

# **Investigating Turkey High School Graduates Attitudes**

**This book highlights the development and outcomes of research on and practical experience in science education in Taiwan. As the outcomes of the scholarship on science education in Taiwan have garnered attention in science education communities around the world, this book gathers the most relevant research on Taiwan, presenting it in a cohesive overview that will move science education forward in terms of policy, research and practice.**

**The book is the compilation of the research work done by the author. After conducting a very deep study and research of the topic the author published the book to help new comers and policy makers to implement technology in the field of education. Book emphasis on the different problems and challenges faced by the educators and policy makers in integration of technology in day today school life and provides strategies to handle these problems or challenges. In the book the author has tried to explore the attitude towards use of computer in education among secondary school teachers teaching in government, aided and private secondary schools with respect to three criteria's: Gender, Experience and Educational Qualifications.**

**The use of information and communication technologies (ICTs) in education has revolutionized learning. Shifting beyond traditional mode of education, the integration of ICTs has become an advantage for students at tertiary education when used for the right purpose to enhance learning. The use of technology brings forth a flexible and accessible mode of education and bridges the gap of learning across borders. This enables students at tertiary level to have access to other universities and academic resource materials globally, thereby expanding their knowledge. Thus, it is crucial to consider the development of technology in education as part of a comprehensive pedagogical framework and take into account new developments in ICTs. ICT-Based Assessment, Methods, and Programs in Tertiary Education is an essential research publication that provides relevant theoretical frameworks and recent empirical research findings on integrating ICTs in tertiary education to enhance learning and allow students to take more control of their learning. Highlighting topics such as assessment, language learning, and e-learning, this book is ideal for teachers, professionals, academicians, researchers, administrators, curriculum designers, instructional designers, and students.**

**This edited book brings together ten empirical papers reporting original studies investigating different facets of individual variation second language learning and teaching. The individual difference factors covered include, among others, motivation, self, anxiety, emotions, willingness to communicate, beliefs, age, and language learning strategies. What is especially important, some of the contributions to the volume offer insights**

**into intricate interplays of these factors while others attempt to relate them to learning specific target language subsystems or concrete instructional options. All the chapters also include tangible implications for language pedagogy. The book is of interest to both researchers examining the role of individual variation in second language learning and teaching, teacher trainers, graduate and doctoral students in foreign languages departments, as well as practitioners wishing to enhance the effectiveness of second language instruction in their classrooms.**

**Middle School Science and Items of High School Entrance Examination  
1st International Conference on Lifelong Education and Leadership for ALL-  
ICLEL 2015**

**Application of Structural Equation Modeling in Educational Research and Practice**

**Research from the Field**

**The Enterprise of Education**

**Journal of International Students 2019 Vol 9 Issue 1**

This book is a collection of reflections on the state of education, art and philosophy, principally in modern Turkey. The contributed chapters include: the identity and social roles of teachers; foreign experts' opinions concerning the structure of the Turkish education system; repercussions of recent Turkish education policies; a provocative essay on the underdetermination of scientific theories; the role of political power on state theatres in Turkey; the relationship between society and art as seen through the lens of theater; the connections between meliorism and other concepts philosophical such optimism and messianism.

This study presents findings from an analysis of the Turkish Science and Technology Curriculum Guidelines and their alignment to the university entrance examination. The analysis of the Science and Technology Curriculum focused on various related aspects: content areas and learning outcomes in terms of scientific process skills, science technology society and environment, attitudes and values, and cognitive objectives. The level determination examination (LDE) questions, which would allow for enrollment at elite high schools and would inevitably affect middle school students' university choices, were analyzed in an alignment study regarding the contents of the science and technology program. In order to investigate the relationship between high school science teaching and high school entrance examination, all relevant documents were analyzed by ten science teachers, who have been teaching science and technology courses at middle schools and are concurrently doctoral students at the science education department. The results indicated that the LDE questions and standards were not fully aligned because the first two alignment criteria have a high consistency while a range of knowledge and balance of representation criteria have a low consistency.

English Studies in the 21st Century presents the results of recent academic research concerning a wide spectrum of subjects—including politics, psychology, religion, philosophy, history, culture, aesthetics, and education—related to literary, cultural, and language studies. Specifically, this collection includes scholarly reflections, interpretations, criticisms, and experiments that both strengthen and challenge dominant perspectives on the English literary tradition and contribute to a multifaceted

discussion of contemporary drama and theater, contemporary theory and fiction, Neo-Victorianism, the Anthropocene, posthumanism, and interdisciplinary studies in English, including linguistics and ELT. The book will be an ideal reference for both academics and students.

