

TRIZ SUMMIT 2023



TRIZ SUMMIT 2023



Natig Gasil oglu Aliyev

**Education Committee Member
TRIZ Developers Summit
Azerbaijan Representative**

**Innovation Management and TRIZ Institute
Executive Director**

Development Vector: Chernyaevsky-Altshuller

The kaizen
of TRIZ educational practices

At a regional level
(Azerbaijan)



Quote:

"...A simultaneous review of the state of development of educational theory and practice in various countries, among different peoples and historical eras, with the goal of establishing benchmarks that allow us to assess contemporary approaches to education and predict their future trajectory, while considering past experiences...".

Given the significance of the topic, this report logically continues the development of proposals presented in the previous speech (**TRIZ SUMMIT 2022**) for enhancing TRIZ educational practices at a regional level.

This presentation, building on the theme of previous work, highlights the **appropriateness** of examining certain theoretical aspects of the pedagogical activities of **Gori Seminary graduates**, with the aim to then integrate them with **TRIZ-Pedagogy** methodologies in the regional educational environment.

This thesis provides an opportunity to explore the prospective of exploring **a comprehensive classification system for the history of regional pedagogical heritage and organisational knowledge in this regard**, further developing the **initial data** by incorporating it into the **S-shaped system development tables and System Operator** from the previous article.

Participants of **TRIZ SUMMIT 2023** are also invited to consider prospects **for establishing measures** to implement the pilot project **“Direction of Development: Chernyaevsky- Altshuller“** for identifying gifted children in the country's remote regions.

It's worth noting that, similar to the previous presentation, **the social import** of this work for the TRIZ community lies in the preliminary research by the Education **Committee of the TRIZ Developers Summit** in **Genrich Altshuller's homeland, the Republic** of Azerbaijan, from 2016 to 2023.

PART ONE

Why is it proposed to determine the trends **in joint development** of these methodologies for practical use, drawing from the experiences of educator Alexey Osipovich Chernyaevsky and inventor Genrich Saulovich Altshuller today?

This is mainly to **systematise** the experience **and personal approach** of educators in shaping

INDIVIDUAL CREATIVE ENERGY, ASCETICISM, AND ENLIGHTENMENT

in the search for gifted children in remote corners of the country, using the methods developed for fostering **Creative Personality Development**.

A bit of background information:

On the 28th of February 2017, as part of the project

'Pedagogical Heritage And Contemporary Issues'

a meeting was held at the Russian Information and Cultural Centre in Baku with representatives from the scientific and pedagogical community, dedicated to Azerbaijan's enlightenment figure, **Alexey Osipovich Chernyaevsky**.



During the meeting, a presentation was given on the **“EDUCATIONAL DEVELOPMENT STRATEGY”**

OF THE RUSSIAN ACADEMY OF EDUCATION (RAO):

'Why do we study the history of pedagogy?'



The attendees represented:

Azerbaijan's Ministry of Education:

Azerbaijan's Institute of Education;

Institute for the Professional Development of Education Workers of Azerbaijan;

Baku Education Department's Learning Support Centre;

Centre for Humane Pedagogy of Azerbaijan;

National Pedagogical University;

Slavic University of Baku;

State University of Baku;

The journal 'Russian Language and Literature';



Azerbaijan's Ministry of Culture and Tourism: (Alumni Houses-Museums of the Gori Seminary)

House Museum of Jalil Mammadkulizadeh;
Nariman Narimanov House Museum;
Uzeyir Hajibeyov House Museum;
M. F. Akhundov National Library;

Azerbaijan's National Academy of Sciences:

Humanities Division of the Presidium of ANAS;
Centre for Systematisation and Collection of Scientific Heritage of the Presidium of the
Academy of Sciences of the Republic of Azerbaijan;
Institute of History of Sciences of ANAS;
Institute of Philosophy of ANAS;
The National Encyclopaedia of Azerbaijan;



The next event:

On 18 May 2017, as part of the Russian Information and Cultural Centre's project in Baku, 'Pedagogical heritage and contemporary issues', the National Academy of Sciences of Azerbaijan's **Institute of Philosophy** hosted an extended meeting of the RICC's Russian Language Teaching and Methodological Centre. The meeting was dedicated to **scientific research in the field of pedagogical history in Russia and Azerbaijan, including the history of the Gori Seminary:**

The Institute of Philosophy
Azerbaijan's National Academy of
Sciences

"Pedagogical Heritage And Contemporary Issues"

*The RICC Training and Methodological
Centre's Extended Field Meeting*

**Baku's Russian Information and
Cultural Centre**

18/05/2017

Nargiz Akhundova, the Academician-Secretary of ANAS's Department of Social Sciences, gave a welcoming speech to the event's participants.

