

THE SIGNIFICANCE OF TEACHER'S BELIEFS IN THE LEARNING PROCESS

Maija Ročāne

Liepāja University, Latvia

Abstract. Nowadays the innovative learning methods and approaches have been implemented in the learning process. Thus opportunities for the discovery of students' talents and abilities are created. Unfortunately, the lack of teachers' beliefs creates barriers in the process of discovering students' talents and abilities. Teachers' beliefs are essential in the process of introduction of the learning method-debating in the lesson. Therefore, the change of teacher's belief is important: from only talented students can debate to each student can debate. The lack of teacher's beliefs in the learner's ability to become a successful learner questions the expected results. The interview carried out in Liepāja Secondary School No.15 showed that the teachers' opinion is that the pedagogical belief can be changed. The experience, feedback, teacher training, as well as success stories were mentioned as teachers' beliefs influencing factors. Teacher training programs were emphasized as an essential component for strengthening teachers' beliefs, acquiring new knowledge and developing the ability to accept personal responsibility for student growth. Most of the interviewed teachers admitted that their pedagogical beliefs have been changed by the achievements of their students as well.

Keywords: Beliefs, debating, experience, learning, learning process, teacher, student.

Introduction

The National Development Plan of Latvia 2014 - 2020 has highlighted the necessity for the innovative curriculum and learning methods in order to promote the creativity in elementary and general secondary education. The opportunities for the discovery of talent and perfection are important as well (Pārresoru koordinācijas centrs, 2012). The pedagogical experience of the author of the publication allows emphasizing that lack of teachers' beliefs causes negative impact in the process of implementation of new and innovative learning methods.

The goal of the publication is: basing on theoretical analysis of literature, to identify and characterize teachers' beliefs as a forming component of the learning process.

The change of beliefs is an important factor in today's education system particularly for students who cannot „fit into the system” or „learn when it is anticipated by the teachers and the education system authorities”. Judgments: „he/ she cannot”, „he/she does not listen”, „his/her behavior is disruptive” are often made. Thus the belief in students' abilities is being questioned and expected results are reduced. In addition, irreversible impact on a young person's self-esteem has been taken and students' future prosperity has been affected” (Tūna, 2014, 10). By accepting the diversity and believing in students' abilities,

not only students' competence but also teachers' professionalism have been achieved.

Progress in the education system is closely related to empowerment. For example, offering students new learning methods: to everyone without standing aside. Students have to get involved through teachers' and their own belief in their personal abilities. It is important to find the strengths of every student, to highlight his/her competence, „not to contrast students' abilities with the official training standards and program requirements, but link these abilities and use them as a springboard.” The teacher must learn how to create new opportunities for students in order to learn and adapt in changing circumstances. As the situation in class changes every day- the age, interests, relationships, value system, socio-economic experience, the situation in family is changing.

Nowadays the change of views in education system is occurring – from „a student must be prepared for school” to „a school must be prepared for every child, to meet his/her needs, to provide professional support for their growth and development”. That is based on the paradigm changing process in pedagogy and learning. It is a necessity for 21st century teacher: „to lower the barriers to learning and participation for every student.” Each student's education is essential for the reason of improving the communication based on democratic principles, as well as a cooperation based on reliance. In order to promote the successful participation of each student in the learning process, it is essential to provide:

- the opportunity for everyone to demonstrate his/her knowledge and /or skills;
- opportunities to share experiences;
- the distribution of success stories (in an informal and interesting way);
- cooperation in all levels (e.g., joint projects);
- participation (hobby groups, interest groups, associations, etc.);
- the teacher's belief in every student's ability to learn and make progress” (Tūna, 2014).

Teacher's belief in every student's ability to be successful in learning, to participate, to cooperate, to believe himself/herself to reach success is an important factor not only for teaching, but also the provision to reach the goal of education programs. For example, the objective of general secondary education program is: „to provide students with the knowledge and skills necessary for personal growth and development, civic participation, employment, social inclusion and continuing of the education, as well as to develop students' ability to learn independently and to be motivated for lifelong learning and considering the appropriate career choice.” (Ministru kabineta noteikumi Nr. 281 par valsts vispārējās vidējās izglītības standartu, mācību priekšmetu standartiem un izglītības programmu paraugiem, 2013).