What is the Gulen Movement and why is Turkey's President Erdogan so convinced that the organisation and its charismatic leader were behind the failed military coup of 15th July 2016? The Gulen, or Hizmet, movement in Turkey was until recently the country's most powerful and affluent religious organisation. At its head is the exiled Muslim preacher Fethullah Gulen, who leads from a gated compound in the Pocono Mountains of the USA. The movement's central tenet is that Muslims should engage positively with modernity, especially through mastering the sciences. At hundreds of Gulen-run schools and universities, not only in Turkey but also worldwide and particularly in the United States, instructors have cultivated the next generation of Muslim bankers, biologists, software engineers and entrepreneurs. In this groundbreaking study, Caroline Tee, an expert on the Gulen Movement, analyses the complex attitudes of Gulen and his followers towards secular modernity. Considered against the backdrop of Turkish politics, Gulenist engagement with modern science is revealed as a key source of the influence the movement has exerted.

Childhood in Turkey: Educational, Sociological, and Psychological Perspectives

Private Tutoring Across the Mediterranean

A Scale Development Study

English Teaching Forum

Talks on Education, Art, and Philosophy

The Impact of the Laboratory and Technology on Learning and Teaching Science K-16

*This book represents a major study of the development and present state of education in Turkey. Turkey offers a unique context for studying education because of the tensions that exist between secularization and Islam, top-down social engineering and democratization, and economic growth and social justice. Education in Turkey brings together some of the leading educationalists in Turkey, as well as a number of scholars from other disciplines. The topics covered include the development and structure of primary, secondary, vocational and adult education, the role of education in shaping citizenship and national identity, human capital, economic growth and educational inequalities. This significant volume will be of particular interest to policy makers as well as researchers and students in education, economics, politics, and Turkish studies. Students attend mathematics courses in Turkey for totally 11 years, throughout education life ranging from primary school to university, including eight years in primary education and three years in secondary education (four years based on new arrangement); however, level of mathematic knowledge of students is upsetting when they reach university education. Students attend various schools including normal high school, Anatolian high school, and science high school, and most students may*

leverage mathematics knowledge both in ordinary high school education and private teaching institution; however, mathematics skills and knowledge of students, who attend vocational high schools, could not be sufficiently improved. In many departments of vocational high schools, mathematics course is available only in the first education year of high school, and later, most vocational courses are emphasized. Those students are not well-educated in the field of mathematics and when they graduate from vocational high schools and they start to attend vocational colleges, they also take mathematics courses and they fail even in principal mathematics courses. Moreover, students perceive vocational colleges as a step towards four-year faculty education after they take ETE (external transfer examination). In current study, 275 students who had mathematics courses from the same teacher and attended various departments of a private charity university, were subjected to mathematics examination which was compiled from ETEs of previous years, and thus, level of mathematics knowledge of students was investigated. Findings of current study indicated that level of mathematics knowledge for students attending vocational colleges is upsetting.

(Contains 5 tables.).

The Enterprise of Education is Book IV of the research series, Research on Education in Africa, the Caribbean and the Middle East. This book examines the implications of rapid political, sociocultural, and economic change for the enterprise of education within particular countries in the regions of Africa, the Caribbean, and the Middle East—all of which have cultural ties. It provides a space for a critical dialogue about the impact of global issues on the enterprise of education in specific locales or regions within a specific country. Finally, the book identifies trends in the enterprise of education that are occurring across the regions. The Enterprise of Education draws from recent research, summarizing, interpreting, and making connections to address issues/questions that are central to the enterprise of education today in these three world regions. Among the specific questions/issues that are considered include the following: How is the enterprise of education addressing and including the needs of all children including those who are squatters, new immigrants, have special education needs, and who are voiceless in their society? What social structures in these regions mitigate against student learning, especially particular groups of students? What research methodologies enable us to investigate the enterprise of education in these world regions? What role does the learning environment play in schools? Who creates curriculum, and for what purposes? Which issues are found to a greater or lesser

extent in education in other world regions? What role do parents play, in economic and social support of schools? How can teachers best be prepared for effective teaching?