The **Director of the Institute of Philosophy, Ilgam Mammadzadeh,** RICC's educational programmes coordinator Natig Aliyev, and scientists from the Institute of Philosophy, Rafiga Azimova and Veliyev Gorkhmaz, along with Ahmedov Agil and Zeynalova Aida from the Institute of History of Sciences, discussed **the significance of academic research into key stages of pedagogical heritage.**

Chernyaevsky's pedagogical work was highlighted.



In conclusion, **Nargiz Rajabova, the Head of the Quality Monitoring and Control Department at the Institute for Professional Development of Education Workers**, proposed summarising the seminar's key points for further review at the institute.

Among those in attendance were **Maryam Seidbeyli, Director of the Institute of History of Sciences of ANAS, Lyubov Yakunina, Head of the Teaching and Methodological Centre of Russian Language at RICC, Almaz Khasret, Head of the International Cooperation Department at the Institute of Education, Azad Ahmedov, Head of the International Projects Department at the Institute for Professional Development of Education Workers**, along with representatives from the scientific and pedagogical community.

•

Dear TRIZ SUMMIT 2023 attendees,

You have been introduced to a selection of events from the "**Pedagogical heritage and modernity**" series, where relevant bodies of the National Academy of Sciences and Azerbaijan's Ministry of Science and Education demonstrated the state's approach to highlighting the pedagogical legacy of Gori Seminary graduates and ongoing study thereof.

ALEXEY OSIPOVICH CHERNYAEVSKY - a teacher and enlightener.

His teaching career began in the village of Marazi, in Azerbaijan's Shemakhi district,

From 1879, **he was an inspector at the Azerbaijani branch of the Gori Transcaucasian Teachers' Seminary**

He wrote the textbook "**VETEN DILI**" ("Native Speech"),



The outcomes of **Alexei Chernyaevsky's** work at the Gori Seminary have given our nation, and previously the entire union, a host of renowned figures:

These include writers and enlighteners such as **Jalil Mammadkulizadeh, Sani Akhundov, Rashid bey Efendiyev, Teymur Bayramalibekov, Firudin bey Kocharli, Nariman Narimanov** and others.

Furthermore, even after his departure from the seminary, it produced talented individuals like composers **Muslim Magomayev** (the grandfather of singer M. Magomayev) and **Uzeyir Hajibekov**.

С 1878 года Д. Д. Семенов назначается директором Закавказской учительской семинарии в городе Гори. ...Благодаря Д. Д. Семенову, Закавказская учительская семинария стала одной из лучших учительских семинарий в России.. Именно в этой семинарии получили образование многие выдающиеся деятели.. В 1902 году, высоко оценивая значение деятельности Семенова, газета «Иверия» писала: «Период, когда в Горьской семинарии директором работал Семенов, является периодом возрождения и просвещения семинарии».

