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Improving Learning Motivation of Young People by Participative Scenarios about Future of Education

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Introductive aspects

- Motivation of young people, which is an important factor for success or failure in their learning/working career, is missing at many pupils in many European schools as well as in vocational education institutions.
- This problem appears particularly in schools with many immigrants and/or young people with disabilities.
- One problem is that there is no equality of chances for the pupils. The school achievement and the chances on the labor market which are dependent of the success in school are highly determined by their parents' income, education and origin.
- > One major problem of these pupils is the difficulty to come to a decision for their future (vocational) life.
- ➤ Often young people show a clear desire to have the possibility to express their wishes in making vocational decisions and they feel frustrated if they are not enough alternatives for them.
- ➤ Often they can not articulate their wishes because they do not know alternatives, particularly in connection with new information technologies (IT) and corresponding learning methods like e-Learning.





Activities in two EU-GRUNDTVIG projects: TYAEST and BASKI

- ➤ In TYAEST we focused on young people who are going to leave the school being not motivated, having disabilities, a migration background or financial problems and are undetermined about their occupational decision.
- ➤ In BASKI we would like to motivate people with learning disabilities to express their wishes about learning modes and a flexible curriculum.
- ➤ In both projects we give young people new learning/working perspectives by letting them participate in shaping their vocational trajectories.
- ➤ To find a suitable strategy for their further vocational development is the first turning point in their learning/working career therefore events were organized which should help them to find these strategies.
- ➤ These events uses, amongst others, an interactive method called "scenario building" based on common knowledge of the young people to discover a way of problem solving for themselves by combining the individual knowledge with experts knowledge under the guidance of a moderator.





Scenario method

- > Scenarios are depictions of possible futures built upon variables selected for their high degree of importance and low degree of certainty.
- > Scenarios serve as a communication tool for opening a discussion among different stakeholders.
- ➤ Scenario planning has a long tradition in military strategy development, since 1970s, starting with a study of Royal Dutch/Shell; scenario technique is spread in the world of economy and social sciences.
- ➤ During the last years the scenario technique found its way to the educational aims.
- ➤ In nowadays scenario technique is used for example in universities and schools for teaching and learning.
- ➤ One of the most remarkable points is the interactivities of the scenario technique which is a major difference compared to traditional classroom teaching.
- ➤ Traditional classroom teaching is often "teacher-centered" while the use of scenario technique leads to "learner-centered".
- > Scenario technique connects quantitative data and information with qualitative information, estimations and opinions resulting in a detailed description one or more possible future situations under a holistic view.

NRW.



The developers of the scenarios have the possibilities to:

- > think about questions, problems and visions without fear and with unbound fantasy,
- develop impulse, ideas, suggestions or social inventions,
- use creative potential to develop demands and solutions,
- overcame the feeling of powerlessness against "mighty" institutions, persons or forces,
- strengthen the capacity to act and the power of judgment.

Some important aspects:

- The scenario technique can be used in single workshops as well as in regular lessons.
- The methods to build up the scenarios must be customized to the time frame, aim and target group.
- Scenarios can be developed using formal or informal methods. The simplest method is a kind of creative "brain writing", as though a storyline is conducted by the oral contributions of the scenario designers' group.





Formal way to develop scenarios:

- Decide on the key question to be answered by the analysis,
- Set the time and scope of the analysis,
- Identify major stakeholders,
- > Identify main descriptors (factors of influence or driving forces),
- Identify the extremes of the possible outcomes of the (two) driving forces and check the dimensions for consistency and plausibility,
- Define the scenarios,
- Write out the scenarios,
- Assess the scenarios. Are they relevant for the goal? Are the internally consistent?
- Identify research needs,
- Develop quantitative methods,
- Converge towards decision scenarios.

In our projects we use a mix of formal and informal methods for the development of participative scenarios.





Examples:

- Within the two projects three scenarios have been developed by combining different variables into configurations that describe plausible but uncertain futures of education.

