improvement of Knowledge: There is a significant positive relationship between the variables motivation to acquire a foreign language and the improvement of the knowledge ($p < .01$, $r_p = 0.708$). That is, the higher the motivation for acquiring a foreign language, the greater the knowledge gain. Therefore, the hypothesis was confirmed.

***Secondary Research Hypothesis 2:** A positive relationship exists between motivation to acquire a foreign language and the improvement of skills. That is, the higher the motivation to acquire a foreign language, the greater the skill improvement.*

To test the hypothesis, a Pearson correlation test was conducted to examine the relationship between motivation to acquire a foreign language and skill improvement.

Correlation Between Motivation to Acquire a Foreign Language and Skills Improvement: It is evident that there is a significant positive relationship between the variable motivation to acquire a foreign language and the improvement of the skill ($p < .01$, $r_p = 0.544$). This indicates that the higher the motivation for acquiring a foreign language, the greater the improvement of the skill. The hypothesis was confirmed.

Secondary Research Hypothesis 3: *A positive relationship exists between motivation to acquire a foreign language and the learning experience. That is, the higher the motivation to acquire a foreign language, the greater the learning experience.* To assess the hypothesis, a Pearson correlation test was conducted to examine the relationship between motivation to acquire a foreign language and improvements in the learning experience.

Correlation Between Motivation to Acquire a Foreign Language and Improving Learning Experience: Is evident that there is a significant positive relationship between the motivation to acquire a foreign language and the improvement of the learning experience variables ($p < .01$, $r_p = 0.477$). This indicates that the higher the motivation for acquiring a foreign language, the better the learning experience. Thus, the hypothesis was confirmed.

In conclusion, three research hypotheses were assessed in this study:

The first hypothesis proposed that there is a positive relationship between motivation to acquire a foreign language and the improvement of knowledge. This hypothesis was confirmed, that is, the higher the motivation to acquire a foreign language, the greater the knowledge gained.

The second research hypothesis examined whether there is a positive relationship between motivation to acquire a foreign language and skill improvement. The hypothesis was confirmed, specifically, the higher the motivation to acquire a foreign language, the greater the skill enhancement.

The third research hypothesis assessed whether there is a positive relationship between motivation to acquire a foreign language and the improvement of the learning experience. The hypothesis was confirmed; that is, the higher the motivation for acquiring a foreign language, the greater the learning experience.

Rate of Motivation for Learning Languages Before and After the Activation of the Model

- Rate of Motivation for Learning Languages – Before Implementation of the Methodology:

motivation to learn English - 52% and motivation to learn Arabic - 31%

Rate of Motivation for Learning Languages – After Implementation of the Methodology:

Motivation to learn English - 95% and motivation to learn Arabic - 63%

It is evident that, there has been a significant increase of approximately 50% in motivation to learn languages among the students at “Rupin” School in Israel.

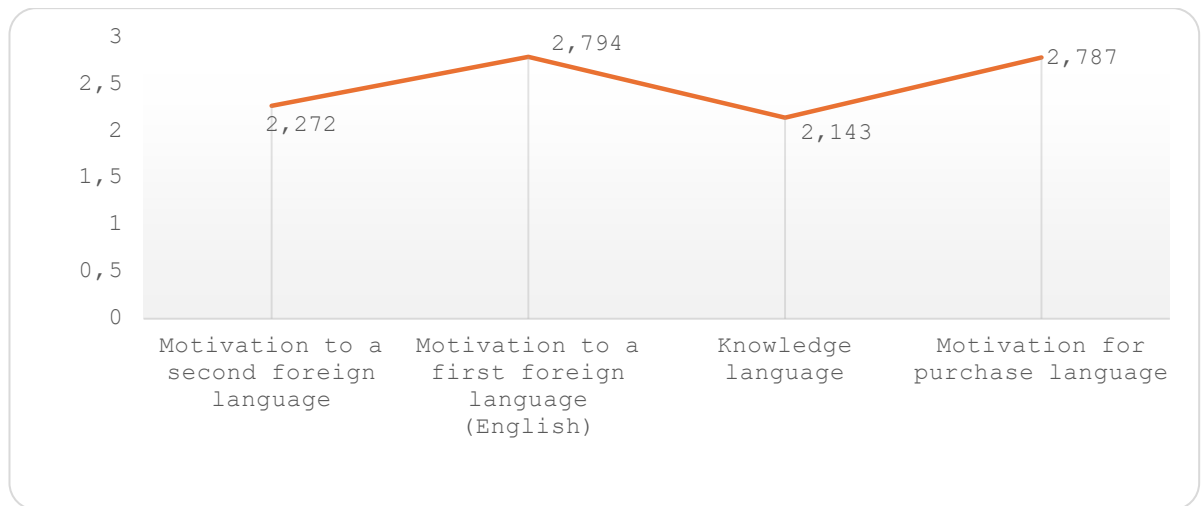


Fig. 3.6 Descriptive Statistics of the Research Variables in Israel – Before the Implementation of the Methodology 2022

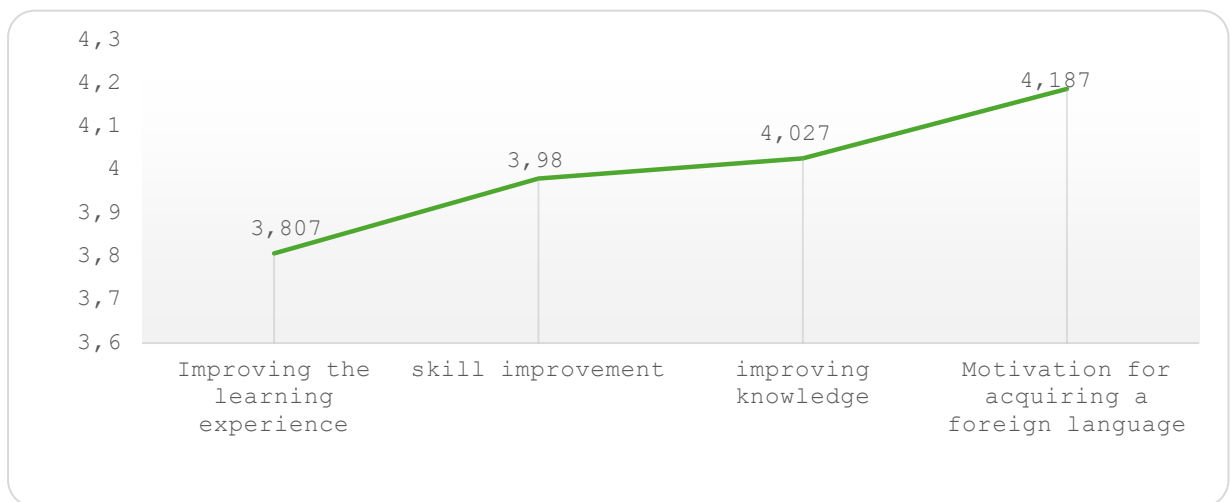


Fig. 3.7 Descriptive Statistics of the Research Variables in Israel - After the Implementation of the Methodology 2023

1. General Descriptive Statistics:

- Motivation to Acquire a Foreign Language: The average score is $M=4.187$ with a standard deviation of $SD=0.629$. This suggests a prominent level of agreement among participants regarding their motivation to learn a foreign language.
- Knowledge Improvement: The average score is $M=4.027$ with a standard deviation of $SD=0.656$. Participants agree that their knowledge has improved.
- Skill Improvement: The average score is $M=3.980$ with a standard deviation of $SD=0.714$. Participants tend to agree that their skills have improved.
- Learning Experience: The average score is $M=3.807$ with a standard deviation of $SD=0.735$. Participants agree that their learning experience has been enhanced.

2. Correlation Analysis:

- *Research Secondary Hypotheses 1:* There is a significant positive relationship between motivation and knowledge improvement ($r=0.708$ $p<.01$). Higher motivation is associated with greater knowledge acquisition.
- *Research Secondary Hypotheses 2:* There is a significant positive relationship between motivation and skill improvement ($r=0.544$ $p<.01$). Higher motivation correlates with better skill development.
- *Research Secondary Hypotheses 3:* There is a significant positive relationship between motivation and the learning experience ($r=0.477$ $p<.01$). Increased motivation is linked to a better learning experience.

3. Impact of a Comprehensive, Context-Driven Methodology for Motivating Students to Learn Multiple Languages: The substantial increase in motivation for both languages following the implementation of the methodology demonstrates its effectiveness. The increase from 52% to 95% for English and from 31% to 63% for Arabic reflects a significant enhancement in students' enthusiasm and engagement with language learning.

Conclusions of the Pedagogical Experiment Results

- The research confirms that higher motivation to acquire a foreign language is positively related to improvements in knowledge, skills, and learning experiences. This highlights the essential role of motivation in enhancing language acquisition.
- The substantial increase in motivation levels among students at "Rupin" school demonstrates the effectiveness of the implemented methodology. The methodology successfully enhanced students' motivation to learn both English and Arabic, reflecting its practical impact on the learning environment.
- The study validates that a motivated learner is likely to experience better outcomes in terms of knowledge acquisition, skill development, and learning experiences. This underscores the importance of fostering motivation in educational settings to achieve optimal language learning results.
- The findings suggest that educational programs and methodologies designed to boost motivation can significantly improve language learning outcomes. Future research could explore additional strategies to further enhance motivation and its effects on language learning. The results of the pedagogical experiment show that that fostering motivation is essential for optimizing language learning. They confirm the effectiveness of the methodology used and suggest that continued efforts to enhance motivation will benefit both learners and educational outcomes.

3.4 Conclusions to Chapter 3

1. The interaction of multilingual education with social, political, and economic factors - bilingual education is closely tied to the political contexts of the region and the interests of the neoliberal global economy. The study found a connection between the social hierarchy of languages and its power. It turns out that in bilingual education efforts with political interests often outweighing the promotion of minority languages. In the same way, success in bilingual education is more likely when equal representation of language groups exists within a given region, aligning with favourable macro-level policies.
2. Multilingual education and the global neoliberal economy - communication is central to the functioning of the market; language, culture and identity are related to the emergence of niche markets, added value, and localization due to the globalization process. English, as the dominant language, is important in socio-cultural, political, economic, legal, and educational domains. However, there is widespread concern that a dominant language threatens the development of minority languages in bilingual and multilingual programs.
3. Increased global migrations threaten the minority groups, leading to the disruption of the modern connection between language and territory giving limited access to minority languages that may empower local communities.
4. Multilingual education and the state - in recent years, globalization has brought a new group of people known as transnational populations, including refugees and minority groups, who live across national borders. Schools operate in the shadow of the ideologies of the nation-state. We found that it is much easier to operate multilingual education programs when macro-societal language policy supports the efforts of local schools.
5. Families and communities in multilingual education - the inclusion of the language and cultural practices of students' communities into school curricula bridges the gap between home and school. The involvement of families in the education of their children is an object of self-empowerment for communities. Multilingual education has a key role in ensuring the use of languages to generate knowledge and learning. Bilingual education will not only be an instrument to "rescue" an endangered language and its speakers, but to expand understanding to the continuation of languages of powerful Western societies.
6. Resources for multilingual education - training bilingual (multilingual) teachers who understand the complexities of multilingualism if we want to succeed in multilingual education efforts. The role of the teacher may vary in diverse cultural and educational traditions, but the value of high-quality teacher education is universally recognized.