Х. МЕХТИЗАДЕ

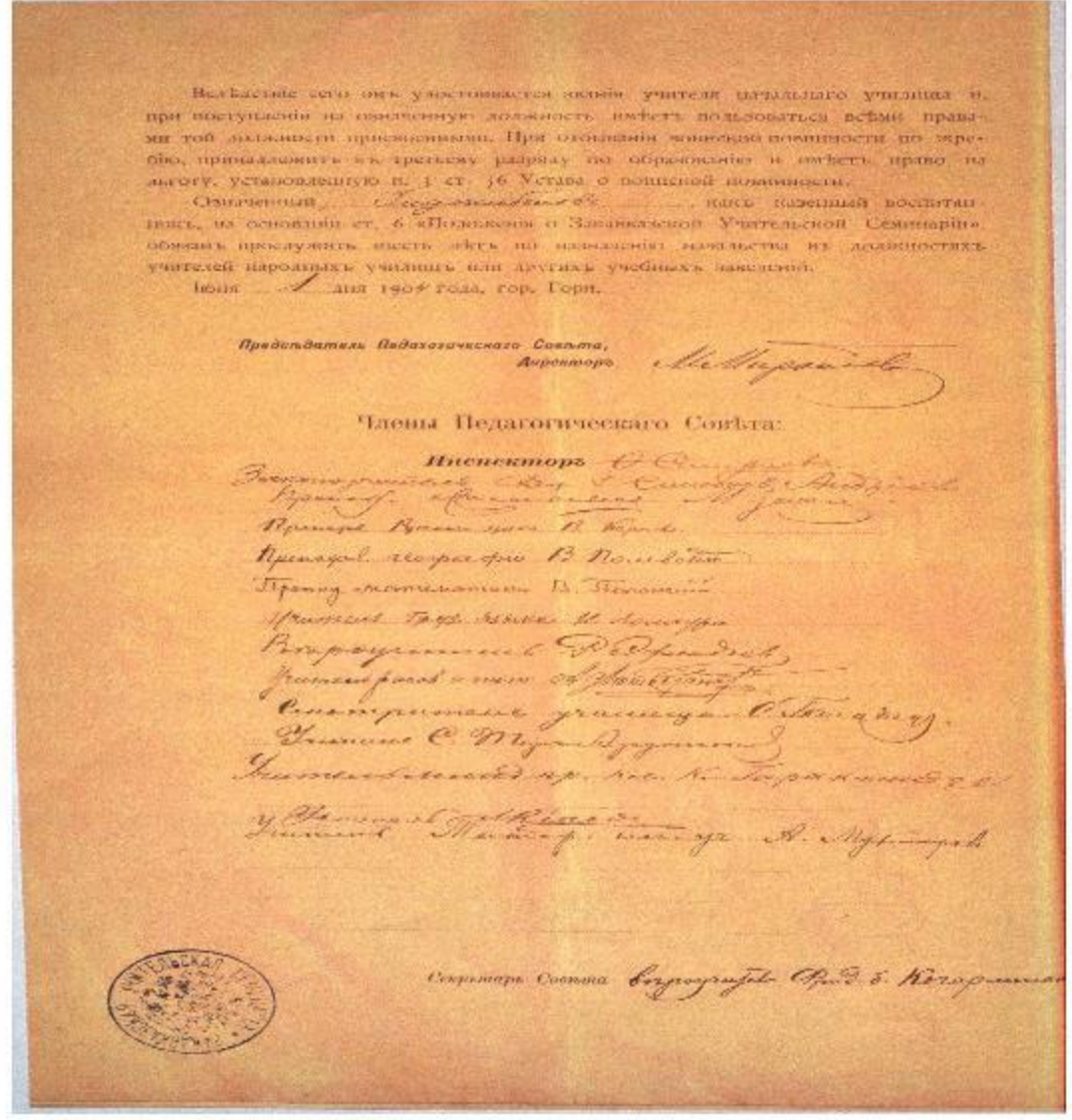
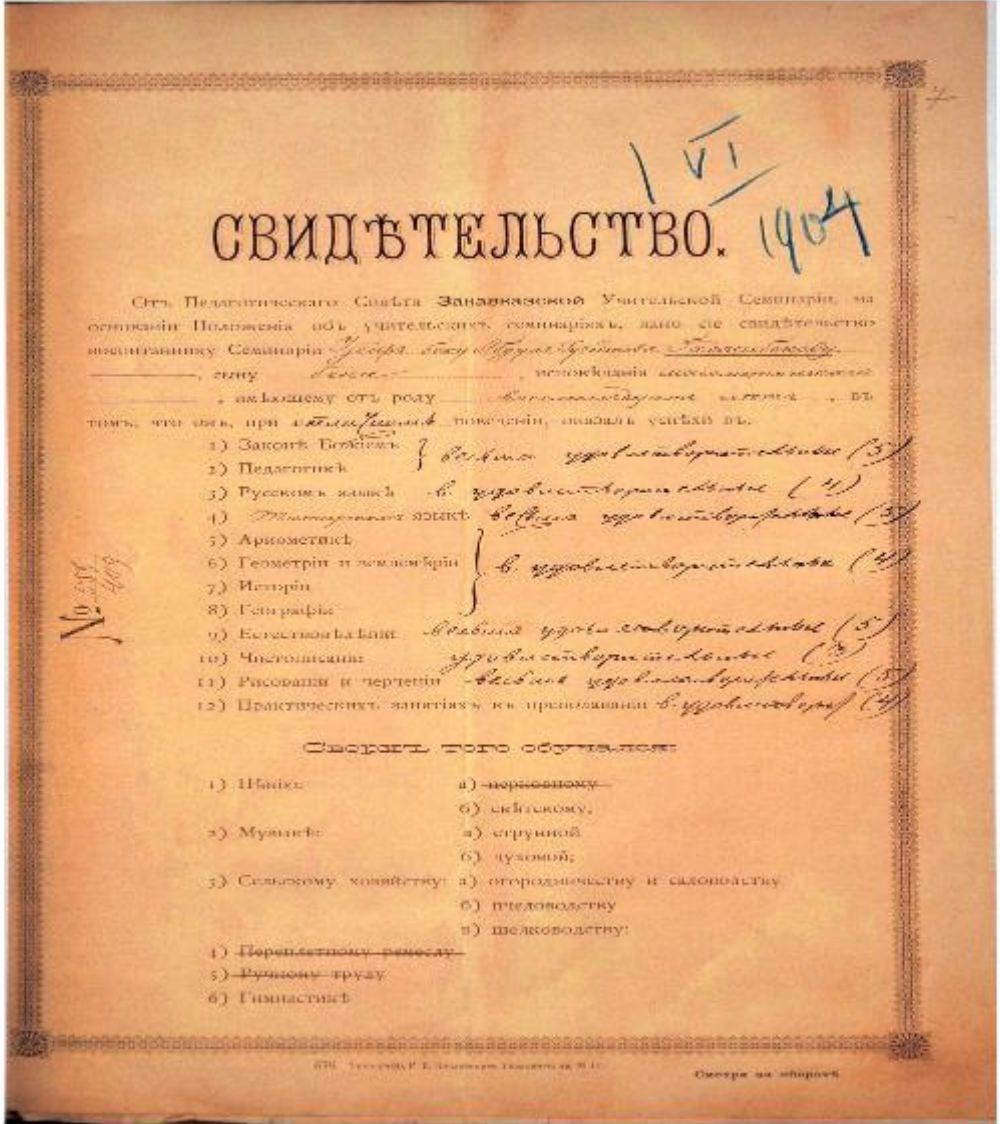
Несмотря на то, что покойный Черняевский не был знатоком азербайджанской литературы, он являлся прекрасным педагогом и хорошо знал тюркский язык. И азербайджанские пословицы, поговорки он использовал удивительно к месту. Готовя к изданию учебник родного языка для обучения грамоте ребятишек он как педагог сумел подобрать нужный материал и преподнести этот материал на живом и ярком детском языке.