This is Book V in the series, *Research on Education in Africa, the Caribbean and the Middle East*. The series strives to encourage the presentation of evidence based investigations using data collected on site from the three world regions it considers. A strong focus is on data specific to a nation or to a region within a nation, as we recognize that nations are diverse, often encompassing regions with unique cultural and geographic characteristics. The data are rooted in the voices of individuals and communities. Such evidential data are analyzed and interpreted within the context of the complex human and natural environments from which they are derived. Chapters in the books within the series describe investigations that are part of an effort to continue the publication of an annual compilation of research studies in the three world regions upon which the series focuses. The series, therefore, indicates that the need to develop modern, self-sufficient, independent, and post-colonial societies is being balanced with the need to strengthen cultural values and identities within these three world regions. Book V in the series focuses on how the educational challenges found in these three world regions are addressed. The chapters specifically examine related recent research, identify useful investigative methodologies, identify accomplishments in meeting challenges, and consider unresolved challenges. The overarching questions presented below were derived from an analysis of the questions, methods, and conclusions presented in the studies appearing in this book. These overarching questions described here reflect the connections between educational issues that emerged in the 20th century and issues identified in the 21st century.

*The Current State of Social Studies*

*Investigating Level of Mathematics Knowledge for Students Attending Vocational Schools in Turkey*

*Investigation of Preservice and Inservice Teachers' Mathematics Related Beliefs in Turkey and the Perceived Effect of Middle School Mathematics Education Program and the School Contexts on These Beliefs*

*An Investigation of Imam-Hatip High School's Senior Students' Meaning-making of the World in the 21st Century*

*Power Dynamics and Implications for Learning and Equity Examining the Gap in Turkey*

***In pre-industrial societies, people moved from childhood to adulthood directly, getting married and going to work early in life. Although this still holds true for many cultures, in countries such as the USA or Japan, adolescence has become a specific stage of life,***

*where young people are cultural trendsetters and market drivers. The International Encyclopedia of Adolescence is an exhaustive socio-cultural survey of young people around the world. The focus is cultural and historical, and the work offers a rarely found worldwide perspective. Entries are compiled by experts from many fields of study, including anthropology, history, psychology, and sociology. Unlike existing works, the Encyclopedia does not stress biological or psycho-pathological issues. It addresses myths and realities of adolescence by looking at the actual life of young people in regions as varied as Iran, India, France, the USA, or Japan. It also explains how teen cultures have developed in some countries and how young people deal with the conflicts between tradition and modernity in others. Country coverage examines cultural beliefs, gender, personal and cultural identity, relationships (familial), friends and peers, love and sexuality, education, work, media, problems, and outlook for the future, plus topics particular to the culture or region discussed.*

*Scientific articles form: International Academic Conference on Teaching, Learning and E-learning International Academic Conference on Management, Economics and Marketing International Academic Conference on Engineering, Transport, IT and AI This volume asks, what is it like to be a child in a country where 25% of the population is under the age of 14? Handling this question through a multidisciplinary lens, the book provides a rich and diverse analysis of different portrayals of childhood in Turkey. From children's rights to transformation of childhood, from refugee children to host country children living in armed conflict areas, from cultural factors to gene-environment interaction, from parent-focused to child-focused programs, readers will find in-depth and up-to-date information about children living in Turkey from the perspectives of sociology, education, and psychology sciences.*

*This volume is the first to deal with Turkish communicative development and disorders, reflecting the use of Turkish by a sizeable population in multilingual settings in Europe, USA, and Australia. In addition to Speech-language Pathologists, the book will be of interest to professionals from related fields such as clinical linguistics, psychology, psycholinguistics, neurolinguistics, audiology, and special education. This book presents a compendium of information about the profession of speech-language pathology, cultural differences, assessment materials and research done in communication disorders in Turkey. It also covers acquisition and disorders in multilingual contexts where there is significant Turkish immigration.*

*Investigating Dynamic Relationships Among Individual Difference Variables in Learning English as a Foreign Language in a Virtual World*

*Recent Advances in Science and Technology Education, Ranging from Modern Pedagogies to Neuroeducation and Assessment*

*Investigating High School Students' Use of Extramural English*

*Challenging Assumptions and Orthodoxies*

*Education in Turkey*

*Advanced Musical Performance: Investigations in Higher Education Learning*

*Investigating Level of Mathematics Knowledge for Students*

*Attending Vocational Schools in Turkey*

*This book captures the now burgeoning research field of early childhood education for sustainability (ECEfS) and comprises insights from an ever-widening and diverse pool of researchers, who are promoting, engaging, and explaining the latest ECEfS research in the light of local, national, and United Nations global policy directives. With the increasing urgency of global*