Each student is different and also learning habits are different. It is essential if students differences are perceived as supportive learning resource, rather than

a troublesome problem and teacher's beliefs should be, „every decision and action of teacher must be focused on what would be better for student.” (Tūna, 2014).

Thus the author of the publication has raised particular research issues:

- 1) What are teachers' beliefs?
- 2) What are the formative factors of teachers' beliefs?
- 3) The teacher's pedagogical beliefs may or may not influence students' attitudes towards the learning process.
- 4) What is the impact of teachers' beliefs on the introduction of learning method-debating in the lesson?

To achieve the given goal the author of the publication has used: theoretical methods (the research, selection and systematization) and empirical methods (interviews).

The theoretical aspects of teacher's belief

The factor of teachers' belief has a significant impact in the learning process. Teachers' beliefs can influence the way knowledge is acquired, the students' actions, as well as the way of thinking and behavior (Borg, 2001).

Director of the Melbourne Educational Research Institute John Hattie in his research highlights the importance of teacher beliefs. He considers that the lack of motivation, unproductive learning style, inability to concentrate, parents not supporting the students' learning process, etc., could be a barrier to the successful acquisition of knowledge. However, the most significant disturbing aspect in learning process is teacher's belief that they are unable to change the student's attitude towards learning. The teacher has to understand that he is a „change agent”. Teacher's beliefs have a huge impact on educational achievements. Hattie has gathered beliefs of successful teacher or teachers-experts about learning process, students, learning environment, achievements, etc. (Hattie, 2012).

J. Hattie (2012) is convinced that successful teachers or teachers-experts have strong beliefs about students' abilities to learn. He has defined five outstanding teacher or teacher-expert features:

1. Teachers-experts are able to identify and apply the most effective, most appropriate teaching methods. Not only has the knowledge made teachers' work effective, but also the way of organizing the learning process and updating interdisciplinary links. Achievements of every student are important to them.
2. Teacher-expert takes care of a positive learning environment. The learning environment is a key component of trust. It is important to create a learning environment where students are not afraid to make mistakes: mistakes are seen as an essential part of the learning process.

3. Searching, finding, creation of feedback in the learning process is essential for teacher-expert. The teacher-expert knows that lesson usually does not occur exactly according to the particular plan; he knows how to guide the lesson to reach its objectives. It is important in this process to identify students who have not understood the subject matter.
4. The teacher-expert believes that all students can become successful students. Beholding teacher's beliefs, students gain confidence in their own abilities as well.
5. The most significant achievements of the teacher-expert are not only good results in tests. The most important benefits are deep understanding of study material; diversity of learning strategies; students obtain researching skills; become civically active and they respect themselves and others.

Every teacher has beliefs. They are focused on his/her work, students, subjects, responsibilities (Pajares, 1992). In the contrast to the knowledge which is regularly developed, belief is relatively constant (Pajares, 1992). The main formative factors of beliefs are family, education, culture, society, reflection, life experience, as well as the process of socialization at school. If teacher's belief is that learning basically does not depend on the teacher, there is no need to look for and find new challenges to improve academic achievement and student's motivation. If the teacher's belief is that the result of education process should be significant learning, the new objectives are set and effective teaching methods applied.

Teacher's beliefs are influenced by both: objective and subjective knowledge. E.g., teacher's assumptions: *all students can debate* or *only talented students can debate*. Such assumptions mirror the teacher's subjective knowledge that is based on the teacher's belief that this particular statement is true. Sometimes the claim can be based on the teacher's experience (Österholm, 2009). Analyzing the phenomenon of teacher's beliefs: beliefs about students; beliefs about learning and beliefs about teacher himself/herself are highlighted (Xu, 2012).

There are teachers who believe that the most important factor of the lesson is discipline as well as good results in the tests. On the contrary to this belief, there is a belief about student-discoverer, who is responsible for his/her learning process and through the cooperation with a teacher and other students, learns, explores and provides feedback (Mansour, 2009). Teacher, who provides professional support to students' growth, believes in each student's educational opportunities.

The teacher's belief about learning influences the whole learning process. Mansour, N. (2009) has divided teacher's beliefs into two categories: *teacher as an authority* and *teacher - facilitator of learning* or teacher who is responsible for the process of learning, convinced in the learner-centered learning (Mansour,

2009). Pajares (1992) believes that teacher beliefs have a greater impact on the learning process than his/her knowledge (Pajares, 1992). Teacher's beliefs influences lesson planning, decision-making, implementation of new ideas in teaching. Confidence is also influenced by the teacher's way of thinking.