7. Resources for multilingual education: a program for multilingual education - the development of appropriate curricula and authentic teaching materials are factors related to economic interests. Although there are numerous multilingual programs at the elementary level, instructional materials become scarce at higher education levels, highlighting the need for expanded resources.
8. The research showed that there are reasons and consequences regarding the level of proficiency to be reached in each of the languages in the curriculum. Students and teachers need to interact to take advantage of the availability of both languages to enhance learning.
9. Literacy-related skills are imparted in languages as students progress through school, multilingual teaching strategies promote metalinguistic awareness, fostering literacy skills across languages.
10. Language translation as simple information of proficiency in both languages - as a scaffolding tool. Translation serves as a scaffolding strategy to support students when they struggle with the dominant classroom language. The scaffolding includes the use of an indicator, visual aids simplified explanations, and concrete examples to enhance comprehension.
11. The daily meeting - breaking through the cultural barrier – builds on the idea that broad cultural connections grew out of a daily meeting between people by using the common language in varying contexts of proficiency, Since 90% of the Arab society in Israel lives in Arab settlements daily interactions between language groups are extremely rare. This leads to the fact that not only the language itself is poor among the students and. Joint projects facilitate cross-cultural encounters, dismantling stereotypes, and prejudices. The language learners became multilingual and, in this way, developed a richer and more complex personality making them more receptive to new languages and culture.
12. The contemporary contexts of a multilingual educational policy and the weight of history - within the contemporary context of a multilingual educational policy, it is difficult to explain the model and content goals without reference historical context of nationalism and the rise of the nation-state. The Jewish-Arab conflict in Israel was acknowledged during this research as an ongoing factor influencing educational policy, particularly in the teaching of Arabic alongside Hebrew. However, the model was designed to resist political pressures and promote linguistic inclusion.
13. Multilingual education and Identity - Didactics and language ideologies embodied in classroom interactions projected a miniature society and influenced the identity options available to students. The various programs implemented in this study followed the

maintenance approach to multilingual education, which is fundamentally different from a transition approach, because its goal is to preserve the student's minority language, strengthen the student's sense of cultural and linguistic identity, and affirm personal and collective linguistic rights. The intercultural approach adopted by these programs aimed to promote positive personal development and enriching students' sense of identity.

GENERAL CONCLUSIONS AND RECOMMENDATIONS

This research addresses a current issue related to optimizing the multilingual education process for middle school students by enhancing their motivation to learn multiple languages simultaneously.

The study focused on analyzing the concept of multilingual education from various theoretical perspectives and conceptualizing it from a motivational standpoint.

A comprehensive, contextualized approach was established to motivate students to engage in simultaneous language learning, which was experimentally validated through the implementation of a specific methodology.

Based on the research aim and objectives, we present the following conclusions:

1. Theoretical analysis indicates that multilingual education has become a global standard, with an increasing number of citizens using two or more languages daily. This trend is particularly obvious in Europe, where students often study two or three languages simultaneously. The European Union's educational policies support this diversity through the "Strategy for Multilingualism", which promotes not only linguistic diversity but also the integration of languages in citizens' communication with governmental institutions.
2. Multilingual education integrates multiple languages into the learning process, fostering the development of educational policies, curricula, and teaching methods. It aims at the effective design of curricula and the adoption of teaching-learning-assessment methods to provide comprehensive multilingual education.
3. Psychopedagogical benchmarks, based on foundational theories and principles, provide functional guidelines for motivating students in multilingual learning. Understanding the cognitive, emotional, and social dimensions of education is essential for developing personalized teaching strategies that promote engagement and well-being. Effective didactic approaches include comparative-historical, audio-lingual, and communicative methods, in addition to grammar-translation strategies and motivational theories. These benchmarks emphasize a balanced approach that integrates both intrinsic and extrinsic motivation, cognitive processes, and diverse teaching strategies, offering a comprehensive framework to foster effective language acquisition by addressing both theoretical and practical aspects of motivation.
4. Integrating language learning with cognitive development, especially through content-based approaches, is particularly valuable in settings with limited language exposure, and the "linguistic landscape" concept highlights the broader socio-cultural role of language in

public spaces. Multilingualism fosters metalinguistic awareness, enhancing learners' adaptability in acquiring new languages.

5. The shift toward qualitative, motivation-centered assessments emphasizes the teacher's role in creating supportive, identity-building environments, making language learning transformative for students.
6. According to the established theoretical framework, we developed a methodology for motivating students to learn several languages simultaneously, applied in a pedagogical experiment. The use of this methodology has led to a significant increase in motivation for language learning, from 52% to 95% for English and from 31% to 63% for Arabic, reflecting the enthusiasm and involvement of the students at the "Rupin" School in Israel.
7. The theoretical and applied outcomes of this research affirm that fostering multilingual motivation is a complex process requiring both strong student commitment and coordinated educator support. This support entails adaptability and flexibility in various learning contexts, as well as educators' dedication to their own professional development.
8. In Israeli schools, teachers are evaluated based on students' standardized test results in the dominant language. Multilingual education faces significant ideological challenges, making it difficult to gain support from communities, families, educators, and even students when assessments are monolingual. Adopting independent assessment methods would help students reflect on their progress, align achievements with personal goals, and foster self-awareness alongside established objectives.
9. In research conducted in Chişinău, Moldova, it was observed that Moldovan students are motivated and employ effective strategies for learning foreign languages. The official language is Romanian, with Russian also widely spoken due to historical factors. Students learn English, Hebrew (in Jewish schools), Russian, and Romanian, which provides a substantial advantage in language acquisition.
10. The study addresses the scientific problem of motivating middle school students for multilingual education by resolving the contradiction between the need for multilingual skills and low student motivation, achieved through psychopedagogical and methodological strategies focused on motivation.
11. The hypothesis was confirmed: a complex, contextualized approach to motivating students in simultaneous multilingual learning positively influenced their motivation and strengthened the broader multilingual education framework.

Based on the results obtained in the research, we suggest recommendations in the following areas:

Dimension of Continuous Teacher Training:

- Ensuring continuous professional development for teachers to enhance the knowledge and skills necessary for adopting strategies to support and motivate students in learning multiple languages in schools in Israel;
- Implementing a mentoring process for novice teachers, supported by experienced colleagues, as well as promoting interaction and the sharing of best practices among teachers through technological and digital means. For example, creating an e-guide of best practices based on teachers' previous experiences, which would include activities designed to facilitate the simultaneous learning of multiple languages;

The Processual Dimension of Student Motivation in Learning Multiple Languages:

- Constantly reviewing and adapting strategies for supporting and motivating students based on their feedback and learning needs;
- Implementing teaching methods to develop standardized learning at three levels: basic, intermediate, and advanced, in accordance with the four skills: speaking, listening, reading, and writing;
- Minimizing the use of translation to primarily develop speaking skills;
- Implementing teaching methods that use natural language;
- Developing common grammatical terminology as a prerequisite for learning multiple languages;
- Linguistic knowledge should be assessed not only through monolingual activities but also through linguistic dialogue and continuous feedback to enhance students' learning;
- Promoting multiculturalism in language teaching by exploring the culture of the language speakers and integrating the foreign language into other subject areas;
- Encouraging individual study and stimulating learning through projects that make lessons more engaging;
- Collaborating with native teachers for a more efficient and enjoyable learning experience;
- Developing textbooks, training brochures, presentations, and digital software for multilingual education in general and for learning multiple languages in particular;
- Utilizing technology in online teaching and learning to create a “democratic” relationship between teachers and students, including the use of artificial intelligence as a support tool for personalized teaching;

The Dimension of Assessing Student Motivation:

- Student motivation for learning multiple languages should be assessed continuously, considering factors such as the absence of stereotypes related to language and its speakers, interest-based learning, the learning context, and the recognition of language importance for personal development.
- Additionally, enthusiasm, autonomy, and creativity should be monitored, along with the impact of multilingual education on students' personal and professional outcomes;
- It is recommended to develop questionnaires to explore students' attitudes towards multilingual education and their support for it, as well as to involve students in the planning, organization, execution, and evaluation of activities dedicated to foreign language learning;

The Dimension of Diversifying the Learning Process:

- Diversifying the learning process by introducing engaging extracurricular activities, such as language clubs, film sessions, or literary readings, aimed at fostering students' interest in foreign languages and providing them with opportunities to apply the knowledge acquired in practice;

The Dimension of Interpersonal Relationships:

- Creating an educational climate favorable to learning multiple languages by supporting interpersonal cooperation in the classroom, developing social skills, and promoting a constructive and inclusive learning environment;
- Utilizing intergenerational study groups and extracurricular activities through which students can interact and develop the social skills necessary for integration into society;

The Dimension of Community and Parental Involvement:

- Close collaboration between teachers, parents, and the local community to promote multilingual education, through organizing parent meetings, debates, and discussions that emphasize the benefits of this education, as well as through training courses for parents designed to provide them with the necessary tools to support their children;

The Dimension of Research in Educational Sciences and Suggestions for Future Research:

- Expanding the approaches to developing motivation for learning multiple languages among students at all educational levels, across various educational contexts, including remote-learning;
- Conducting longitudinal studies to determine the long-term impact of the methodology on student motivation for learning multiple languages and their progress;
- Developing and publishing methodological guides on motivating students to learn multiple languages;

- Investigating how external factors, such as political crises, wars, or economic instability, affect students' motivation to learn a foreign language;
- Evaluating teachers from diverse cultural backgrounds in relation to the effectiveness of the methodology and its impact on student motivation.

Considering the complexity of the multilingual education process in general, and student motivation in learning multiple languages in particular, our research presents certain *limitations*:

- It is important to mention the influence of current political and economic events worldwide, especially in the context of the political crisis;
- There are limitations related to the attitudes of teachers in other subjects towards multilingual education, their resistance to change, and, consequently, insufficient involvement;
- Another challenge is ensuring that multilingual teaching is culturally appropriate, particularly when teachers do not share the same cultural background as their students.

BIBLIOGRAPHY

English:

1. ABDALLA, M. *Arabic immersion and summer programs in the United States*. In: *Handbook for Arabic Language Teaching Professionals in the 21st Century (1st ed.)* [online]. New York: Routledge. 2006, pp. 317-330. ISBN: 9780203824757. DOI: <https://doi.org/10.4324/9780203824757>
2. ABEDI, J. The no child left behind act and English language learners: Assessment and accountability issues. In: *Educational Researcher*. American Educational Research Association. 2004, vol. 33, no. 1, pp. 4-14. ISSN: 0013189X.
3. ABU-RABIA, S. Multicultural and Problematic Social Contexts and Their Contribution to L2 Learning. In: *Language Culture and Curriculum* [online]. 1995, vol 8(2), pp. 183-199. ISSN: 1747-7573. Disponible: <https://doi.org/10.1080/07908319509525202>.
4. ALANEN, R., DUFVA, H., MÄNTYLÄ, K., PÄÄKKÖNEN, M., SAARELA, S., SAJAVAARA, K. *Children's Metalinguistic Awareness in L1 and L2: A Sociocognitive Perspective*. In: *Multiple Languages - multiple perspectives: texts on Language teaching and linguistic research*. Soveltavan kielentutkimuksen keskus, jakaja, 1999. vol. 57, pp. 218-227 .ISBN: 951-9388-45-1
5. ALDERSON, J.C. *Assessing Reading*. Cambridge University Press, 2000. ISBN: 978-0-511-7360-7 Available on:
Disponible: [https://books.google.co.il/books?hl=iw&lr=&id=XrhcbBr9gLwC&oi=fnd&pg=PP1&dq=.+Alderson,+J.C.+\(2000\)+Assessing+Reading.+Cambridge+Language+Assessment+Series+\(eds.+J.C.+Alderson+and+L.F.+Bachman\).+Cambridge,+CUP.&ots=KLSQhpQY6A&sig=Na3mOLj5JU02ucimZGnwQiWdSY&redir_esc=y#v=onepage&q&f=false](https://books.google.co.il/books?hl=iw&lr=&id=XrhcbBr9gLwC&oi=fnd&pg=PP1&dq=.+Alderson,+J.C.+(2000)+Assessing+Reading.+Cambridge+Language+Assessment+Series+(eds.+J.C.+Alderson+and+L.F.+Bachman).+Cambridge,+CUP.&ots=KLSQhpQY6A&sig=Na3mOLj5JU02ucimZGnwQiWdSY&redir_esc=y#v=onepage&q&f=false)
6. ALHEBAISHI, S.M. Investigating the use of L1 in L2 classrooms: An action research project in teaching practicum. In: *International Journal of English Language Teaching* [online]. 2017, vol 5(4), pp.18-25. ISSN: 2055-0839. DOI: <https://doi.org/10.37745/ijelt.13>
7. AMES, C.A. *Motivation - What teachers need to know*, In: *Teachers College Records*. Columbia University, 1990, vol. 91, no. 3, pp. 409-421. ISBN: 978-663-87-589-6
8. ANGEL M.Y., L. Conceptualizing the potential role of L1 in CLIL. In: *Language, Culture and Curriculum* [online]. Taylor & Francis, 2015. vol. 28(1), pp. 74-89. ISSN: 1747-7573. DOI: [10.1080/07908318.2014.1000926](https://doi.org/10.1080/07908318.2014.1000926)
9. ANTONOVSKY, A. *Research methods in education*. Israel: The Open University, 2012. ISBN: 978-9812-92-754-7.

