Educational foresight-event and personal-resource mapping as methods for future thinking developing

This presentation defines and describes pedagogical focus in futures studies through the problems of using the concepts of time in education in the formation of the concepts of individualization of education and reveal the possibilities of futures studies and cultural-historical theory (L. Vygotsky) to solve developmental challenges of pedagogical activity.
Educational foresight-event and personal-resource mapping as methods for future-thinking developing

• In the context of the global trend of individualization of education one of the insufficiently studied and difficult to approach is the issue of how and by what means it is possible to organize interaction with the child on the temporal aspects of processes of individualization.

• The concepts of time and future in educational theories becomes the new historical challenge for the classical idea of western education.

• Now this is the necessary subjects to study in the connection with the issues of formation of image of the futures and futures thinking, when considering how the image of the future begins to affect the understanding of the past and present, how to establish links between the future, past and present.

Our research is focused on analysis of the concepts educational foresight-event (EFE) (T. Yakubovskaya) and personal-resource mapping (T. Kovaleva)
Concept “Educational Foresight-Event” (EFE)  
by Tatiana Yakubovskaya

? How the image of the future begins to affect the understanding of the past and present  
? How to establish links between the future, past and present  
? How these play systematizing role in the practice of education individualization

The concept of educational foresight-event (EFE) is based on analysis of the experience of educational technology and project “Open Foresight-laboratory” – specific format of future-oriented educational practice as series of regular educational foresight-events (EFE)

The experience of educational project and educational technology “Open Foresight-laboratory of students: Key Technologies and Profession skills for Future +20” developed by research and pedagogical groups (head of groups – Tatiana Yakubovskaya) by cooperation of Tomsk State University and high schools and colleges of West Siberia (Tomsk, 2012–2017) and Arctic area (Yamal, 2017)

Experience of future-oriented educational practices (3 models):

educational technology and project “Open foresight-laboratory” as series of regular educational foresight-events (EFE)  
(head of research and pedagogical groups – Tatiana Yakubovskaya)

Model 1. Open foresight-laboratory of high school students (2012 – 2017, Russia, Tomsk State University & high schools)

2012: 1 EFE – 5 experts, 70 high schools students, 12 teachers from Seversk gymnasium/high school (Tomsk region)
2013: 1 EFE - 12 experts, 150 high schools students, 34 teachers from 11 regions of Russia and Tomsk
2014: 2 EFE - 17 experts, 290 high schools students, 41 teachers from Tomsk region and 10 regions of Russia
2015: 2 EFE - 16 experts, 310 high schools students, 46 teachers from Tomsk region and 13 regions of Russia
2016: 2 EFE - 22 experts, 305 high schools students, 46 teachers from Tomsk region and 10 regions of Russia
2017: 1 EFE – 10 experts, 145 high schools students, 21 teachers from Tomsk region and 13 regions of Russia

Model 2. Open foresight-laboratory of students for the region development (2017, Russia, Tomsk State University & high schools and colleges of Yamal, Yamalo-Nenets Autonomous District)

March 2017: 1 EFE - 18 experts, 60 high schools and colleges students (10 groups), 20 teachers from 6 towns of Yamal
April 2017: 1 EFE – 23 experts, 60 high schools and colleges students (6 groups), 21 teachers from 5 towns of Yamal

Model 3. Open foresight-laboratory of students for interdisciplinary researches and projects (project since September 2017, Tomsk State University)
Experience of future-oriented educational practices: “Open foresight-laboratory” as series of regular or educational foresight-events (EFE)

- Programs (for different models EFE: 1, 2, 3)
- Foresight-essays (prepared / distance stage)
- Presentations of teams of Open Foresight-laboratory (3-10 teams, 3 stages=3 days)
- Questionnaires
- Interviews
- Video materials

For example:

Model 2. Open foresight-laboratory of students for the region development «Arctic Generations & Arctic Skills + 20»

Yamal, Yamalo-Nenets Autonomous District, for high schools & colleges, head of programs team – Tatiana Yakubovskaya

February-March 2017: 3 days = 3 stages and 1 month before as preparation stage
18 experts, 60 high schools and colleges students, 20 teachers from 6 towns of Yamal

Preparation stage (1 month before)

I. Key Technologies for Arctic Lifestyle +20: Threats and Opportunities
   I. Digitalization. IT
   II. Robotics
   III. New materials. 3- and 4-D printing
   IV. Power Engineering
   V. Biotechnology

II. Arctic Lifestyle & Arctic Generations +20 (versions)

III. Arctic Skills + 20: Top - 15 Professions for Arctic Generation and My Priorities for My Educational Programs (versions)
Concept of “Educational Foresight-Event” (EFE):

- Core of the educational technology “Open Foresight-laboratory” (Tomsk, TSU) is the specific format of educational activities and teaching frameworks - “Educational Foresight-Event” (EFE), which goes beyond “futures” as isolated lessons through the empirical, interpretive, critical, and action learning modes of futures studies.