Thus very often teaching that is contrary to the teacher's beliefs can be considered as misleading (Pajares, 1992).

Teachers who are confident about their professionalism are able to make their own personal responsibility for student growth and believe in students' ability to learn significantly. On the contrary, teacher who does not believe in his/her professionalism and the ability to organize the learning process efficiently do not expect great results from the students, and are often unable to solve discipline problems at the lesson. Teacher's belief is an important factor for both: the promotion of learning and motivation. The teacher's belief in himself/herself affects both: the teacher's openness towards bringing the innovation into the lesson and successful classroom management strategies as well (Hoy, Woolfolk, 2000).

Through analyzing the interrelationships of knowledge and belief, „we are confident” and „we are more than confident” can be highlighted. Here the teacher's belief is based on knowledge (Österholm, 2009). Teacher must have the knowledge about new, innovative teaching methods, which lead to educational achievements, e.g., teaching method-debating. Without the knowledge about effective teaching methods teacher may continue to work with the belief that the learning process is progressing well and improvements are not necessary. Thus the learning process in the lesson becomes predictable. New methods and forms of work sometimes may become a troublesome factor for both: students and the teachers leading them outside the „comfort zone” the lesson they are used to. Bringing the method-debating to the lesson, there are particular teachers' and students' beliefs dominating: *only talented students can debate; debating requires considerable knowledge; debating is not necessary for life; debating cannot be linked with to the curriculum*, etc. Snider, A., Maxwell, S. (2006) have highlighted two kinds of belief about bringing the method –debating to the lesson:

1. Only talented students can debate;
2. Everybody can debate.

Experience is an important factor affecting belief. Beliefs are formed by positive or negative personal learning experience, as well as the positive or negative opinion of others - an encouragement to successful performance in future (Österholm, 2009). For example, if a teacher has successfully introduced debating in the lesson, students' satisfaction about learning outcomes has been gained and positive work experience has been raised which results in the new belief. Gained belief can contribute to the professional achievements in future. As an additional motivating factor is the positive feedback of others-school administration, colleagues, students, parents.

The practical aspects of teacher's belief

In order to find out the role of the teacher's pedagogical belief in the learning process, the author of the article interviewed 12 teachers of Liepaja Secondary School No.15. All interviewed teachers have significant achievements and positive attitude towards their professional work.

Respondents' average pedagogical work experience is 20 years. Respondents were asked four questions:

1. I believe that I can/cannot change students' attitude to learning.
2. What causes a positive change in the attitudes of students toward the learning process?
3. My pedagogical beliefs can/cannot be changed.
4. What can change or affect my pedagogical beliefs?

The belief of all respondents is that they are able to change the students' attitude to learning. It is essential for the teacher to realize that he/she is able to foster the change, e.g., the change of attitudes toward learning, thus promoting significant learning. The number of important factors contributing to the positive change in the students' attitudes toward learning process was mentioned in the interviews. All responses were divided into categories- teacher, student, learning process, learning environment. Respondents believe that in order to create positive change in the learning process: commendation; positive encouragement; belief in yourself; student-teacher and teacher-teacher cooperation; positive communication; inspiring students; teacher interest in helping the student to achieve the goal; the teacher's positive attitude towards the students; trust and the recognition that a teacher has to become a teacher-expert are important. Respondents' opinion is that students must have the belief in their ability to learn successfully as well as the cooperation student-student and student-teacher; positive interaction, positive attitude and confidence.

Also the success stories about positive learning experience are important as well. These stories must be based on real facts, based on „small and large victories”; understanding of teaching material; the clarity of the goals; contemporary, varied learning methods. Positive learning environment is very significant as well. As an important aspect for the positive changes teachers' and students' self-confidence and belief in themselves were also mentioned. The necessity for the improvement of the learning process was highlighted as well.