10. ASHTON, Michael C., VERNON, Philip A., VISSER, Beth A. Beyond g: Putting multiple intelligences theory to the test. In: *Intelligence* [online]. Elsevier, 2006. vol. 34(5), pp. 487-502. ISSN: 1873-7935. DOI: <https://doi.org/10.1016/j.intell.2006.02.004>
11. ASSOR, A. Autonomous moral motivation: Consequences, socializing antecedents, and the unique role of integrated moral principles. In: *The social psychology of morality: Exploring the causes of good and evil*, American Psychological Association [online]. 2012. pp. 239–255. ISBN: 978-1-4338-1011-4. DOI: <https://doi.org/10.1037/13091-013>
12. ARAR, Khalid and ABRAMOVITZ, Ruth. Teacher-related factors in assimilation of technological change in schools: The case of an Arab school in Israel. In: *International Journal of Educational Management* [online]. Emerald publishing, 2017. vol. 31(6), pp. 766-779. ISSN: 0951-354X. DOI: [10.1108/IJEM-03-2016-0057](https://doi.org/10.1108/IJEM-03-2016-0057)
13. ARNOLD, Gordon Frederick and O'CONNOR, Joseph Desmond. *Intonation of Colloquial English (2nd ed.)*. London, Longman, 1973. ISBN: 978-0582523890. Disponible: <https://www.slideshare.net/slideshow/longman-intonation-of-colloquial-english/49124431>
14. BACHMAN, L.F. *Fundamental considerations in language testing*. Oxford, OUP, 1990. ISBN: 0194370038. Available on: [https://books.google.co.il/books?hl=iw&lr=&id=5_KJCfkWgqcC&oi=fnd&pg=PR8&dq=Bachman,+L.F.+\(1990\)+Fundamental+considerations+in+language+testing.+Oxford,+OUP.&ots=WLgFcPNve_&sig=oucUkhUEoEstOmWcrtW2hzmO3fY&redir_esc=y#v=onepage&q&f=false](https://books.google.co.il/books?hl=iw&lr=&id=5_KJCfkWgqcC&oi=fnd&pg=PR8&dq=Bachman,+L.F.+(1990)+Fundamental+considerations+in+language+testing.+Oxford,+OUP.&ots=WLgFcPNve_&sig=oucUkhUEoEstOmWcrtW2hzmO3fY&redir_esc=y#v=onepage&q&f=false)
15. BALLMAN, T.L. Enhancing Beginning Language Courses Through Content Enriched Instruction. In: *Foreign Language Annals (ACTFL)* [online]. Wiley, 1997, vol 30(2), pp. 173-186. ISSN: 1944-9720. Available on: <https://doi.org/10.1111/j.1944-9720.1997.tb02340.x>
16. BARAK, M. Transition from traditional to ICT-enhanced learning environments in undergraduate chemistry courses. In: *Computers & Education* [online]. Elsevier Ltd., 2007. Vol. 48(1), pp. 30-43. ISSN: 0360-1315. DOI: [10.1016/j.compedu.2004.11.004](https://doi.org/10.1016/j.compedu.2004.11.004)
17. BENATI, Alessandro G. and VANPATTEN, Bill. *Key Terms in Second Language Acquisition*. London: Bloomsbury Publishing, 2010. ISBN: 9781474227506.
18. BIALYSTOK, E., CRAIK, F.I., KLEIN, R., VISWANATHAN, M. Bilingualism, aging, and cognitive control: Evidence from the Simon task. In: *Psychology and Aging* [online]. 2004, vol 19(2), pp. 290-303. ISSN: 0882-7974. DOI: <https://doi.org/10.1037/0882-7974.19.2.290>
19. BIRKELBACH, D., DAWSON, B., HOFFMAN, B.J., LANCE, C.E. Method Effects, Measurement Error, and Substantive Conclusions, In: *Organizational Research Methods*.

- Israel Academy of Sciences and Humanities* [online]. ©2010. Vol. 13, pp. 435-455. Available on: <https://education.academy.ac.il/>
20. BLOOM, B.S. *Human characteristics and school learning*, 1976. New York: McGraw-Hill. Available on: <https://psycnet.apa.org/record/1977-22073-000>
 21. BROEDER, Peter, EXTRA, G., VAN HOUT, R. Processes in the developing lexicon of adult immigrant learners. In: *AILA Review*. Tilburg University, 1988. Vol. 6, pp. 86-109. Available on: <https://pure.uvt.nl/ws/portalfiles/portal/759192/PROCESSE.PDF>
 22. BROWN, Chery and HATCH, Evelyn. *Vocabulary, semantics, and language education*. USA: Cambridge, CUP. 2017. ISBN: 521-47942-8
 23. BYRAM, M. *Teaching and Assessing Intercultural Communicative Competence: Revisited*. Clevedon, Multilingual Matters, 1997. ISBN: 9781800410237
 24. CANAGARAJAH, A.S. Resisting linguistic imperialism in English teaching. In: *ELT Journal* [online]. Oxford: Oxford University Press, 2002. vol 56(3), pp. 330–333. ISSN 0951-0893. Available on: <https://doi.org/10.1093/elt/56.3.330>
 25. CARRIERE, Jonathan S. A., CHEYNE, James Allan, SMILEK, Daniel. Absent-mindedness: Lapses of conscious awareness and everyday cognitive failures. In: *Consciousness and cognition* [online]. Canada: University of Waterloo, 2006. 15(3), pp. 578-592. ISSN: 978-9841-86-235-1. Available on: http://oops.uwaterloo.ca/publish/yccog_798.pdf
 26. CENOZ, Jasone and VALENCIA, Jose F. Additive trilingualism: Evidence from the Basque Country. In: *Applied Psycholinguistics* [online]. Cambridge University Press. 1994, vol 15(2), pp.195-207. ISSN: 1469-1817. DOI: <https://doi.org/10.1017/S0142716400005324>
 27. CENOZ, J. *Multilingual Education in the Basque Country* In: *Beyond Bilingualism: Multilingualism and Multilingual Education*. Clevedon: Multilingual Matters Limited . 1998, vol 3(8), pp. 175-191. ISBN: 9781853594205
 28. CENOZ, Jasone and GENESEE, Fred. *Beyond Bilingualism: Multilingualism and Multilingual Education*. Clevedon: Multilingual Matters, 1998. pp. 243-258. ISBN: 9781853594205
 29. CENOZ, J. The Additive Effect of Bilingualism on Third Language Acquisition: A Review. In: *International Journal of Bilingualism* [online]. Netherlands: SAGE Journals, 2003, vol 7(1), pp. 71-87. Available on: <https://doi.org/10.1177/13670069030070010501>

30. CENOZ, Jasone and GORTER, Durk. Linguistic landscape and minority languages. In: *International Journal of Multilingualism* [online]. 2006, vol 3(1), pp. 67-80. ISSN: 1747-7530. DOI: [10.1080/14790710608668386](https://doi.org/10.1080/14790710608668386)
31. CENOZ, J. Defining multilingualism. In: *Annual Review of Applied Linguistics* [online]. Cambridge University Press, 2013. vol 33, pp. 3-18. Available on: <https://doi.org/10.1017/S026719051300007X>
32. CENOZ, Jasone, EGAÑA, Elizabet Arocena, GORTER, Durk. Teachers' beliefs in multilingual education in the Basque country and in Friesland. In: *Journal of Immersion and Content-Based Language Education* [online]. John Benjamins Publishing, 2015. vol. 3, no. 2, pp. 169-193. ISSN: 2212-8433. DOI: [10.1075/jicb.3.2.01aro](https://doi.org/10.1075/jicb.3.2.01aro)
33. CENOZ, Jasone and GORTER, Durk. Minority languages and sustainable translanguaging: Threat or opportunity? In: *Journal of Multilingual and Multicultural Development* [online]. 2017, vol 38(10), pp. 901-912. ISSN: 1747-7557. Available on: <https://doi.org/10.1080/01434632.2017.1284855>
34. CENOZ, Jasone and GORTER, Durk. *Translanguaging as a pedagogical tool in multilingual education*. In: *Language Awareness and Multilingualism. Encyclopaedia of Language and Education (3rd ed.)* [online]. Springer, 2017, pp. 309–321. ISBN: 978-3-319-02240-6. Available on: https://doi.org/10.1007/978-3-319-02240-6_20
35. CHAN, Swee Heng, RAOOFI, Saeid, TAN, Bee Hoon. Self-Efficacy in Second/Foreign Language Learning Contexts. In: *English Language Teaching* [online]. Canadian Centre of Science and Education, 2012. vol. 5(11), pp. 60-73. ISSN: 1916-4750 DOI: <http://dx.doi.org/10.5539/elt.v5n11p60>
36. CHOMSKY, N. *Aspects of the Theory of Syntax*. Cambridge, Massachusetts: The M.I.T Press, 1965. ISBN: 9780262530071
37. *Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions- Multilingualism: an asset for Europe and a shared commitment*. European Commission. Brussels, 2008. Available at: [COM\(2008\) 566 final](#) of 18 Sep. 2008.
38. CIRILA, P., JANA, K., MELITA, P.L., MILENA, V.Z., SONJA, P. Students' Social Behaviour in Relation to their Academic Achievement in Primary and Secondary School: Teacher's Perspective. In: *Psychological Topics* [online]. Croatia: University of Rijeka, 2019. vol. 18(1), pp. 55-74. ISSN: 1849-0395 Available on: https://www.researchgate.net/publication/277730063_Students'_Social_Behaviour_in_Relation_to_their_Academic_Achievement_in_Primary_and_Secondary_School:_Teacher's_Perspective

tion to their Academic Achievement in Primary and Secondary School Teacher's Perspective

39. CLARK, J.L. Curriculum Renewal in School Foreign Language Learning. In: *Australian Review of Applied Linguistics* [online]. Oxford, OUP, Jan 1986. vol. 9, no. 1, pp. 14 – 42. ISSN: 0155-0640. DOI: <https://doi.org/10.1075/ara1.9.1.02cla>
40. COLLINS, L., HALTER, R. H., LIGHTBOWN, P. M., SPADA, N. Time and the Distribution of Time in L2 Instruction. *TESOL Quarterly* [online]. 1999, vol. 33, no. 4, pp. 655-680. ISSN: 00398322. DOI: [10.2307/3587881](https://doi.org/10.2307/3587881)
41. COOK, V. Going beyond the native speaker in language teaching. *TESOL Quarterly* [online]. 1999, vol. 33, no. 2, pp. 185-209. ISSN: 00398322. DOI: [10.2307/3587717](https://doi.org/10.2307/3587717)
42. CORBIN, Juliet M. and STRAUSS, Anselm L. *Basics of qualitative research: Techniques and procedures for developing grounded theory (3rd ed.)*. Thousand Oaks, California: SAGE [online]. 2008. ISBN: 9781452230153. DOI: <https://doi.org/10.4135/9781452230153>
43. CRABBE, D. The Quality of Language Learning Opportunities. *TESOL Quarterly* [online]. 2003, vol. 37, no. 1, pp. 9-34. ISSN: 00398322. DOI: [10.2307/3588464](https://doi.org/10.2307/3588464)
44. CRUTTENDEN, A. *Intonation*. Cambridge, 1986. ISBN: 0-521-59182-1 Available on: [https://books.google.co.il/books?hl=iw&lr=&id=wfxRzq74X2YC&oi=fnd&pg=PR11&dq=Cruttenden,+A.+\(1986\)+Intonation.+Cambridge,+CUP-&ots=ooU4G-_5o2&sig=_njIj0ItaU4nyYJGdNOruhOBjZ8&redir_esc=y#v=onepage&q&f=false](https://books.google.co.il/books?hl=iw&lr=&id=wfxRzq74X2YC&oi=fnd&pg=PR11&dq=Cruttenden,+A.+(1986)+Intonation.+Cambridge,+CUP-&ots=ooU4G-_5o2&sig=_njIj0ItaU4nyYJGdNOruhOBjZ8&redir_esc=y#v=onepage&q&f=false)
45. CUMMINS, J. A proposal for action: Strategies for recognizing heritage language competence as a learning resource within the mainstream classroom. In: *Modern Language Journal* [online]. Wiley, 2005. vol. 89(4), pp. 585-592. ISSN: 00267902. Available at: <https://www.jstor.org/stable/3588628>
46. CUMMINS, J. Rethinking monolingual instructional strategies in multilingual classrooms. In: *Canadian Journal of Applied Linguistics* [online]. 2007, vol. 10, pp. 221-240. ISSN: 1920-1818. Available on: <https://journals.lib.unb.ca/index.php/CJAL/article/view/19743>
47. CUMMINS, J. Teaching for transfer in multilingual school contexts. In: *Encyclopaedia of Language and Education (3rd ed.)* [online]. Springer, 2017. pp. 103-115. ISBN: 978-3-319-02258-1. DOI: [10.1007/978-3-319-02258-1_8](https://doi.org/10.1007/978-3-319-02258-1_8)
48. DANNENBERG, J. *The linguistic revolution and its impact*. Israel: Oranim College, 2011. ISBN: 978-9833-02-257-4
49. DARII, L., GÎNCU, I., GORAS-POSTICA, V., [et al.]. *Intercultural Education: Methodological guide and course support for future teachers*; Moldova State Univ. –