- Concept of “Educational Foresight-Event” (EFE) develops a significant focus within pedagogy in futures studies by the examination and adopting fundamental models from Vygotsky’s Sociocultural Theory methods of educational foresight and narrative foresight (S.Inayatullah) approaches, theory of extreme events and problems with probability, randomness (concept of Black Swan, N. Taleb), model “transformative action” (Transformative Action Institute, TAI)

Conclusions: **Concept of Education Foresight-Event (EFE) (by Tatiyana Yakubovskaya)**

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**Educational formats**

Educational Foresight-Events (EFE) as series of regular future-oriented educational practices. EFE goes beyond “futures” as isolated lessons through the empirical, interpretive, critical, and action learning modes of futures studies.

**Future-oriented communities participation into EFE**

Students and future-oriented communities participation into transforming action through education foresight and narrative foresight:

- analysis from a focus on new technologies to the question of effects and impacts to economic, social-cultural, educational, changes of competencies and professions,
- to an exploration of the worldviews and myths that underlie possible, probable and preferred futures
- and, finally, towards versions of the own choice of educational scenarios and professions in line with the possibilities of desired presents and futures

**Rethinking visions about Future**

Rethinking versions about own futures (educational, professional) and futures of the territory: from uncertain visions about own futures to the more positive and constructive versions.
Conclusions:

• By educational foresight-event (EFE) is established links between the future and past and present that teaches skills for personal and social transformation and can lead to meaningful change and development for individuals and groups within a learning environment in the connection with the issues of formation of image of the future.

• The “Open Foresight-laboratory” moves thinking from a focus on new technologies to the question of effects and impacts to economic, social-cultural, educational, professional changes, to an exploration of the worldviews and myths that underlie possible, probable and preferred futures and, finally, towards versions of the own choice of educational scenarios and professional in line with the possibilities of desired resents and futures, as well as rethinking versions about own futures (educational, professional) and futures of the territory: from uncertain visions about own futures to the more positive and constructive versions.

Concept “personal-resource mapping”

by Tatiana Kovaleva

How the image of the future begins to affect the understanding of the past and present?

How to establish links between the future, past and present?

How these play systematizing role in the practice of education individualization?
Two steps to stimulate learner’s independent initiative aimed at handling the Future

**Step 1.** Special Educational Foresight Events to “have learner got into a larger time-scale” (B. Elkonin)

**Step 2.** Stimulating learner to undertake a step along his/her personal learning pathway in this larger time scale basing on his/her internal (*anthropological*) and external (*cultural and social*) resources.

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**Step 2 and Personal Resource Mapping**

**PRM** – a special type of pedagogic support provided to a learner on his/her personal learning pathway.

Personal Resource Mapping – a base and image of the Learner’s progress

**Personal Resource Maps:**

- image of the Learner’s advance along his/her personal learning pathway
- unique results of each learner’s efforts although preceding Foresight Event can be in a group
- Learner’s next step along his/her personal learning pathway in the new time scale
Personal Resource Mapping –
common mean for tutor and student

- Topic: places of interest, educational resources, events…;

- Direction: navigation, routes, priorities, individual educational program …

- Scale: priority tasks, time and space for realization of individual educational program...

Sample Titles of Educational Maps:

• “Family Traditions”
• “River of Life”
• “Map of Art Studying Places”
• “My school troubles”
• “My personal interests”
• “My lacks”
• “Map of my serious business”
• “My education”
• “Map of teacher’s training courses in Izhevsk (Russia)”
Technological Phases of Tutoring:

**attachment:**
- Creating of “excessive” educational environment;

**support:**
- navigation;

**development:**
- maintenance of Individual Educational Program (IEP)
Conclusion:

In terms of the key provisions of the cultural-historical theory concepts of educational foresight-events and personal-resource mapping are aimed at stimulating the process of learning, that is, to overcome the deficit of experience of self-dependent and productive activities, avoiding the formal and fictitious learning outcomes in relation to the problems of personal perspectives and future.
References


• Milojević, Ivana – Inayatullah, Sohail. Narrative foresight. Futures, Volume 73, October 2015, Pages 151-162