*climate disruptions, resource depletions, and biodiversity losses alongside greater human dislocation, the international scope of research and theory in this book provides a comprehensive guide to the role of sustainability in early childhood education, at a time when it is needed more than ever. Elliott, Ärlemalm-Hagsér, and Davis have brought together a collection of studies that offer new insights and approaches to ECEfS which challenge dominant narratives surrounding early childhood education and sustainability, including topics such as: how diverse worldviews and cultures challenge perceptions of sustainability; how bold national early education policies and urgent shifts in teacher education are imperative for driving transformative practices; and, how ECEfS curriculum and pedagogy can be incorporated successfully into early years settings. This book will both inspire researchers and more deeply enable early years' educators to practise sustainability with children, and so will be of great interest to scholars, lecturers, and researchers, as well as undergraduate and postgraduate students, across the increasingly intersecting fields of sustainability and early childhood education.*

*The proceedings of the 2017 Symposium on Chaos, Complexity and Leadership illuminate current research results and academic work from the fields of physics, mathematics, education, economics, as well as management and social sciences. The text explores chaotic and complex systems, as well as chaos and complexity theory in view of their applicability to management and leadership. This proceedings explores non-linearity as well as data-modelling and simulation in order to uncover new approaches and perspectives. Effort will not be spared in bringing theory into practice while exploring leadership and management-laden concepts. This book will cover the analysis of different chaotic developments from different fields within the concepts of chaos and complexity theory. Researchers and students in the field will find answers to questions surrounding these intertwined and compelling fields.*

*This volume, one in a series resulting from Project SPAN (Social Studies/Social Science Education: Priorities, Practices, and Needs), reviews and analyzes the current state of K-12 social studies. A major purpose of the review and analysis was to form a basis for recommendations for future directions that might be taken to improve social studies. The report contains six sections. The first section provides a broad and integrative*

**analysis of the interrelated topics of rationales, definitions, approaches, goals, and objectives of social studies. The second section, "Curriculum Organization in Social Studies," describes the typical pattern of social studies programs from kindergarten through grade 12, stating that despite numerous variations that have occurred, the dominant pattern throughout the nation is one that was established more than 60 years ago. "Social Studies Curriculum Materials," the third section of the volume, describes the great extent to which students, teachers, administrators, and the public accept and rely on curriculum materials as essential aids to teaching, learning, and classroom management. Foremost among curriculum materials being used are textbooks. The topic of the fourth section is "Social Studies Teachers." There is general agreement that the teacher is "the central figure," the "key," or "the magic ingredient" in the learning process. The fifth section, "Instructional Practices in Social Studies," presents a detailed report on what teachers do. The last section, "Barriers to Change in Social Studies," focusing on the fact that the new social studies had relatively little impact on the schools, explores reasons for lack of change in schools. (Author/RM)**

**Examining the Teacher Induction Process in Contemporary Education Systems**

**Challenges and Opportunities**

**The Politics of Islam and Modernity**

**An Investigation of Computer Attitude Of Secondary School Teachers In Relation To Gender, Experience And Educational Qualifications**

**ICT-Based Assessment, Methods, and Programs in Tertiary Education**

For students learning English as a foreign language (EFL), using English outside the classroom is as important as participating in the classroom activities. By developing the Extramural English Use Scale, this study aims to explore the frequency of high school students' Extramural English (EE) in relation to the listening, speaking, reading and writing skills depending on different variables. 292 students in a state high school in Turkey were given the 5-point Likert type scale including 34 items, and the data were analyzed using SPSS 22.0. After the reliability and validity analysis, independent samples t-test, ANOVA and Pearson correlation analysis were used to reveal whether the frequency of EE use differs depending on the variables of gender, course selection and perceived English level. It was found that the frequency of EE use differs depending on these variables. It was also revealed that the frequency of EE use is low, and thus it is suggested that students should be encouraged to engage in EE activities.