Chişinău: CE “Pro Didactica”, Tipogr. “Bons Offices”, 2020. pp.30-54, pp.64-74; pp. 117 - 128. ISBN 978-9975-3013-2-9

50. DECI, Edward L. and RYAN, Richard M. A motivational approach to self: Integration in personality. In: *R. Dienstbier (Ed.), Nebraska symposium on motivation: Vol. 38. Perspectives on motivation*. Lincoln, NE: University of Nebraska Press, 1991. pp. 237–288. ISSN: 978-7761-52-678-9
51. DECI, Edward L. and RYAN, Richard M. *Optimizing students' motivation in the era of testing and pressure: A self-determination theory perspective*. Singapore: Building autonomous learners, 2016. pp. 9-29. ISBN: 978-9812-87-629-4
52. DONATO, Richard and TUCKER, G. Richard. *Implementing a district-wide foreign language program: A case study of acquisition, planning, and curricular innovation* [online]. Eric Digest, 2001. Available on: <https://files.eric.ed.gov/fulltext/ED456673.pdf>
53. DÖRNYEI, Z. Motivation and motivating in the foreign language classroom. In: *The modern language journal* [online]. Wiley, 1994. vol. 78(3), pp. 273-284. ISSN: 00267902 DOI: <https://doi.org/10.2307/330107>
54. DOUGLAS, D. *Assessing Languages for Specific Purposes*. Cambridge University Press. 2000. ISBN: 9780521584951 Available on: https://books.google.co.il/books?id=exfxgbsRn1gC&printsec=frontcover&hl=iw&source=gbs_ge_summary_r&cad=0#v=onepage&q&f=false
55. DUBINER, D. The Impact of Incipient Trilinguality on the Socio-Affective Development of Jewish Elementary School Children in Israel. In: *The Journal of Multilingual and Multicultural Development* [online]. 2010, 31(1), pp. 1-12. Available on: <https://doi.org/10.1080/01434630903367215>
56. DUBINER, D. *The necessary conditions needed for successful second learning acquisition and teaching*. Israel: The Israel Academy of Sciences and Humanities of the Ministry of Education, 2012. ISBN: 978-3-319-02257-4
57. DUPUY, B. C. Content-based instruction: Can it help ease the transition from beginning to advanced foreign language classes? In: *Foreign Language Annals (ACTFL)* [online]. Wiley, 2000. vol. 33, no. 2, pp. 205- 223. ISSN: 1944-9720. DOI: [10.1111/j.1944-9720.2000.tb00913.x](https://doi.org/10.1111/j.1944-9720.2000.tb00913.x)
58. ECCLES, Jacquelynne S., SCHIEFELEF, Ulrich, WIGFIELD, Allan. Motivation to succeed. In: *W. Damon & N. Eisenberg (Ed.), Handbook of child psychology: Social, emotional, and personality development*. New York: John Wiley & Sons, Inc ,1998. pp. 1017–1095. ISSN: 978-3-316-85556-6

59. ECCLES, Jacquelynne S. and ROESER, Robert W. Schools, academic motivation, and Stage-Environment fit. In: *Individual bases of adolescent development (3rd Ed.)* [online]. Hoboken, NJ: Wiley, 2009. pp. 404–434. ISBN: 9780470479193. DOI: <https://doi.org/10.1002/9780470479193.adlpsy001013>
60. EUNJU, L. The Relationship of Motivation and Flow Experience to Academic Procrastination in University Students. In: *Research and Theory on Human Development* South Korea: School of Humanities and Social Sciences Halla University, 2005. 166(1), pp. 5-15. ISSN: 978-3-520-00587-8
61. FRY, D.B. *Homo Loquens: Man as a Talking Animal*. Cambridge CUP, 1977. ISBN: 9780521217057.
62. GARDNER, Robert C. and MACINTYRE, Peter D. A student's contribution to second language acquisition. Part I: cognitive variables. In: *Language Teaching* [online]. Cambridge University Press, 1992. vol. 25(4). DOI: [10.1017/S026144480000700X](https://doi.org/10.1017/S026144480000700X)
63. GARDNER, Robert C. and MACINTYRE, Peter D. A student's contribution to second language acquisition. Part II: Affective variables. In: *Language Teaching* [online]. Cambridge University Press, 1993. vol. 26(1), pp. 1-11. DOI: [10.1017/S0261444800000045](https://doi.org/10.1017/S0261444800000045)
64. GARDNER, R. C. Integrative Motivation: Past, Present and Future. In: *Temple University Japan, Distinguished Lecturer Series*, Tokyo, February 17, 2001; Osaka, February 24, 2001.
65. GASS, S. Input, interaction, and second language production. In: *Studies in Second Language Acquisition* [online]. Cambridge University Press, 1994. vol. 16, no. 3. ISSN: 1470-1545. DOI: [10.1017/S0272263100013097](https://doi.org/10.1017/S0272263100013097)
66. GENESEE, F. *A Case Study of Multilingual Education in Canada*. In: *Beyond Bilingualism: Multilingualism and Multilingual Education*. Clevedon: Multilingual Matters Limited .1998, vol 3(11), pp. 243-258. ISBN: 9781853594205
67. GLISAN, Eileen. W. and DONATO, Richard. It's Not “Just a Matter of Time:” A Response to Rifkin. In: *Foreign Language Annals (ACTFL)* [online]. Wiley, 2004. vol. 37(3), pp. 470–476. ISSN:1944-9720. DOI: [10.1111/j.1944-9720.2004.tb02704.x](https://doi.org/10.1111/j.1944-9720.2004.tb02704.x)
68. GLUZMAN, T., MUCHNIK, M., NIZNIK, M., TEFERRA, A. *Elective language study and policy in Israel*. Springer International Publishing, 2016. ISBN: 978-3-319-81661-6
69. GOETZ, T., HAAG, L., HALL, N., PEKRUN, R. Academic emotions from a social-cognitive perspective: antecedents and domain specificity of students' affect in the context of Latin instruction. In: *Educational psychology* [online]. The British Psychological

Society, 2006. vol. 76(2), pp. 289-308. ISSN: 2044-8279. DOI: [10.1348/000709905X42860](https://doi.org/10.1348/000709905X42860)

70. GOODMAN, K. S. Whole-Language Research: Foundations and Development. In: *The Elementary School Journal* [online]. The University of Chicago Press, 1989. vol. 90, no. 2. pp. 207-221. ISSN: 00135984. Available on: <http://www.jstor.org/stable/1002030>
71. GRAUBERG, W. *The elements of foreign language teaching*. 1997. Clevedon, Multilingual Matters. ISBN: 9781853593864
72. GREEN, Jasmine, MARSH, Herbert W., MARTIN, Andrew J. Motivation and engagement in English, mathematics, and science high school subjects: Towards an understanding of multidimensional domain specificity. In: *Learning and Individual Differences* [online] 2007. pp. 279–269. Available on: <https://doi.org/10.1016/j.lindif.2006.12.003>
73. GRICE, H.P. Logic, and conversation. In: *Speech acts*. New York, Academic Press, 1975. pp. 41-58. ISBN: 0127854231. Available on: <https://www.ucl.ac.uk/lis/studypacks/Grice-Logic.pdf>
74. GUMPERZ, J.J. *Language in social groups*. Stamford, Stamford University Press, 1971. ISBN: 978-0804707985
75. GUZMÁN VALERIO, Luis Alejandro, MENKEN, Kate, PÉREZ ROSARIO, Vanessa. Increasing multilingualism in schools capes: New scenery and language education policies. In: *Linguistic Landscape* [online]. John Benjamins Publishing Company, 2018. vol. 4(2), pp. 101-127. ISSN: 2214-9953. DOI: <https://doi.org/10.1075/ll.17024.men>
76. FIRTH, J.R. The Tongues of Men and Speech. In: *Foundations of Language* [online]. London, Oxford University Press, 1964. vol. 4, no. 1, pp. 84–86. ISSN: 0015900X. Disponible: <http://www.jstor.org/stable/25000319>
77. HAIM, O. Investigating transfer of academic proficiency among trilingual immigrant students: A holistic Tri-Directional approach. In: *The Modern Language Journal* [online]. Wiley, 2015. vol. 99(4), pp. 696- 717. ISSN: 1540-4781. DOI: <https://doi.org/10.1111/modl.12278>
78. HAMIDI, Hadi, MAFTOON, Parviz, SAREM, Saeid Najafi. A Closer Look at Different Aspects of Language Teaching/ Learning and Learner Identity. In: *Theory & Practice in Language Studies* [online]. ACADEMY PUBLISHER Manufactured in Finland, 2012. Vol. 2, No. 6, pp. 1160-1167. ISSN: 1799-2591. Available on: <https://www.academypublication.com/issues/past/tpls/vol02/06/10.pdf>

79. HARGREAVES, David J., NORTH, Adrian C., TARRANT, Mark. English and American adolescents' reasons for listening to music. In: *Psychology of Music* [online]. 2000, vol. 28(2), pp. 166-173 ISSN: 1741-3087. DOI: <https://doi.org/10.1177/0305735600282005>
80. HART, D., LAPKIN, S., SWAIN, M., TURNBULL, M. Time on task and immersion graduates' French proficiency. In: *French second language education in Canada: Empirical studies* [online]. Toronto: University of Toronto Press, 1998. pp. 31-55. Available on: https://www.researchgate.net/profile/Merrill-Swain/publication/252541065_Time_on_Task_and_Immersion_Graduates%27_French_Proficiency/links/00b7d53beaf2dd5886000000/Time-on-Task-and-Immersion-Graduates-French-Proficiency.pdf
81. HAWKINS, E.W. *Awareness of language: An introduction*. Cambridge, CUP, 1987. ISBN: 978-0521337625
82. HILL, J. *Using Literature in Language Teaching* [online]. London, Macmillan Education, 1986. ISBN: 978-0333423899.
83. HOLEC, H. *Autonomy and Foreign Language Learning* [online]. ERIC, 1982. ISBN: ISBN-0-08025-357-1. Available on: <https://eric.ed.gov/?id=ed192557>
84. JOHNSON, Helen and JOHNSON, Keith. *Encyclopaedic dictionary of applied linguistics*. Oxford, Blackwells, 1997. ISBN: 9780631214823 Available on: <https://citeseerx.ist.psu.edu/document?repid=rep1&type=pdf&doi=a6ef93fd65410a32a26a217fddde76e539d0a5ab>
85. JONES, K. *Simulations in language teaching*. Cambridge, CUP, 1982. ISBN: 978-0521270458.
86. KELLER, J.M. Motivational design of instruction. In: *C.M. Reiguluth (ed), Instructional design theories and Models: An Overview of their Current status*. Hillsdale, New Jersey: Lawrence Erlbaum, 1983. pp. 383-434. ISSN: 978-3-319-5539-4
87. KEMBOJA, Ismail, SUPYAN, Hussin, ZAINI, Amir. Blogs in Language Learning: Maximizing Students' Collaborative Writing. In: *Procedia - Social and Behavioural Sciences* [online]. Elsevier, 2011, vol. 18, pp. 537-543. ISSN: 1877-0428. DOI: <https://doi.org/10.1016/j.sbspro.2011.05.079>
88. KNUTSON, E.M. Cross-cultural awareness for second/ foreign language learners. In: *Canadian modern language review* [online]. UTP Journals, 2006. vol. 62(4), pp. 591-610. ISSN: 1710-1131 DOI: [10.3138/cmlr.62.4.591](https://doi.org/10.3138/cmlr.62.4.591)