По нашему убеждению, «Родной язык» А. О. Черняевского имеет такое же значение для азербайджанцев, как и учебник Ушинского «Родное слово», подготовленный им для русских школ.

ФИРУДИН-БЕК КОЧАРЛИ. 1910 год.



**Certificate
of graduation from the Gori Seminary
of composer
Uzeyir Hajibekov**



It is worth noting that in the village of Marazi in Gobustan district, Azerbaijan, where Chernyayevsky began his teaching career, there is a **secondary school named after the renowned educator.**

In 2015, this institution of general education was reopened to the district's students in a refurbished state, following extensive restoration work supported by the **Embassy of the Russian Federation** in Azerbaijan and funded by the **government.**

The following individuals attended the opening ceremony after the restoration works.

Vladimir Dorokhin, the Ambassador Extraordinary and Plenipotentiary of the Russian Federation to the Republic of Azerbaijan.

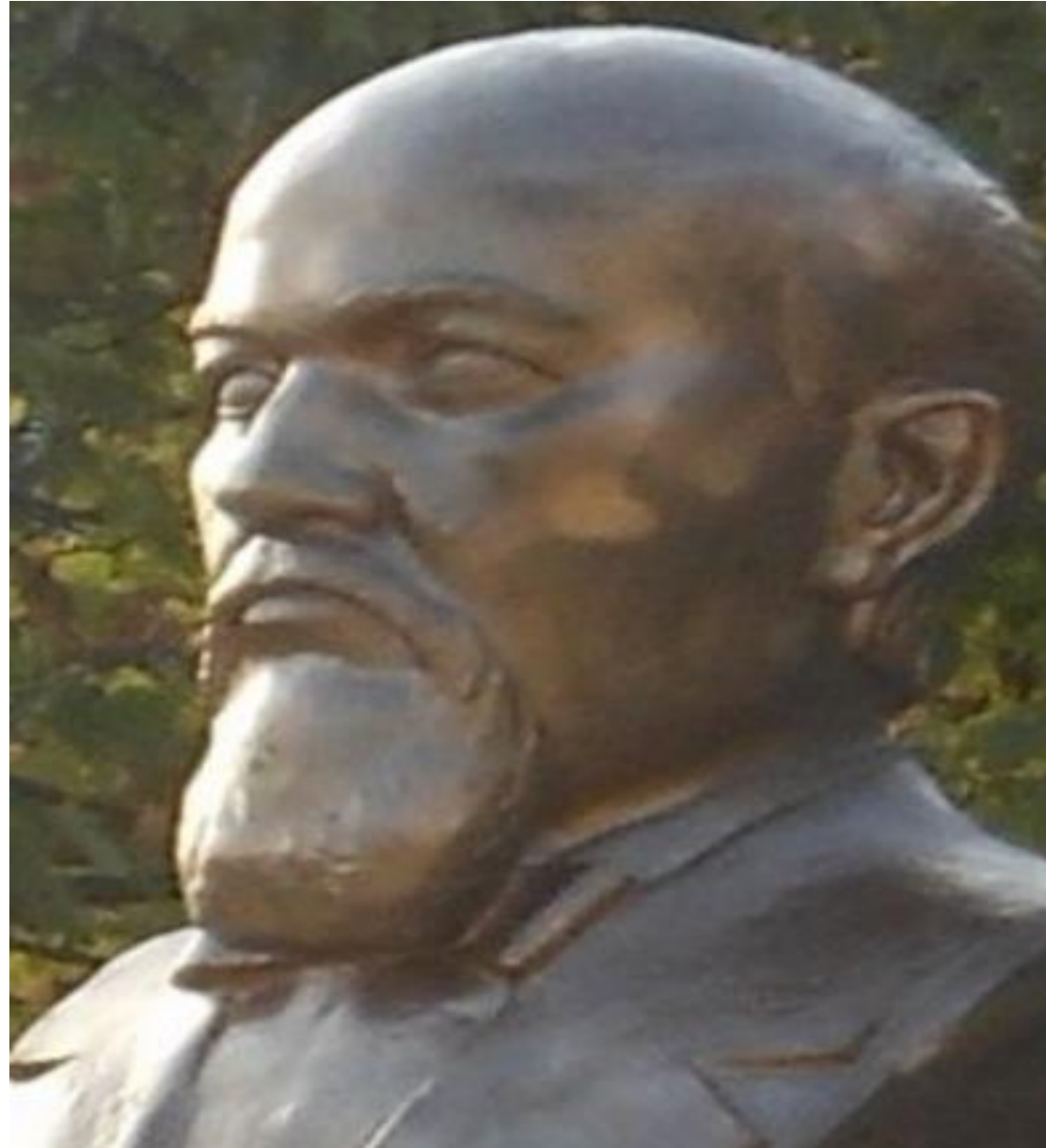
and

Abid Sharifov, the country's Deputy Prime Minister.





CHERNYAEVSKY MONUMENT AT THE SCHOOL'S ENTRANCE



Address marking the commencement of the academic year at Chernyaevsky School by **Valentin Denisov**, Head of the Rossotrudnichestvo Representative Office in Azerbaijan.



Discussing **Genrich Altshuller's** work, well-known among conference attendees, it's worth noting that the development of **literary science fiction schools and inventive problem-solving theory** in Azerbaijan has laid the groundwork for a new generation of Baku-based science fiction writers and inventors to emerge. These include science fiction writers **Evgeny Voiskunsky and Pavel Amnuel**, and TRIZ Masters **Mikhail Rubin and Victor Fey**, among others.

I'd like to draw the conference attendees' attention to the fact that since 2016, preparatory seminars and student presentations from the republic's general education institutions for the International TRIZ Cup Competition have been held annually in Henrikh Saulovich's homeland. This initiative, led by the **TRIZ Developers Summit management**, has seen the masters' compatriots awarded the **GRAND PRIX** prize three times.