"This informative monograph makes a much-needed contribution to L2 writing scholarship, advancing the field toward a comprehensive understanding of the nature of L2 writing in the digital age. Written in a clear and cogent style, the book provides valuable insights for L2

writing researchers and practitioners across different contexts from around the world." -Icy I  
The Chinese University of Hong Kong "This book is a very welcome and timely addition to the  
field of L2 writing. It discusses in a clear and accessible manner how rapidly changing  
technologies have impacted L2 writing practices. It promises to be an invaluable resource for  
L2 writing scholars wishing to understand and take advantage of the teaching and research  
opportunities created by these new technologies." --Neomy Storch, University of Melbourne,  
Australia This book presents a comprehensive approach to issues related to researching and  
teaching second language (L2) writing in digital environments. In the digital age, new  
technologies have revolutionized the ways we communicate and construct knowledge, and  
have also reshaped the traditional notions of writing and literacy, posing new challenges and  
opportunities for L2 teachers and students. This book provides up-to-date coverage of the  
main areas of L2 writing and technology, including digital multimodal composing, computer-  
mediated collaborative writing, online teacher and peer feedback, automated writing  
evaluation, and corpus-based writing instruction. It synthesizes the relevant literature, analyzes  
theoretical perspectives, compiles relevant resources, and offers research and pedagogical  
recommendations to guide scholars in undertaking new L2 writing research and instructional  
practice in technologically-supported educational contexts. This book will be of relevance and  
interest to researchers, language teachers, and graduate students in applied linguistics and  
education. Mimi Li is Assistant Professor of Applied Linguistics at Texas A&M University -  
Commerce, USA. Her research areas are second language writing and computer assisted  
language learning. She has published work on computer-based collaborative writing, computer  
mediated teacher/peer feedback, and digital multimodal composing. She serves on the  
editorial boards of multiple international peer-refereed journals.

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Traveling from Zimbabwe to New Zealand and on to Ghana and the United States, the voices  
of higher education are presented in a way only scholars from these regions can fully articulate  
and understand. The changing world of higher education challenges all of those involved in  
very unique ways. In *Global Voices in Higher Education*, scholars from 10 different countries  
share their work, describing not only their research but also the context in which their work  
exists. This book allows the reader to travel with these scholars to their colleges and  
universities and discover areas of concern in higher education from around the globe.

The Gülen Movement in Turkey

Science Education Research and Practices in Taiwan

Examining the Role of Women Entrepreneurs in Emerging Economies

Chaos, Complexity and Leadership 2017

Tep Vol 31-N3

Theories of Mathematics Education

***Entrepreneurship has seen an influx of industry-leading women. With this shift, women are now impacting a mainly male-dominated field and face ongoing challenges within this domain. Examining the Role of Women Entrepreneurs in Emerging Economies is a critical scholarly resource that examines the influence and impact of women entrepreneurs in emerging economies. Featuring coverage on a broad range of topics such as women empowerment, financial management strategies, and discriminatory practices, this book is a vital resource for business managers, organizational leaders, professionals, and researchers seeking current research on***

**women-related issues in different types of work communities and environments.**

**Advances in Mathematics Education is a new and innovative book series published by Springer that builds on the success and the rich history of ZDM—The International Journal on Mathematics Education (formerly known as Zentralblatt für - daktik der Mathematik). One characteristic of ZDM since its inception in 1969 has been the publication of themed issues that aim to bring the state-of-the-art on central sub-domains within mathematics education. The published issues include a rich variety of topics and contributions that continue to be of relevance today. The newly established monograph series aims to integrate, synthesize and extend papers from previously published themed issues of importance today, by orienting these issues towards the future state of the art. The main idea is to move the field forward with a book series that looks to the future by building on the past by carefully choosing viable ideas that can fruitfully mutate and inspire the next generations. Taking inspiration from Henri Poincaré (1854-1912), who said “To create consists precisely in not making useless combinations and in making those which are useful and which are only a small minority.**

**Before today’s teachers are ready to instruct the intellectual leaders of tomorrow, they must first be trained themselves. Every teacher experiences an induction process that can make their early years as an educator nerve-racking. Focusing on this period of time in a teacher’s career can lead to greater teacher retention and success. Examining the Teacher Induction Process in Contemporary Education Systems addresses the construct of teacher induction through theoretical and empirical research. It also provides an in-depth conceptualization of being a novice teacher through micro-political realities of teaching in different geographical and cultural regions. While highlighting topics including adaptation challenges, mentor-mentee interaction, and teacher retention, this book is ideally designed for school administrators, early career teachers, educational researchers, educational professionals, and academicians seeking current research on early career educator adaptation and practices.**