89. KODA, K. *Insights into Second Language Reading: A Cross-Linguistic Approach* [online]. Cambridge University Press, UK, 2005. ISBN: 9781139524841. DOI: <https://doi.org/10.1017/CBO9781139524841>
90. KRAMSCH, C. *Context and Culture in Language Teaching* [online]. Oxford University Press, 1993. ISBN: 9780194371872. Available on: https://books.google.co.il/books?id=73rFnM6qlrwC&printsec=frontcover&hl=iw&source=gbs_ge_summary_r&cad=0#v=onepage&q&f=false
91. KRAMSCH, C. Second language acquisition, applied linguistics, and the teaching of multiple languages. In: *The Modern Language Journal* [online]. Wiley, 2000. vol. 84 (3), pp. 311-326. ISSN: 1540-4781. DOI: <https://doi.org/10.1111/0026-7902.00071>
92. KRASHEN, S.D. *The Input Hypothesis: Issues and Implications*. Addison-Wesley Longman Ltd., 1985. ISBN: 9780582553811
93. KRASHEN, S.D. *Principles and Practice in Second Language Acquisition* [online]. Pergamon Press Inc, 1982. ISBN 0-08-028628-3. Available on: https://www.sdkrashen.com/content/books/principles_and_practice.pdf
94. KUZNETSOVA, E., LEAVER, B.L., LORD, N., OVTCHARENKO, E., SHEKHTMAN, B. *Developing professional-level oral proficiency: the Shekhtman Method of Communicative Teaching*. In: *Developing professional-level language proficiency* [online]. Cambridge: Cambridge University Press, 2002. pp. 119-140. ISBN: 9780511606465. DOI: <https://doi.org/10.1017/CBO9780511606465.007>
95. LADO, R. *Language testing: the construction and use of foreign tests*. London, Longman, 1961. ISBN: 9780582525344
96. LAMBERT, W. E. *Bilingual Education of Children; the St. Lambert Experiment*. Newbury House Publishers (1 Ed.), 1972. ISBN: 978-0912066080
97. LARSEN-FREEMAN, D. *Techniques and Principles in Language Teaching (2nd Ed.)*. Oxford: Oxford University Press, 2000. ASIN: B004RXJ03O
98. LAVI, Z. *Is education possible in the age of postmodernism?* Ra'anana, Israel: Poalim Library, 2000. ISBN: 990-0200-694-3020-517-1
99. LEVIN, Tamar and SHOHAMY, Elana. Achievement of immigrant students in mathematics and academic Hebrew in Israeli school: A large-scale evaluation study. In: *Studies in Educational Evaluation* [online]. Tel Aviv University, Israel, 2008. vol. 34(1), pp. 1-14. ISSN: 1879-2529. DOI: <https://doi.org/10.1016/j.stueduc.2008.01.001>

100. LITTLEWOOD, William, and YU, Baohua. First language and target language in the foreign language classroom. In: *Language Teaching* [online]. Cambridge University Press, 2009. vol. 44(1), pp. 64-77. ISSN:1475-3049. DOI: [10.1017/S0261444809990310](https://doi.org/10.1017/S0261444809990310)
101. LONG, M. The Role of the Linguistic Environment in Second Language Acquisition. In: *W. Ritchie and T. Bhatia (Eds.), Handbook of Second Language Acquisition*. San Diego: Academic Press, 1996. pp. 413-468. DOI: [10.1016/B978-012589042-7/50015-3](https://doi.org/10.1016/B978-012589042-7/50015-3)
102. MACLELLAN, E. Academic achievement: The role of praise in motivating students. In: *Active Learning in Higher* [online]. SAGA, 2005. vol. 6, nr. 3. ISSN: 1741-2625. DOI: [10.1177/1469787405057750](https://doi.org/10.1177/1469787405057750), Available on: <http://alh.sagepub.com/content/6/3/194>
103. MACSWAN, J. A multilingual perspective on translanguaging. In: *American Educational Research Journal* [online]. AERA, 2017. vol. 54(1), pp. 167-201 ISSN: 1935-1011. DOI: <https://doi.org/10.3102/000283121668393>
104. MARKEE, N. *Managing curricular innovation*. New York: Cambridge, 1997. ISBN: 0-521-55512-4
105. MARTIN, Andrew J. and MARSH, Herbert W. Academic resilience, and its psychological and educational correlates: a construct validity approach. In: *Psychology in the schools* [online]. Wiley, 2006. vol. 43(3), pp. 267-281. ISSN: 1520-6807. DOI: [10.1002/pits.20149](https://doi.org/10.1002/pits.20149)
106. MASLOW, A. H. A theory of human motivation. In: *Psychological Review* [online]. 1943. vol. 50(4), pp. 370–396. ISSN: 1939-1471. DOI: <https://doi.org/10.1037/h0054346>
107. MAY, S. *The multilingual turn: Implications for SLA, TESOL, and bilingual education*. New York: Routledge, 2013. ISBN: 9780203113493
108. MCDONOUGH, S.H. *Psychology in Foreign Language Teaching (2nd Ed.)*. London: Unwin Hyman Ltd, 1981. ISBN: 9780044180029
109. MCGOBROW, R.G. Bilingual and multilingual education, In: *Encyclopaedia of language education (3rd ed.)* [online]. New Zealand: Springer, University of Auckland, 2020. ISSN: 978-3-319-02257-4. DOI: [10.1007/978-3-319-02258-1](https://doi.org/10.1007/978-3-319-02258-1).
110. MENDELOVITCH, Miriam and STEINER, Dasi. "I'm The Same Teacher": The Attitudes of Science and Computer Literacy Teachers Regarding Integrating ICT in Instruction to Advance Meaningful Learning. In: *EURASIA Journal of Mathematics Science and Technology Education* [online]. 2017. vol. 13(5), pp. 1259-1282. ISSN: 1305-8223. DOI: <https://doi.org/10.12973/eurasia.2017.00670a>
111. MET, M. Content-Based Instruction: Defining Terms, Making Decisions. In: *The National Foreign Language Centre (NFLC Reports)* [online]. Washington, D.C, 1999. Available on: <http://www.carla.umn.edu/cobaltt/modules/principles/decisions.html>

112. MIHALJEVIĆ DJIGUNOVIĆ, Jelena and NIKOLOV, Marianne. Motivation of young learners of multiple languages. In: *The Palgrave handbook of motivation for language learning* [online]. Palgrave Macmillan, Cham, 2019. pp. 515-533. ISBN: 978-3-030-28380-3. DOI: <https://doi.org/10.1007/978-3-030-28380-3>
113. MUNBY, J. *Communicative syllabus design*. Cambridge, 1972. ISBN: 0-521-22071-8
Available on:
[https://books.google.co.il/books?hl=iw&lr=&id=mFJUqCs5da0C&oi=fnd&pg=PA1&dq=Munby,+J.+\(1972\)+Communicative+syllabus+design.+Cambridge,+&ots=kr8x26Izov&sig=LY2Gn-VG1pZCrE8xfFv0cw0CQ-U&redir_esc=y#v=onepage&q=Munby%2C%20J.%20\(1972\)%20Communicative%20syllabus%20design.%20Cambridge%2C&f=false](https://books.google.co.il/books?hl=iw&lr=&id=mFJUqCs5da0C&oi=fnd&pg=PA1&dq=Munby,+J.+(1972)+Communicative+syllabus+design.+Cambridge,+&ots=kr8x26Izov&sig=LY2Gn-VG1pZCrE8xfFv0cw0CQ-U&redir_esc=y#v=onepage&q=Munby%2C%20J.%20(1972)%20Communicative%20syllabus%20design.%20Cambridge%2C&f=false)
114. MUÑOZ, C. Exploring young learners' foreign language learning awareness. In: *Language awareness* [online]. Elsevier, 2014. vol. 23(1-2), pp. 24-40. ISSN: 1747-7565. DOI: <https://doi.org/10.1080/09658416.2013.863900>
115. NATION, P. *Learning vocabulary in another language*. Cambridge: Cambridge University Press, 2001. ISBN: 9781139524759
116. NIKOLOV, Marianne and TIMPE-LAUGHLIN, Veronika. Assessing young learners' foreign language abilities. In: *Language Teaching* [online]. Cambridge University Press, 2021. vol. 54(1), pp. 1-37. ISSN: 1475-3049. DOI: [10.1017/S0261444820000294](https://doi.org/10.1017/S0261444820000294)
117. NORTH, B. The Development of a Common Framework Scale of Language Proficiency. In: *Theoretical Studies in Second Language Acquisition*. New York, Monographs, 2000. vol. 8. Pp.459. ISBN: 9781453910597. Available on <https://www.peterlang.com/document/1054400>
118. NUNAN, D. Principles for Designing Language Teaching Materials. In: *A Periodical for Classroom Language Teachers*. ERIC, 1988. Vol. 10, no. 2, pp. 1-24. ISSN: 0129-7767.
119. O'CONNOR, J.D. *Phonetics*. Harmondsworth, Penguin, 1973. ISBN: 9780140215601
120. ORTIS, J.M. The Effects of Music, Rhymes and Singing on the Classroom Environment. 2008. Masters in Teaching Program 2006-2008. Available on: <https://citeseerx.ist.psu.edu/document?repid=rep1&type=pdf&doi=d1cdeb9955daaee1423d083de56b0340b056c13f#page=205>
121. OSKARSSON, M. *Self-assessment of foreign language skills: a survey of research and development work*. Strasbourg, Council for Cultural Cooperation, 1984. ISBN: 92-871-0358-5

122. PERINI, Matthew J., SILVER, Harvey F., STRONG, Richard. Integrating learning styles and multiple intelligences. In: *Educational leadership* [online]. 1997. vol. 55(1), pp. 22-27. ISSN: 0013-1784 Available on: <https://www.ascd.org/el/articles/integrating-learning-styles-and-multiple-intelligences>
123. PHILLIPSON, R. *Linguistic imperialism continued*. London: Routledge, 2013. ISBN: 9780415872010
124. PICCARDO, E. Plurilingualism and curriculum design: Toward a synergic vision. *TESOL Quarterly* [online]. 2013, vol. 47(3), pp. 600-614. ISSN: 1545-7249. DOI: [10.1002/tesq.110](https://doi.org/10.1002/tesq.110)
125. PORCHER, L. Reflections on Language Needs in the School. In: *ERIC*. France: Council of Europe, Strasbourg. 1980.
126. REID, J. *Assessing Vocabulary*. Cambridge, CUP, 2000. ISBN: 0521621829. Available on: <https://assets.cambridge.org/97805216/21823/sample/9780521621823wsc00.pdf>
127. SEARLE, J.R. A classification of illocutionary acts. In: *Language in Society*, Cambridge University Press, April 1976, vol. 5, Issue 1, pp. 1 – 23. ISSN: 1469-8013. DOI: <https://doi.org/10.1017/S0047404500006837>
128. SHEILS, J. *Communication in the modern language classroom*. Strasbourg, Council of Europe, 1988. ISBN: 9278115516. Available on: [https://books.google.co.il/books?hl=iw&lr=&id=BkxWsZriTN0C&oi=fnd&pg=PA1&dq=Sheila,+J.+\(1988\)+Communication+in+the+modern+language+classroom.+Strasbourg,+Council+of+Europe&ots=Sij2CDaEVq&sig=gAySpeGs8TyPXScso6CDjWvoKO8&redir_esc=y#v=onepage&q&f=false](https://books.google.co.il/books?hl=iw&lr=&id=BkxWsZriTN0C&oi=fnd&pg=PA1&dq=Sheila,+J.+(1988)+Communication+in+the+modern+language+classroom.+Strasbourg,+Council+of+Europe&ots=Sij2CDaEVq&sig=gAySpeGs8TyPXScso6CDjWvoKO8&redir_esc=y#v=onepage&q&f=false)
129. SHOHAMY, E. *Language policy: Hidden agendas and new approaches*. New York: Routledge, 2006. ISBN: 9780415328654
130. SHOHAMY, Elana and WAKSMAN, Shoshi. Linguistic landscape as an ecological arena: Modalities, Meanings, Negotiations, Education. In: *Linguistic landscape: Expanding the scenery*. New York: Routledge, 2008. pp. 313-331. ISBN: 9780203930960
131. SHOHAMY, E. Assessing multilingual competencies: Adopting construct valid assessment policies. In: *The Modern Language Journal* [online]. Wiley, 2011. vol. 95(3), pp. 418-429. ISSN: 00267902. DOI: <https://www.jstor.org/stable/41262376>
132. SHOHAMY, E. Linguistic landscape: Interpreting and expanding language diversities. In: *Diversity and Super-Diversity*. Georgetown University Press, 2017. pp. 37-63. ISBN: 9781626164239.