On the contrast to the analysis of theoretical literature the fact that teachers' belief is relatively constant was mentioned. All respondents admitted that their beliefs can be changed. Analyzing factors influencing teacher's belief, respondents have referred to students who had changed their pedagogical beliefs with their learning achievements, attitudes, belief in their own abilities. The majority of respondents have recognized that for the change of teachers' beliefs, experience; individual and collective achievements; positive examples; feedback; teacher training is important. Evaluating the fact that teachers' further

education has affected teachers' pedagogical beliefs, it must be recognized that also knowledge is an important belief-forming component. Two respondents considered that significant factor influencing teachers' belief is confidence in each student's abilities. The values, social attitudes, and emotions were also highlighted in the interviews.

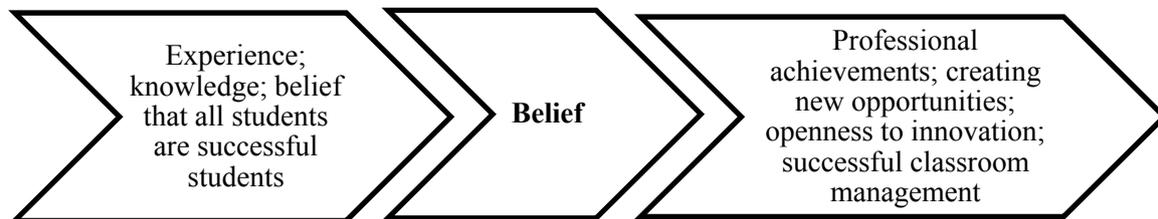


Figure 1. The influencing factors of teacher's belief and the factors which are influenced by belief.

After analyzing theoretical sources, as well as interviewing teachers from Liepaja Secondary school No.15, significant influencing factors of pedagogical belief can be defined. They are experience (success stories, significant work with students, etc.), knowledge and implementation of effective teaching methods in the learning process, as well as the belief that all students can be successful students. Gaining and strengthening pedagogical beliefs will contribute to teacher's professional achievements, create new opportunities, teacher openness to innovation to implement a successful classroom management strategy (see figure No.1).

The teacher with strong pedagogical belief is motivated to offer students new opportunities, e.g., the opportunity to debate. Debating is mainly provided as an extracurricular activity in school debate clubs, as well as participation in the regional and national debate tournaments or other activities organized by the organization *Debašu centrs* in the education system of the Republic of Latvia. Thus debating brings together talented students as well as students who are motivated to engage in extra-curricular time. Snider, A., Schnurer, M. (2006) emphasizes that if the teacher's pedagogical belief is „nobody knows everything and everyone knows something; knowledge is shared while debating together „, the debating could be successfully implemented in a lesson and beyond it. Thus every student could be offered the opportunity to debate (Schnurer, Snider, 2006). The teacher determines the preferred methodology for the particular lesson. Teacher whose belief is *everyone can debate* and who has chosen to apply the method debating in the lesson not only makes the learning process more interesting for both students and teachers, but also promotes the understanding of the learning content.

Table .1 The implementation of debating in the lesson through using Fink’s taxonomy

The category of Fink’s taxonomy	The description of category	The activity of debating
<i>Foundational knowledge</i>	Knowledge, the ability to memorize, the ability to generate new ideas and to understand. Nowadays the necessity of practically useful knowledge has been updated (Fink, 2013).	The research of debate resolution, collecting the necessary information. If the debating takes place in the foreign language lesson, thus gaining significant knowledge of foreign language.
<i>Application</i>	Students learn how to integrate the new intellectual, physical, social, and other activities. The development of skills, application of existing and new knowledge. Interrelationships between ideas and a vision of the situation as a whole. Finding similarities and applying new knowledge, thus acquiring new knowledge again and again. The necessary for the teacher in the learning process is to emphasize broad application possibilities of the newfound knowledge (Fink, 2013).	The development of arguments and facts through applying the gained knowledge; ability to answer the questions and to find the core ideas, values and arguments; good time management; the holistic approach to the information.
<i>Integration</i>	The understanding of the integration of learning content, e.g. in the daily life, as well as cross-curricular engagement (Fink, 2013).	The refutation of opponents’ arguments, problem solving, solution proposal setting while debating
<i>Caring</i>	Caring is updated as the development of new interests and values. Sometimes learning experience has changed the attitudes of students towards learning and the world around them. This may be reflected in the new interest and / or values. The process of change promotes responsibility and a positive attitude, raising new motivation and desire to learn.	Evaluation of the topicality of the resolution both in personal life and society as a whole. Clarification of personal and other attitudes toward resolution that contribute to the formation of beliefs. The creation of new interests that foster to motivation and the desire to learn.
<i>Human dimension</i>	Ability to understand yourself and others. The discovery of personal participation in the public processes, leading to the new future vision (Fink, 2013). The human aspect updates cooperation between teacher and student for the successful acquisition of the knowledge, as well as an understanding of other people's behavior.	The opportunity to discuss the issue with the other members of the class, to get to know himself/herself as a personality and clarify personal position, as well as the position of the others. Even after the lessons in the family and the community to discuss, express personal opinions, beliefs.