**To reach the highest standards of instrumental performance, several years of sustained and focused learning are required. This requires perseverance, commitment and opportunities to learn and practise, often in a collective musical environment.**

***This book brings together a wide range of enlightening current psychological and educational research to offer deeper insights into the mosaic of factors and related experiences that combine to nurture (and sometimes hinder) advanced musical performance. Each of the book's four sections focus on one aspect of music performance and learning: musics in higher education and beyond; musical journeys and educational reflections; performance learning; and developing expertise and professionalism. Although each chapter within its home section offers a particular focus, there is an underlying conception across all the book's contents of the achievability of advanced musical performance and of the important nurturing role that higher education can play, particularly if policy and practice are evidence-based and draw on the latest international research findings. The narrative offers an insight into the world of advanced musicians, detailing their learning journeys and the processes involved in their quest for the development of expertise and professionalism. It is the first book of its kind to consider performance learning in higher education across a variety of musical genres, including classical, jazz, popular and folk musics. The editors have invited an international community of leading scholars and performance practitioners to contribute to this publication, which draws on meticulous research and critical practice. This collection is an essential resource for all musicians, educators, researchers and policy makers who share our interest in promoting the development of advanced performance skills and professionalism.***

***Communication Disorders in Turkish***

***Global Voices in Higher Education***

***A Report of Project SPAN***

***Seeking New Frontiers***

***Proceedings of IAC 2019 in Vienna***

***English Studies in the 21st Century***

Private tutoring—supplementary, out-of-school instruction offered at a fee to individuals or groups—represents a substantial household expenditure, even in systems that claim to have free public education. It plays out across, alongside, and even within some school systems. Emerging as a 'shadow education', private tutoring now operates as a system and industry crossing national, regional, and social-class boundaries. Private tutoring is provided through different modes of delivery including the internet. Policy makers, parents, teachers, trade unions, corporations, community associations, and students are implicated in the private tutoring industry. The debates over private tutoring are therefore part of the larger struggles over the ends of education in just and equitable societies. The authors in this volume address diverse national settings of

private tutoring across the Mediterranean, and examine its political, economic, social, and cultural underpinnings. They draw on a range of conceptual frameworks, and deploy a variety of research methods to problematize the multifaceted relationships between tutoring, learning, and equity. The volume captures a multiplicity of voices, and focuses on some of the central challenges facing education in pluralistic societies. This book focuses on the dynamic relationships among individual difference (ID) variables (i.e., willingness to communicate, motivation, language anxiety and boredom) in learning English as a foreign language in the virtual world Second Life. The theoretical part provides an overview of selected issues related to the four ID factors in question (e.g., definitions, models, sources, types, empirical investigations). The empirical part reports the findings of a research project which aimed to examine the changing nature of WTC, motivation, boredom and language anxiety experienced by six English majors during their visits to the said virtual world, the main contributors to the changes in the levels of the constructs under investigation, as well as their relationships. The book closes with the discussion of directions for further research as well as pedagogical implications.

Journal of International Students (JIS) is a quarterly publication on international education. JIS is an academic, interdisciplinary, and peer-reviewed publication (Print ISSN 2162-3104 & Online ISSN 2166-3750) on international student affairs. The journal publishes narrative, theoretical, and empirically-based research articles, student and faculty reflections, study abroad experiences, and book reviews relevant to international students and their cross-cultural experiences and understanding in international education.

The Impact of the Laboratory and Technology on K-12 Science Learning and Teaching examines the development, use, and influence of active laboratory experiences and the integration of technology in science teaching. This examination involves the viewpoints of policymakers, researchers, and teachers that are expressed through research involving original documents, interviews, analysis and synthesis of the literature, case studies, narrative studies, observations of teachers and students, and assessment of student learning outcomes. Volume 3 of the series, Research in Science Education, addresses the needs of various constituencies including teachers, administrators, higher education science and science education faculty, policymakers, governmental and professional agencies, and the business community. The guiding theme of this volume is the role of practical laboratory work and the use of technology in science learning and teaching, K-16. The volume investigates issues and concerns related to this theme through various perspectives addressing design, research, professional practice, and evaluation. Beginning with definitions, the historical evolution and policy guiding these learning experiences are explored from several viewpoints. Effective design and implementation of laboratory work and technology experiences is examined for elementary and high school classrooms as well as for undergraduate science laboratories, informal settings, and science education courses and programs. In general, recent research provides evidence that students do benefit from inquiry-based laboratory and technology experiences that are integrated with classroom science curricula. The impact and status of laboratory and technology experiences is addressed by exploring specific strategies in a variety of scientific fields and courses. The chapters outline and describe in detail research-based best practices for a variety of settings.