133. SKEHAN, P. *Variability and Language Testing*. London, 1987. Available on: [https://www.academia.edu/8825727/Variability and Language Testing](https://www.academia.edu/8825727/Variability_and_Language_Testing)
134. SPADA, N. Communicative Language Teaching: Current Status and Future Prospects. In: *International Handbook of English Language Teaching* [online]. Boston, MA: Springer, 2007. pp. 271-288. ISBN: 978-0-387-46301-8. DOI: https://doi.org/10.1007/978-0-387-46301-8_20
135. SPOLSKY, B. *Conditions for second language learning*. UK: Oxford, OUP, 1989. ISBN: 194370860. Available on: <https://llt.org.in/wp-content/uploads/2019/02/Revised-Softcopy-of-LLT-issue2-pdf.io-15-pdf.io-2.pdf>
136. SPOLSKY, B. *Concise encyclopaedia of educational linguistics*. Amsterdam, Elsevier, 1989. ISBN: 9780080431635.
137. STERN, H.H. and WEINRIB, Alice. Multiple languages for Younger Children: Trends and Assessment. In: *Language Teaching* [online]. Cambridge University Press, January 1977. Vol. 10, Issue 1, pp. 5 – 25. ISSN: 1475-3049. DOI: <https://doi.org/10.1017/S0261444800003232>
138. STERN, H.H. Fundamental concepts of language teaching. In: *Studies in Second Language Acquisition* [online]. Oxford, OUP, June 1985. vol. 7, Issue 2, pp. 251 – 253. ISSN: 1470-1545. DOI: <https://doi.org/10.1017/S0272263100005416>
139. SWAIN, M. Communicative competence: some roles of comprehensible input and comprehensible output in its development. In: *Input in second language acquisition*. Rowley, MA: Newbury House, 1985. pp. 235-253. ISBN: 0-88377-284-1
140. SWAIN, M. The Output Hypothesis: Its History and Its Future. in: Keynote speech given at the 5th International Conference on ELT in China. Beijing. 2007. Available on: <https://docplayer.net/35411659-The-output-hypothesis-its-history-and-its-future.html>
141. TRUDGILL, P. *Applied Sociolinguistics* (2nd edition). Harmondsworth, Penguin, 1983. ISBN: 0127012206.
142. TUCKER, G.R. A global perspective on multilingualism and multilingual education. In: *Beyond bilingualism: Multilingualism and multilingual education* [online]. Clevedon: Multilingual Matters, 1998. pp. 3-15. ISSN: 9781800418073. DOI: [10.21832/9781800418073-003](https://doi.org/10.21832/9781800418073-003)
143. VROOM, H.V. The Effects of Attitudes on Perception of Organizational Goals. In: *Human Relations* [online]. Sage Journals, 1960. Vol. 13(3), ISSN: 1741-282X DOI: <https://doi.org/10.1177/001872676001300304>

144. WEINER, B. *An attributional theory of motivation and emotion*. New York: Springer Verlag, 1986. ISBN: 978-1-4612-4948-1
145. WENTZEL, K.R. Does being good make the grade? Social behaviour and academic competence in middle school. In: *Journal of Educational Psychology* [online]. 1993. vol. 85(2), pp. 357–364. ISSN: 0022-0663. DOI: <https://doi.org/10.1037/0022-0663.85.2.357>
146. WENTZEL, K.R. Motivation and achievement in early adolescence: The role of multiple classroom goals. In: *Journal of Early Adolescence* [online]. SAGE, 1993. vol. 13(1), pp. 4–10. ISSN: 1552-5449. DOI: <https://doi.org/10.1177/02724316930130010>
147. WENTZEL, K.R. Social-motivational processes and interpersonal relationships: Implications for understanding motivation at school. In: *Journal of Educational Psychology* [online]. 1999, vol. 91, pp. 76–97. Available on: <http://dx.doi.org/10.1037/0022-0663.91.1.76>
148. WILLIAMS, E. *Reading in the language classroom*. London, Macmillan, 1984. ISBN: 9780333271797
149. **WITTMAN, H.** International Conference "EU: Building links to Eastern Partnership Countries", p. 49-54. Chisinau, March 15-16, 2023. Organizers: EUforY. An article published in the conference materials: *Education of Students from A Motivational Perspective*. ISBN: 978-9975-175-46-3. https://ibn.idsi.md/sites/default/files/imag_file/49-54_35.pdf
150. **WITTMAN, H.** Psycho-pedagogical and Methodological Approaches to the Multilingual Education of Students: The Analytical Framework. In: *Online International Interdisciplinary Research Journal [Online]*. WEB of Science, 02 April 2023. vol. 13(2), pp. 19-25. ISSN: 2249-9598. Available on: <https://oiirj.org/oiirj/?s=Wittman&submit=Search>
151. **WITTMAN, H.** Teaching Methods of Multilingual Education in Schools motivation and Multilingual Education in Schools. In: *Online International Interdisciplinary Research Journal [Online]*. WEB of Science, 02 April 2023. vol. 13(2), pp. 26-32. ISSN: 2249-9598. Disponible: <https://oiirj.org/oiirj/?s=Wittman&submit=Search>
152. **WITTMAN, H.** Scientific-practical conference "Perspectivele de Reziliență a Familiei În Contextul Multiplelor Crize", May 11, 2023. pp. 199-209. Organizers: Republic of Moldova for UNESCO. An article published in the conference proceedings: *Methods of Multilingual Education in Schools motivation and Multilingual Education in Schools*. ISBN: 978-9975-3651-5-4. <https://doi.org/10.55086/PRFCMCX199210>

153. **WITTMAN, H.** Psycholinguistic and Motivational Approaches to Learning Several Languages. In: *Studia Universitatis [Online]*. Moldova State University, 23 July 2023. Nr. 5, pp. 135-139. ISSN: 1857-2103. Available on: [https://doi.org/10.59295/sum5\(165\)2023_22](https://doi.org/10.59295/sum5(165)2023_22)
154. **WITTMAN, H.** International scientific and practical conference "Science. Education. Culture", Tom 2, Volume III, p. 212. Comrat, Oct. 02, 2023. Organizers: Comrat State University. An article published in the conference materials: *Psycholinguistical and Motivational Approaches to Learning Several Languages*. ISBN: 978-9975-83-254-0. <https://kdu.md/images/Files/mezhdunarodnaya-nauchno-prakticheskaya-konferenciya-nauka-obrazovanie-kultura-posvyashchennaya-32-godovshchine-kgu-tom--2.pdf>
155. **WITTMAN, H.** National Scientific conference with international participation "Integration Through Research and Innovation", pp. 351-358. Chisinau, Nov. 09-10, 2023. Organizers: Moldova State University. An article published in the conference materials: *Psycho-pedagogical And Methodological Landmarks for Multilingual Education of Students from A Motivational Perspective*. ISBN 978-9975-62-688-0. https://cercetare.usm.md/wp-content/uploads/Culegere-de-articole-Seria-Stiinte-sociale_2023.pdf
156. **WITTMAN, H.** International Conference on Adult Education of "Education for Peace and Sustainable development", p. 108. Chisinau, Nov. 09-11, 2023. Organizers: Moldova State University. An article published in the conference materials: *Landmarks for Multilingual Education of Students from Motivational Perspective*. ISBN: 978-9975-62-593-7. https://ibn.idsi.md/sites/default/files/imag_file/111-111_46.pdf
157. **WITTMAN, H.** Multilingual Education from Students: Case Study in Israel and Moldova. In: *Journal Evaluation in Education [Online]*. DOAJ, 13 April 2024. vol. 5, no. 2, pp. 81-88. ISSN: 2716-4160. Available on: <https://cahaya-ic.com/index.php/JEE/article/view/957>
158. **WITTMAN, H.** Promoting Multilingualism In School. In: *Studia Universitatis [Online]*. Moldova State University, 3 September 2024. Nr. 5(175), pp.123-130. ISSN: 1857-2103. Available on: [https://doi.org/10.59295/sum5\(175\)2024_17](https://doi.org/10.59295/sum5(175)2024_17)
159. WRAY, A. Formulaic language in learners and native speakers. In: *Language teaching [online]*. Cambridge, CUP. vol. 32, Issue 4, October 1999, pp. 213 – 231. ISSN: 1475-3049. DOI: <https://doi.org/10.1017/S0261444800014154>
160. YULE, G. *Referential communication tasks*. Mahwah, N.J., Lawrence Erlbaum, 1997. ISBN: 9781315044965. DOI: <https://doi.org/10.4324/9781315044965>

161. ZHAO, L. The influence of learners' motivation and attitudes on second language teaching. In: *Theory and Practice in Language Studies* [online]. Academy Publication, 2015. vol. 5(11), pp. 2333-2339, DOI: <http://dx.doi.org/10.17507/tpsls.0511.18>
 162. ZHENG, Y. Anxiety, and second/foreign language learning revisited. In: *Canadian Journal for New Scholars in Education/ Revue Canadienne des jeunes chercheurs et chercheurs en education* [online]. 2008. vol. 1(1). Available on: https://www.researchgate.net/publication/272507492_Anxiety_and_Secondforeign_Language_Learning_Revisited
- Hebrew:**
163. ARBEL, H., EPSTEIN, N., KABALINSKI BEN DOR, D., KAUFMAN, H., LACHMAN, D. Learning through games. In: *Eureka* (32), 2011. ISSN: 978-998-14-885-3
 164. ASSOR, Avi and KAPLAN, Avi. Motivation for learning at school - Theory and practice. In: *Reflective Education, Motivation for learning: New conceptions*. Jerusalem, Israel: Branco Weiss Institute, 2001. vol. 20, pp. 13-35. ISBN: 978-624-987-741-8
 165. ASSOR, A. Promoting intrinsic motivation for learning in schools. In: *Reflective Education, Motivation for learning: New conceptions*. Jerusalem, Israel: Branco Weiss Institute, 2001. vol. 20, pp. 167-190. ISBN: 978-624-987-741-8
 166. ASSOR, Avi and others. *Using self-determination theory as a basis for comprehensive school reforms*. Symposium at the conference of the Israeli Association for Educational Research. Oct 2000. Tel Aviv, Israel.
 167. BAR HAIM, A. Demarcation of organizational behaviour. In: *Organizational Behaviour* [online]. Tel Aviv: The Open University, 2004. Vol. I, no. 1. ISBN: 990012944640205171. Available on: https://www.nli.org.il/he/books/NNL_ALEPH990012944640205171/NLI
 168. BIRENBAUM, M. What Should be Improved and What is High-level Performance? Diagnostic Assessment of Mathematics Achievement in TIMSS-R of Israeli and Singaporean Eighth Graders. In: *Megamot* [online]. Henrietta Szold Institute, 1997. vol. 72, no. 4, pp. 655-672. Available on: <https://www.jstor.org/stable/23659059>
 169. BRANDS, O. *Pedagogy in the information age*. Report from a study day. Jerusalem: The Israeli National Academy of Sciences, 2012. ISBN: 978-965-208-195-7. Available on: <https://education.academy.ac.il/SystemFiles/23016.pdf>
 170. BUTLER, R. The desire to learn: the motivation for studies and its implications for the counselling psychological work in the school. In: *Issues in school psychology*. Jerusalem: Magnes Publishing House, 1996. ISBN: 965-223-948-8

171. KAPLAN, A. Principles for cultivating motivation for learning and achievement in middle school. In: *Studies in education and science teaching- Interim reading*, Bitown for middle school science and technology teachers [online]. 2013, vol. 21. Available on: <https://www.motnet.proj.ac.il/wp-content/uploads/2017.pdf>
172. SHATZ-OPPENHEIMER, O. Narrative, Identity and Professional Identity. In: *Research Pathways* [online]. MOFAT Institute, 2008. vol. 15, pp. 27-33. Available on: https://infocenters.co.il/mofet/pdf_viewer.asp?lang=ENG&dlang=HEB&module=search&page=pdf_viewer&rsvr=all@all¶m=%3Cpdf_path%3Emultimedia/full_text/d9971.pdf%3C/%3E%3Cbook_id%3E9971%3C/%3E¶m2=&site=mofet