INTERNATIONAL CONTEST TRIZ CUP 2023

International Competition 'TRIZ Cup 2023'

A preparatory seminar with Baku European Lyceum **students on the use of TRIZ tools and creative imagination techniques.**

(future **Grand Prix** champions)

Moderators:

Representatives from the Institute of Art and Architecture of the National Academy of Sciences and the Artists' Union of Azerbaijan

Yelchin Shamilli

Bahram Khalilov



International Competition 'TRIZ Cup 2023'

Presentation of Diplomas, Certificates, and Letters of Appreciation to teachers and students of the National Aviation Academy

Present:

Chairman of the Board of the Innovation Management and TRIZ Institute, **Prof. Dr. M. K. Kovalov Ali Kutwan;**

Khagani Abdullayev, Pro-Rector for Innovative Technologies at the Aviation Academy

Chairman of the TRIZ Club at the **Said Akhmedov** Academy



It's noteworthy that there's a chance to carry on the pedagogical traditions of Chernyaevsky using Altshuller's methods and those of his followers in TRIZ-Pedagogy, during the **International TRIZ Cup Competition**.

The Regional Education Committee's representatives could identify motivated students **before the** International Competition and actively support their further improvement in mastering TRIZ techniques (**Junior**), tracking their creative and professional growth (**Talent Acquisition**) **after** the competition.

It appears feasible to develop **combined methods** for identification, as it were,

YOUNG PASSIONARIES, BEARERS OF SPIRITUAL ENERGY (Drawing on Chernyaevsky's experience)

and encourage students to gain knowledge of the systemic thinking and technical skills of TRIZ (Altshuller's **RTL**), which can aid in shaping a specific phase of a new educational paradigm in this field in the era of digital technology.

As Vygotsky once said:

Rediscover the **joy of learning**.

The foundation of this initiative is:

A select number of participants in the TRIZ Developers Summit TRIZ Cup are chosen through a special survey aimed at identifying motivated children from the broad student population of general education institutions, while considering recommendations from the Department for Gifted Children at the Institute of Education. This approach fosters increased interest in the creative pursuit and personal growth.

It's worth noting that the TRIZ Developers Summit Education Committee has conducted significant research in this area in the past:

"Organising Research Activities in Primary School" by Radovskaya, O. V. and Rubina, N. V.

Participants at the organisational and theoretical level of the project are encouraged to consider the following areas (using some specialist definitions) to draw from the pedagogical and creative legacy of Chernyaevsky and Altshuller, with the aim of outlining **stages for future development.**

COGNITIVE MOTIVATION

among students, specifically, among **candidates** for the International TRIZ Cup Competition:

- **All actions are pedagogically directed;**
- **Developing intrinsic cognitive motivation;**
- **Techniques** for fostering cognitive motivation;
(utilising the experience of Chernyaevsky and Altshuller)
- A specialised programme for **rejuvenating the motivation** system of students during their learning process;
- The **neurophysiological processes** involved in a child's cognitive development (with the assistance of additional specialists);

- Determining **the conditions that give rise to cognitive needs**;
- Creating **an environment that fosters the development of research skills** among students studying TRIZ theory;
- Developing cognitive **independence**;
- Organising **educational and cognitive** activities;
- Encouraging **inquisitive and cognitive** activity;

- Identifying the most effective teaching methods for TRIZ-Pedagogy at a regional level, as developed by experts and educators;

- **Additional arrangement of an introductory lecture series for interested parties:**

"Discussing the influence of Russian Sentimentalism in literature on the cognitive motivation of Azerbaijani writer-graduates from Gori Seminary and the role of the emotional component of extracurricular reading of Russian and Azerbaijani literature in the formation of cognitive motivation among students (from the experience of teaching literature lessons to graduates of the Gori Seminary)";

Future plans include defining a framework for comparative analysis and summarising and drawing analytical conclusions on acceptable works related to the history of our masters' pedagogical and creative legacy for subsequent presentation to relevant educational management structures and research centres.