Forum

Worldviews and Identity Discernment of Turkish Youth and the Role of Religious Education

A Journal for the Teacher of English Outside the United States  
Investigating Individual Learner Differences in Second Language Learning  
Design Solutions for Adaptive Hypermedia Listening Software  
Researching Early Childhood Education for Sustainability

*Adaptive hypermedia listening software enables materials writers to combine and deliver a wide range of digital elements on the same digital computer platform more efficiently. Such a combination and delivery provides a multidimensional, multi-sensory digital environment in which rich, efficient, instant, comprehensible, optimum, and meaningful input and feedback can be presented effectively and efficiently. Moreover, language learners' attention can be drawn to forms and meanings in input. Such aspects correspond with different theories and hypotheses of language learning and teaching. This presents users/learners with an environment that is easy to use, tension-free, and optimal during self-study. However, to be able to design and develop cost effective and professional adaptive hypermedia listening software, there are certain scientific educational findings and implications that need to be implemented at every single stage. To have access to such vital findings is not so easy, and research must address this area. Design Solutions for Adaptive Hypermedia Listening Software explores how to design and create technically and pedagogically sound and efficient interactive adaptive hypermedia listening software for language learners in any language. The chapters will cover learner strategy tools, the effectiveness of this technology, best practices in adaptive hypermedia listening software, and the benefits and challenges of this technology for language learning. It is ideal for companies, institutions, teachers, policymakers, academicians, researchers, advanced-level students, technology developers, and decision-making pertinent government officials interested in designing and developing multimedia listening environments for language learners.*

*Structural Equation Modeling (SEM) is a statistical approach to testing hypothesis about the relationships among observed and latent variables. The use of SEM in research has increased in psychology, sociology, and economics in recent years. In particular educational researchers try to obtain the complete image of the process of education through the measurement of personality differences, learning environment, motivation levels and host of other variables that affect the teaching and learning process. With the use of survey instruments and interviews with students, teachers and other stakeholders as a lens, educators can assess and gain valuable information about the social ecology of the classrooms that could help in improving the instructional approach, classroom management and the learning organizations. A considerable number of research have been conducted to identify the factors and interactions between students' characteristics, personal preferences, affective traits, study skills, and various other factors that could help in better educational performance. In recent years, educational researchers use Structural Equation Modeling (SEM) as a statistical technique to explore the complex and dynamic nature of interactions in educational research and practice. SEM is becoming a powerful analytical tool and making methodological advances in multivariate analysis. This book presents the collective works on concepts, methodologies and applications of SEM in educational research and practice. The anthology of current research described in this book will be a valuable resource for the next generation educational practitioners.*

*Science and technology education research, influenced by inquiry-based thinking, not only concentrates on the teaching of scientific concepts and addressing any misconceptions that learners may hold, but also emphasizes the ways in which students learn, and seeks avenues to achieve better learning through creativity. New developments in science and technology education rely on a wide variety of methods, borrowed from various fields of science, such as computer science, cognitive science, sociology and neurosciences. This*

*book presents papers from the first international conference on “New Developments in Science and Technology Education” that was structured around seven main thematic axes: namely modern pedagogies in science and technology education; new technologies in science and technology education; assessment in science and technology education; teaching and learning in the light of inquiry learning methods; neuroscience and science education; conceptual understanding and conceptual change in science; and interest, attitude and motivation in science. It explores the beneficial impact of pedagogically updated practices and approaches in the teaching of science concepts, and elaborates on future challenges and emerging issues that concern science and technology education. By pointing out new research directions, the volume will inform educational practices and bridge the gap between research and practice, providing new information, ideas and perspectives. It will also promote discussions and networking among scientists and stakeholders from worldwide scientific fields, such as researchers, professors, students, and companies developing educational software.*

*International Encyclopedia of Adolescence*

*Explorations of Chaos and Complexity Theory*

*Program of Surface-water Investigations in Turkey*

*Online*

*Researching and Teaching Second Language Writing in the Digital Age*

*Undertaking Educational Challenges in the 21st Century*