In French

173. COSTE, D. Eduquer pour une Europe des langues et des cultures. In: *Etudes de linguistique appliquée*, 1983. pp. 133-246.
174. GUȚU I. Politiques linguistiques et éducatives européennes et nationales: enjeux et perspectives au début du millénaire. Actele Colocviului internațional de științe ale limbajului „Eugeniu Coșeriu” (CISL), ediția a XVI-a Eugeniu Coșeriu centenar. Limbă, creativitate, cultură – structuri de rezistență ale ființei umane (24-25 septembrie 2021). USM, Chișinău, 2021. p.159-164. ISBN 978-9975-158-66-4
175. HAMELINE, D. Les objectifs pédagogiques en formation initiale et en formation continué. Paris, E.S.F., 1979. ISBN: 978-2710108726
176. ROULET, E. Théories grammaticales, descriptions et enseignement des langues. Paris Bruxelles; F. Nathan Labor, 1972. ISBN: 2-8259-0085-0
177. SOLCAN A. Compétence discursive dans l’enseignement motivant du français În Probleme ale științelor socioumanistice și modernizării învățământului. În: *Materialele conferinței științifice internaționale cu participare internațională 26 martie 2021, Seria 23, Vol. 2. – 2021. – 402 p. –ISBN 978-9975-46-561-8. CZU 811.133.1:378.147. CZU 811.133.1:378.147 p.235-241.*

Romanian:

178. GORAS-POSTICA, V., NASTASIU, S. Limba română – mijloc de integrare socio-culturală a tinerilor din Republica Moldova aici și acum? ACROSS, www.across-journal.com ISSN 2602-1463.Vol. 4(2) 2021
179. GUȚU, VL. (coord.) et al. Psihopedagogia Centrată pe copil. Chișinău: CEP USM, 2008. 175 p. ISBN 978-9975-70-810-4.
180. IANIOGLO M. Cultura comunicării în contextul dialogului intercultural. În: *Perspectivile și Problemele Integrării în Spațiul European al Cercetării și Educației*, Ed.

6-a, 6 iunie 2019, Cahul, Republica Moldova: Universitatea de Stat „Bogdan Petriceicu Hasdeu” din Cahul, 2019, Vol.6, Partea 2, pp. 32-35. ISSN 2587-3563

181. *Rezoluția Consiliului referitoare la o Strategie Europeană pentru Multilingvism. Strasbourg*, 2008. Disponibil: <http://eurlex.europa.eu>
182. SLAMA-CAZACU, T. Psiholingvistica. O știință a comunicării. București: Ed. All Educational, 1999. 840 p.
183. SLAMA-CAZACU, T. Relațiile dintre gândire și limbaj. Dinamica dezvoltării acestor relații. Un fapt concret: învățarea și utilizarea „cazurilor oblice”. In: Psiholingvistica – o știință a comunicării. București: All Educational, 1999. 825 p.
184. SOLCAN, A. Eficientizarea comunicării în limba străină prin demersuri metodologice situative. In: Probleme actuale ale lingvisticii și didacticii limbilor străine=Aktuelle Forschungsfragen der Linguistik und der Methodik des Fremdsprachenunterrichts. Conferința Științifică cu Participare Internațională (24-25 aprilie 2018) Rezumatele comunicărilor. Chișinău: Tipogr. "Garomont-Studio", 2018. p. 228-240. ISBN 978-9975-136-73-0.

ANNEXES

Appendix 1: Guide to Implementing First Foreign Language Curricula According to the Ministry of Education, Republic of Moldova

The curricular culture of the educational system in the Republic of Moldova, launched towards the end of the 20th century, provided recipients of the National and European educational policy documents with an opportunity to benefit from a well-developed system, pertinent to the curriculum as a process (development, design, teaching, and learning), as well as a product (framework, programs, guides, notebooks, tests, etc.). In the context of these national and international documents, the development and reconceptualization of the National Curriculum ensure continuity in curricular reforms and educational policies. This represents a strategic direction for promoting the quality of general education by aligning it to European and international standards.

At the same time, a school curriculum is relevant only if it can meet the needs of society and education. Such a document must promote the renewal of the educational process in response to global challenges and changes (globalization, digitalization, technological advancements, and value crises) as well as societal issues (socio-political, economic, and demographic crises). Furthermore, it must address concerns within the national education system, such as curricula theorizing by subjects, insufficient interdisciplinary connection at the curricular level, lack of consensus regarding the notion of "competence", and desynchronization between formative and summative evaluations. Such renewal must also rely on reevaluating the experience gained by teachers in the teaching-learning-evaluation process, correlating to the interests and needs of the modern student, and analysing the quality of the results obtained at the end of the process. Moreover, communication in a foreign language remains one of the eight key competences developed by the European Commission's Working Group B in November 2004, recognised as one of the fundamental imperatives for lifelong learning.

The Foreign Language Curriculum I (2018) for Primary Education addresses these current needs and requirements as an integral part of the National Curriculum for General Education in the Republic of Moldova. The Foreign Language Curriculum Implementation Guide is part of the Curriculum for Primary Education system of products and serves as a landmark document for the implementation of the Curriculum in the educational process of the FL I subject matter.

In this context, the Guide proposes the following:

- Design of the Curriculum for the FL I subject and innovations to the Curriculum;

- General guidelines on teaching strategies and methodological benchmarks for curriculum design for the FL I subject, including long-term and short-term design, as well as methodological suggestions and task models for educational design in the FL I (for different competences, grades, and languages);
- General guidelines for assessment, including proposals for assessment by school subject and models of assignments for assessment in the FL I (for different competencies, grades, and languages);
- Consideration of a focus on active learning, learning to learn, competency formation, the development of pupils' creative abilities as value generators , ensuring an optimal balance between theoretical and applied approaches, while addressing actual possibilities of classroom application and adaptation to the CEFR levels (A1 for the primary level);
- The guide is intended for teachers of the FL I in primary school and educational directors. Successful implementation of the Curriculum developed in FL I involves:
 - Compliance with and promotion of European policies on Language Learning.
 - Continuous adaptation of the FL I Curriculum to the CEFR.
 - Contribution to the effective management of the curriculum implementation for Primary Education and for the FL I at the departmental level.
 - Creation of a favourable psychological and relational climate of the FL I at all levels.
 - Establishment of an appropriate learning environment for FL I.
 - Development of a motivational framework for teachers and students learning FL .;
 - Conscious acceptance by all participants in the educational process of the changes and innovations within the curricular framework.
 - Effective partnership with parents within the context of the Interdisciplinary Strategy for the Development of Parenting Skills and Competencies for 2016-2022.
 - Effective collaboration with representatives of the public and international entities which represent the appropriate foreign languages in the Republic of Moldova.

Appendix 2: The Curriculum for Learning the Arabic Language in Grades 7-9 in Israel

9 (3 hours in week)	8 (3 hours in week)	7 (3 hours in week)	Class Grade Subjects to study
		✓	The letters
		✓	The vowels
		✓	The script marks
		✓	Arabic literature
✓	✓	✓	Vocabulary
✓	✓	✓	Grammatical topics
✓	✓	✓	Interpersonal discourse
✓	✓	✓	Knowing the Arab world
✓			Using a dictionary

Appendix 3: Research Questionnaire for Students in Israel – Foreign Language Acquisition at School

Dear Student,

As part of my doctoral thesis, I am conducting research to examine the language acquisition process. Therefore, your participation and responses to the questions in this questionnaire are important and will significantly help me in preparing my work. The information you provide will be recorded and kept confidential, used only for the purpose of research, while ensuring your privacy and anonymity in accordance with the ethical guidelines.

I would greatly appreciate it if you took the time to answer the questionnaire, ensuring that your responses accurately reflect your personal perceptions and opinions on the subject.

Part I - Demographic variables

Sex: Male / Female

Grade: 7th / 8th / 9th

Country of birth: Israel / Other _____

Mother tongue: Hebrew/ English/ Arabic/ Other _____

Are there one or more additional languages that you speak? If so, specify and indicate the level of proficiency in speaking, reading, and writing?

Language	Reading	Writing	Speaking
	Low/ Medium/ High	Low/ Medium/ High	Low/ Medium/ High
	Low/ Medium/ High	Low/ Medium/ High	Low/ Medium/ High
	Low/ Medium/ High	Low/ Medium/ High	Low/ Medium/ High

What language or languages do you speak at home ? _____

Part II - The Statements

Below is a list of statements regarding the two languages taught at school. Please indicate your degree of agreement with each statement for each language.

- 1- To a very low degree
- 2- To a low extent
- 3- To a moderate extent
- 4- To a high extent
- 5- To a very high degree

No	The statement	Degree of consent									
		5	4	3	2	1	5	4	3	2	1
		Arabic					English				
1	I understand everything the teachers explain and teach in class in this language.										
2	I am able to cope with the materials and textbooks in this language.										
3	I manage to communicate with all my classmates in this language.										
4	I am able to participate in all the discussions during the lessons in this language										
5	I can write papers in this language										
6	I can complete the assignments and homework in this language										
7	I can send messages to friends and talk to them on the phone in this language										
8	I can watch movies and TV shows in this language										
9	I can read books in this language										
10	I believe it is important to learn this language										
11	I think mastering this language will help me later in life										

Thank you very much for your cooperation!

Appendix 4: Research Questionnaire for Students in Israel – Motivation for Acquiring a Foreign Language

Dear Student,

This questionnaire was compiled for the purpose of a pedagogical study on the subject of learning multiple languages, specifically Arabic and English, at school. It is anonymous and will help in writing an essay on education. I would greatly appreciate your answers to the questionnaire. Thank you!

Sex: Male / Female

Grade: 7th / 8th / 9th

Please rate the validity of the following statements using a five-point scale:

1- Completely false

2- Not entirely true

3- True in some cases

4- True

5- Absolutely true

No	The statement					
		1	2	3	4	5
1	I study multiple languages at school because it interests me.					
2	I study multiple languages at school, so my friends will not think I am lazy.					
3	I study multiple languages at school because I have to.					
4	I study multiple languages at school because I want to.					
5	I study multiple languages at school because I enjoy it (learning languages).					
6	I study multiple languages at school so that the teacher will think well of me.					
7	I study multiple languages at school so that the teacher or parents do not get mad at me.					
8	I study multiple languages at school because I want to learn new things.					
9	I study multiple languages at school because it is important for my future.					
10	I study multiple languages at school, so my parents will not be ashamed of me.					
11	I study multiple languages at school because it is important to my life.					

Appendix 5: Research Questionnaire for Students in the Republic of Moldova – Foreign Language Acquisition at School

Dear Student,

As part of my doctoral thesis, I am conducting research to examine the language acquisition process. Therefore, your participation and responses to the questions in this questionnaire are important and will significantly help me in preparing my work. The information you provide will be recorded and kept confidential, used only for the purpose of research, while ensuring your privacy and anonymity in accordance with the ethical guidelines.

I would greatly appreciate it if you took the time to answer the questionnaire, ensuring that your responses accurately reflect your personal perceptions and opinions on the subject.

Part I - Demographic variables

Sex: Male / Female

Grade: 7th / 8th / 9th

Country of birth: Republic of Moldova / Other _____

Mother tongue: Romanian (Moldovan)/ English/ Hebrew/ Other _____

Are there one or more additional languages that you speak? If so, specify and indicate the level of proficiency in speaking, reading, and writing?

Language	Reading	Writing	Speaking
	Low/ Medium/ High	Low/ Medium/ High	Low/ Medium/ High
	Low/ Medium/ High	Low/ Medium/ High	Low/ Medium/ High
	Low/ Medium/ High	Low/ Medium/ High	Low/ Medium/ High

What language or languages do you speak at home ? _____

Part II - The Statements

Below is a list of statements regarding the two languages taught at school. Please indicate your degree of agreement with each statement for each language.