PART TWO

The second part of the presentation outlines plans **for organising the initial stage** in jointly applying the experiences of Chernyaevsky and Altshuller in identifying gifted children in remote regions of Azerbaijan, for participation in the International TRIZ Cup competition. This involves:

- **Implementation of a pilot project**

DEVELOPMENT VECTOR: CHERNYAEV - ALTSHULLER

using **general education institution No.1 named after Chernyayevsky** in Marazi village, Gobustan district, Republic of Azerbaijan as a base;

- Conducting an offsite (or virtual) meeting of the **TRIZ Developers Summit Education Committee** to organise **TDS interregional events, focusing on 'The main vectors and mechanisms for promoting the International TRIZ Cup Competition'**, in collaboration with interested representatives from the Ministry of Education and Science, and local authorities of the Gobustan district.

- Coordinating the action plan for selecting participants in the international **Competition "TRIZ Cup 2024"**, considering the **methodological advice** from both researchers **studying Chernyaevsky's legacy and the history of Gori Seminary**, as well as that from TRIZ Pedagogy experts from the TRIZ Developers Summit Education Committee;

- Conducting a selection round for the competition to find motivated candidates (through questionnaires and teacher recommendations) among **all age groups** at Chernyaevsky Secondary School No. 1;

- Holding preparatory seminars for competition participants to acquaint them with the contest rules using the TRIZ Pedagogy approach;
- Arranging for students' work to be submitted for review by the TDS competition jury;
- Conducting a comparative analysis of the outcomes of students' work to **assess the impact** of the pilot project, followed by recommendations from the Education Committee for future competitions in other regions on an international scale;

The next stage of the pilot project:

- Facilitating discussions between the TRIZ Developers Summit Education Committee and the Institute for Strategic Development of Education at the Russian Academy of Education, to engage in shaping and executing joint initiatives of the Russian Ministry of Education and Azerbaijan's Ministry of Science and Education in this field;
- Engaging in talks with interested parties to **transform** the "**Development Vector: Chernyaevsky-Altshuller**" initiative of the TRIZ Developers Summit Education Committee into the **resource potential** of a specific area (TRIZ-Pedagogy or the International TRIZ Cup Competition) of innovative educational development, as well as to provide **organisational and technical** support for this project;

- Conducting negotiations to build a **multi-level expert-driven vision and system integration** on the aforementioned initiative between the TRIZ Developers Summit Education Committee, the **Institute of System Projects at Moscow State Pedagogical University** (Laboratory of Competent Educational Practices, Laboratory of Humanitarian Expertise and Social Design of Education), the Institute of Education Development Strategy at the Russian Academy of Education, and the Institute of Education of Azerbaijan (Department for Gifted Children);



- Holding discussions to develop innovative infrastructure in this field (**Development Vector: Chernyaevsky-Altshuller**) and for evaluation purposes

Progression of Educational Accomplishments

during the execution of this innovative project for subsequent dissemination;

- Through the **Moscow Museum of Education** (the institution's expertise in this field), the **Azerbaijan Museum of Education**, and General Education Institution Chernyaevsky No. 1, a programme will be developed for regular meetings and seminars involving researchers focusing on pedagogical history (Gori Seminary) and TRIZ practitioners (TRIZ Pedagogy);

Coordinators:

TRIZ Developers Summit Education Committee

The Russian Academy of Education's Institute for Education Development Strategy

Institute of Education of Azerbaijan

Institute for Researching Pedagogy on Children's Giftedness

The Russian Academy of Sciences' Institute of Age Physiology

Project Integration Coordination Classification: Management of Organisational Knowledge (Knowledge Management)

The aim and essence of the recommendations presented in this presentation (a pilot project for long-term systemic support of the aforementioned methodological recommendations) **is to establish Worthy Goals** (a method / Life Strategy for a Creative Personality, LSCP), considering

REGIONAL PRACTICES

(Altshuller, Chernyaevsky, alumni of Gori Seminary),

Among those keen to participate in the process of selection and preparation for the annual International "TRIZ Developers Summit Cup" and other similar TRIZ community contests.

Insights from Pedagogical Heritage:

Encouraging "... the emergence of a positive life plan as the implementation of the **zone of proximal development** among high school students..."

Concept

"ZONE OF PROXIMAL DEVELOPMENT"

was first introduced to psychology in the early twentieth century by **Vygotsky** to elucidate the specifics of human development during ontogenesis.

TRIZ SUMMIT 2023

THANK YOU!



TRIZ SUMMIT
2023

EDUCATION

SESSION