 These are set in the year 2010.
- ➤ Basis idea: the future of education particularly in connection with new technologies (e-Education) will be determined by many driving forces (descriptors) ranked and sorted by different experts we contacted within these projects and other ones.
- ➤ Our choice are two variables Availability of IT devices and corresponding infrastructure (AIT) and Convergence of learning technology and pedagogy (CTP).



Aspects referring to driving forces



AIT:

- ➤ In some schools is spotty infrastructure with limited access to devices in others there are wired Internet and Laptops available for the learners.
- ➤ Particularly in different parts of the globe there is a range of possibilities how individuals and educational systems have different degrees of control over the use of technology.
- ➤ It is certain that educators in schools and universities recognize increased potential of new technologies but they will face different degrees of institutional resistance due to laws, external controls, budget limitations, etc.
- ➤ Uncertain are cost of devices and infrastructures, convergence of different technologies, financial support from different sources, etc

CTP:

- ➤ There are at one extreme experts in education and technology having motivation, financial and political support and at the other extreme learning technology will fail to evolve being limited to streams or text and very simple exercises and not being supported.
- ➤ Certain is that public education sector will lack money and motivation to sponsor the development of exciting learning technology.
- ➤ Uncertain is if progress in the development of strong partnerships between educators and IT-experts, digitized library materials, etc. will be drivers in education improvement.



Three scenarios presented in the form of a story are in the development within some events organized within TYAEST for example at Matthias-Claudius-Gesamtschule in Bochum with an integrative class with students with and without handicaps and some students having a Turkish background.

The scenarios are dealing with:

- 1. Multi-dimensional learning
- 2. Intercultural learning
- 3. "Smart technology" for students



1. Multi-dimensional learning

The scenario about Multi-dimensional learning modes including non-formal, informal and formal learning by using e-Learning describes a frustrated teacher who does not want to change his teacher-centered pedagogical style (nor liked by the learners).

The students having ideas and suggestions for improving the quality of education. They by propose the organization of informal learning events and the use of interactive software. But the school has not motivated and qualified staff or/and materials to guide the students in organizing such events. The students are extremely frustrated because their suggestions have been ignored.

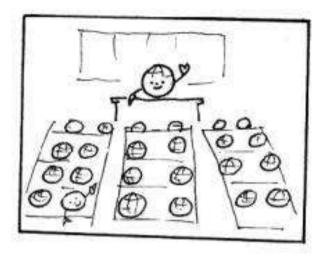


Figure 1:
The teacher act –
the pupils react

2. Intercultural learning

The second scenario covers the problem of Intercultural learning. In this scenario teaching and learning mixed up in a networked culture where different languages, values and ideas of different cultures will be exchanged face to face or in a virtual environment. This is a crucial aspect in many schools from Germany and other European countries, where students with a migration background have both, problems of self-integration and problems to be integrated.



Figure 2: Intercultural learning





3. "Smart technology" for students

In the third scenario some "smart technology" making everyday operations and learning easier are presented. The abilities of the students were unleashed and they can use their competences to do their best without being handicapped by disabilities. The artificial intelligence (AI) of the technology learns with the learner and could be linked with medical programs of disabled.

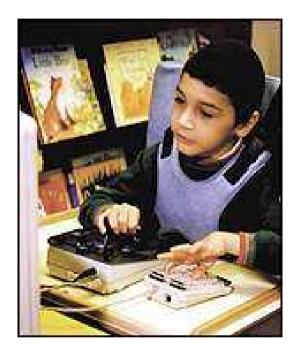


Figure 3:
Use of technology
to overcome barriers





Figure 4: Participative Development of Scenarios in Bochum



Conclusions

Scenarios building is a method to improve the motivation of young people for a standard, formal education that could be caused by

- a history of exclusion from school,
- a lack of parent and/or teacher support,
- immigration difficulties,
- negative influence of friends,
- disabilities.

Other approaches to motivate young people to learn used in the two projects:

- > to participate at the development of flexible curriculum,
- the motivation of teachers to use interesting course material that introduces creativity to a subject and has a direct relevance to every day life,
- organizing different informal events for the students.