- 1- To a very low degree
- 2- To a low extent
- 3- To a moderate extent
- 4- To a high extent
- 5- To a very high degree

No	The statement	Degree of consent									
		5	4	3	2	1	5	4	3	2	1
		Arabic					English				
1	I understand everything the teachers explain and teach in class in this language.										
2	I am able to cope with the materials and textbooks in the language.										
3	I manage to communicate with all my classmates in this language										
4	I am able to participate in all the discussions in the lessons in this language										
5	I can write papers in this language										
6	I can complete the assignments and homework in this language										
7	I can send messages to friends and talk to them on the phone in this language.										
8	I can watch movies and TV shows in this language.										
9	I can read books in this language.										
10	I believe it is important to learn this language.										
11	I think mastering this language will help me later in life.										

Thank you very much for your cooperation!

Appendix 6: Research Questionnaire for Students in the Republic of Moldova – Motivation for Acquiring a Foreign Language

Dear Student,

This questionnaire was compiled for the purpose of a pedagogical study on the subject of learning multiple languages, specifically Arabic and English, at school. It is anonymous and will help in writing an essay on education. I would appreciate your answers to the questionnaire.

Thank you!

Sex: Male / Female

Grade: 7th / 8th / 9th

Rate the validity of the following statements using a five-point scale:

1- Completely false

2- Not entirely true

3- True in some cases

4- True

5- Absolutely true

No	The saying					
		1	2	3	4	5
1	I study multiple languages at school because it interests me.					
2	I study multiple languages at school, so my friends will not think I am lazy.					
3	I study multiple languages at school because I have to.					
4	I study multiple languages at school because I want to.					
5	I study multiple languages at school because I enjoy it (learning languages).					
6	I study multiple languages at school so that the teacher will think well of me.					
7	I study multiple languages at school so that the teacher or parents do not get mad at me.					
8	I study multiple languages at school because I want to learn new things.					
9	I study multiple languages at school because it is important for my future.					
10	I study multiple languages at school, so my parents will not be ashamed of me.					
11	I study multiple languages at school because it is important to my life.					

Appendix 7: Questionnaire on Students in Israel Following the Implementation of the Model (2023)

Below is a short questionnaire intended for 50 students in Israel.

The purpose of the questionnaire: to confirm the hypothesis that the model functions through exposure and proximity to the culture of the language being studied, thereby increasing the student's motivation to learn it.

Part I - Demographic variables.

Sex Male Female

Grade: 7th / 8th / 9th

Country of birth: Israel/ Other: _____

Mother tongue: Hebrew/ English/ Arabic/ other: _____

Part II - The Statements

Below is a list of statements regarding the two languages taught at school. Please indicate your degree of agreement with each statement.

Degree of consent					The statement	No
5 To a very high degree	4 To a high extent	3 To a moderate extent	2 To a low extent	1 To a very low degree		
					The desire to integrate into the social environment and develop social relationships, such as in the "twins" project, increases my motivation to learn and master the target language	1
					The ambition to succeed and achieve high academic performance increases my motivation to learn and master the target language.	2
					The support from the teacher, therapist, and other factors in the school environment boosts my motivation to learn and master the academic language.	3
					Having to fulfil different personal goals strongly motivates me to learn and master the language.	4

					My desire to connect with my roots and belong to society motivates me to learn the language.	5
					My competitive nature makes me curious to learn about groundbreaking leaders and motivates me to learn the other language.	6
					Watching videos related to the culture of the country stimulates my curiosity and motivates me to learn the target language.	7
					The connection to tradition and the celebration of holidays related to the foreign country where I study motivates me to learn the academic language	8
					The desire to operate independently in the country motivates me to learn the foundational language	9
					The content and the positive learning experiences in the classroom, such as peak days, increase my curiosity and interest, and make me more motivated to learn the target language.	10

Appendix 8: Results of Israeli Students Following Model Implementation

No#	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10
1	3	4	2	3	4	3	5	5	5	5
2	4	2	5	3	4	2	4	5	4	5
3	3	4	5	3	4	3	5	4	5	5
4	3	4	5	3	4	2	4	5	5	4
5	3	3	3	3	3	3	5	3	5	3
6	4	4	5	3	4	3	4	5	5	5
7	3	4	5	3	4	3	4	4	4	4
8	3	4	5	3	5	2	4	5	3	5
9	3	4	4	5	4	3	5	5	5	5
10	4	4	5	3	4	3	4	4	5	5
11	5	4	5	3	3	2	4	5	5	5
12	3	4	4	5	4	4	4	5	4	4
13	2	4	5	3	5	3	5	5	5	5
14	3	4	3	3	5	1	4	5	5	5
15	4	5	5	3	3	3	4	5	5	4
16	2	4	5	3	4	3	4	4	4	3
17	3	4	5	3	4	3	3	5	5	4
18	4	4	4	5	5	3	4	5	5	5
19	3	4	5	1	5	3	5	4	5	4
20	3	4	3	3	4	3	5	5	5	5
21	3	4	5	3	4	1	4	4	4	5
22	2	4	5	4	4	3	4	4	5	5
23	4	4	5	3	4	3	4	5	5	5
24	3	4	4	3	3	4	5	5	4	5
25	4	4	5	3	5	3	4	5	4	5
26	3	4	5	1	4	3	5	4	5	5
27	2	4	5	3	4	3	4	5	5	5
28	3	4	5	3	4	3	5	5	5	5
29	3	3	4	3	5	5	5	5	4	5
30	3	3	5	3	4	3	4	5	4	3
31	3	3	5	1	4	3	5	5	5	5
32	3	4	4	3	4	5	5	3	5	4
33	3	3	5	3	3	3	4	4	5	5

34	3	4	4	3	5	3	5	5	4	5
35	3	3	3	3	4	3	4	5	5	5
36	3	4	5	3	4	4	4	5	5	4
37	3	3	5	3	4	3	5	4	4	5
38	3	4	5	3	5	4	5	5	5	5
39	4	3	4	3	3	3	4	5	5	5
40	3	4	3	4	4	3	4	4	5	5
41	3	3	5	3	5	5	5	5	4	5
42	3	3	5	3	5	3	4	5	5	5
43	3	3	4	3	4	3	4	5	5	5
44	3	4	5	3	4	5	5	5	4	4
45	3	3	5	4	3	3	4	5	5	5
46	3	3	5	3	5	3	4	5	5	5
47	4	4	5	3	4	2	4	5	4	4
48	3	3	3	3	4	3	5	5	5	5
49	3	3	5	4	4	3	4	5	5	5
50	4	3	5	3	4	3	4	5	5	5

DECLARATION OF RESPONSIBILITY

I, the undersigned, hereby declare under my own responsibility that the materials presented in this doctoral thesis are the result of my own research and scientific achievements. I affirm this statement, and I understand that I will bear the consequences in accordance with the applicable laws if this declaration is found to be untrue.

Sincerely Yours,

Wittman, Hanna

A handwritten signature in blue ink, appearing to read 'WITTMAN HANNA', is written over a horizontal line.

_____2024

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EDUCATION

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- 2017** Graduate of a mediation course at *Bar Ilan University, Israel.*
- 1998 – 1999** M.E.D., M.Sc. in Education and Behavioural Sciences, *University of Latvia.*
- 1990 – 1993** B.E.D., High school teaching studies and internship in teaching Hebrew and Arabic, *Lewinsky College, Israel.*

EXPERIENCE

- 2020 – present** Emissary teacher from the Ministry of Education and Agency was a Hebrew teacher at the *Gymnasium School and Herzl High School, Chisinau, Moldova.*
- 2015 – 2020** Hebrew teacher, class teacher and presenter for the Hebrew matriculation exam at *Rabin High School, Israel.*
- 2010 – 2024** Conducting psychometric and matriculation exams in Hebrew, Ministry of Education, *Israel.*
- 2009 – 2012** Instructor of a team of foreign language teachers in the Education Division of Settlements, Ministry of Education, *Israel.*
- 1996 – 2019** Coordinator of a teaching project at "Hila" (Youth at risk), *Netanya Municipality, Israel.*
- 1995 – 2000** Professor and coach of Arab students, *Beit Berl College, Israel.*
- 1989 – 2015** Hebrew and Arabic teacher and class teacher at *Hadassim Middle School, Israel.*
- Coordinator of the drug and alcohol prevention program.
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ARTICLES IN INTERNATIONAL MAGAZINES:

1. WITTMAN, H. Psycho-pedagogical and Methodological Approaches to the Multilingual Education of Students: The Analytical Framework. In: *Online International Interdisciplinary Research Journal* [Online]. WEB of Science, 02 April 2023. vol. 13(2), pp. 19-25. ISSN: 2249-9598. Disponible: <https://oiirj.org/oiirj/?s=Wittman&submit=Search>
2. WITTMAN, H. Teaching Methods of Multilingual Education in Schools motivation and Multilingual Education in Schools. In: *Online International Interdisciplinary Research Journal* [Online]. WEB of Science, 02 April 2023. vol. 13(2), pp. 26-32. ISSN: 2249-9598. Disponible: <https://oiirj.org/oiirj/?s=Wittman&submit=Search>
3. WITTMAN, H. Psycholinguistic and Motivational Approaches to Learning Several Languages. In: *Studia Universitatis* [Online]. *Moldova State University*, 23 July 2023. Nr. 5, pp. 135-139. ISSN: 1857-2103. Disponible: [https://doi.org/10.59295/sum5\(165\)2023_22](https://doi.org/10.59295/sum5(165)2023_22)
4. WITTMAN, H. Multilingual Education from Students: Case Study in Israel and Moldova. In: *Journal Evaluation in Education* [Online]. DOAJ, 13 April 2024. vol. 5, no. 2, pp. 81-88. ISSN: 2716-4160. Disponible: <https://cahaya-ic.com/index.php/JEE/article/view/957>
5. WITTMAN, H. Promoting Multilingualism In School. In: *Studia Universitatis* [Online]. *Moldova State University*, 3 September 2024. Nr. 5(175), pp.123-130. ISSN: 1857-2103. Disponible: [https://doi.org/10.59295/sum5\(175\)2024_17](https://doi.org/10.59295/sum5(175)2024_17)

ARTICLES FROM PARTICIPATING IN SCIENTIFIC CONFERENCES:

1. WITTMAN, H. International Conference "EU: Building links to Eastern Partnership Countries", p. 49-54. Chisinau, March 15-16, 2023. Organizers: EUforY. An article published in the conference materials: *Education of Students from A Motivational Perspective*. ISBN: 978-9975-175-46-3. https://ibn.idsi.md/sites/default/files/imag_file/49-54_35.pdf
2. WITTMAN, H. Scientific-practical conference "Perspectivele de Reziliență a Familiei În Contextul Multiplelor Crize", May 11, 2023. pp. 199-209. Organizers: Republic of Moldova for UNESCO. An article published in the conference proceedings: *Methods of Multilingual Education in Schools motivation and Multilingual Education in Schools*. ISBN: 978-9975-3651-5-4. <https://doi.org/10.55086/PRFCMCX199210>
3. WITTMAN, H. International scientific and practical conference "Science. Education. Culture", Tom 2, Volume III, p. 212. Comrat, Oct. 02, 2023. Organizers: Comart State University. An article published in the conference materials: *Psycholinguistical and Motivational Approaches to Learning Several Languages*. ISBN: 978-9975-83-254-0. <https://kdu.md/images/Files/mezhdunarodnaya-nauchno-prakticheskaya-konferenciya-nauka-obrazovanie-kultura-posvyashchennaya-32-godovshchine-kgu-tom--2.pdf>
4. WITTMAN, H. National Scientific conference with international participation "Integration Through Research and Innovation", p. 351-358. Chisinau, Nov. 09-10, 2023. Organizers: *Moldova State University*. An article published in the conference materials: *Psychopedagogical And Methodological Landmarks for Multilingual Education of Students from A Motivational Perspective*. ISBN 978-9975-62-688-0. https://cercetare.usm.md/wp-content/uploads/Culegerea-de-articole-Seria-Stiinte-sociale_2023.pdf
5. WITTMAN, H. International Conference on Adult Education of "Education for Peace and Sustainable development", p. 108. Chisinau, Nov. 09-11, 2023. Organizers: *Moldova State University*. An article published in the conference materials: *Landmarks for Multilingual Education of Students from Motivational Perspective*. ISBN: 978-9975-62-593-7. https://ibn.idsi.md/sites/default/files/imag_file/111-111_46.pdf

PARTICIPATING IN INTERNATIONAL SCIENTIFIC CONFERENCE:

1. International Workshop "Raise awareness on Moldova Europeanization in Academia And beyond IT", Chisinau, Nov. 21-24, 2023. Organizers: EUforY.