		Participation in debate tournaments outside the school in future, thus making new friends and gaining experience, not only through debating, but also to be aware of their contribution to the promotion of civil society and gaining self-confidence.
Learning how to learn	Includes the desire to become successful student- student with independent learning skills, as well as having interest in the subject (Fink, 2013).	Self-esteem, a summary of the debate, stressing the clash points, the discussion after the debate on its progress. To discuss the ways how to better find the necessary information; collaborate with team members; what can be learnt from the opponents; how to be confident about himself/herself in future and etc.

If the teacher’s pedagogical belief is *everybody can debate*, the greatest benefit from using this method in the lesson is the fact that all six categories included in L. Dee Fink’s significant learning taxonomy have been updated in the learning process. These categories are: foundational knowledge, learning how to learn, application, integration, caring and human dimension.

Opportunity to debate raises students' beliefs in the personal development. Thus, for example, acquiring new knowledge in the category *foundational knowledge* allows the student to understand the topicality and importance of the topic in both: personal life and in the society as a whole. Thus contributing to the knowledge-based belief formation. Knowledge-based belief also contributes to the opportunity to discuss with other classmates, clarifying the opinions and attitudes about themselves and others. Raising discussions outside the lesson: in the family, in the community lead to the category *human dimension*, thus promoting the formation of the beliefs about successful community.

Conclusions

- 1) Significant influencing factors of pedagogical beliefs are experience, knowledge, implementation of modern teaching methods in the learning process as well as the belief that all students can be successful students. Through the gaining process of pedagogical beliefs teacher’s professional achievements are promoted; new opportunities are created; teacher’s openness to innovation to deliver a successful classroom management strategy is achieved.
- 2) Teacher has to understand that he/she creates change. Teacher's belief that every student has the ability to learn and make progress is essential. Students become more confident about their own abilities through beholding their teachers' beliefs. Thus new opportunities for students to learn are created.

- 3) The disturbing aspect of learning process is the teacher's belief that he/she is unable to change the student's attitude to learning.
- 4) Using of debating in the lesson can lead to the forming process of beliefs about personal abilities. This process includes all categories of Fink's taxonomy.
- 5) Both students' and teachers' beliefs about learning and teaching are forming component of the learning process. Thus beliefs affect the learning process.

This work was partly funded by European Social Fund, project “Doktora studiju attīstība Liepājas Universitātē”, grant No.2009/0127/1DP/1.1.2.1.2./ 09/IPIA/VIAA/018.



References

- Borg, M. (2001). *Key concepts in ELT: Teachers' beliefs*. In: ELT Journal 55(2). (pp. 186-188). Oxford University Press. 186 p.
- Fink, L., D. (2013). *Creating Significant Learning Experiences: An Integrated Approach to Designing College Courses*. John Wiley & Sons Jossey Bass. San Francisko. 26-30 p.
- Hattie, J. (2012). *Visible Learning for Teachers: Maximizing Impact on Learning*, London: Routledge. 22-35 p.
- Hoy, Woolfolk, A. (2000). *Changes in Teacher Efficacy During the Early Years of Teaching Orleans, LA*. Session 43:22, Qualitative and Quantitative Approaches to Examining Efficacy in Teaching and Learning, American Educational Research Association. 2-6 p.
- Mansour, N. (2009). *Science Teachers' Beliefs and Practices: Issues, Implications and Research Agenda*. International Journal of Environmental & Science Education Vol.4, No.1. 29-30 p.
- Ministru kabineta noteikumi Nr. 281 par valsts vispārējās vidējās izglītības standartu, mācību priekšmetu standartiem un izglītības programmu paraugiem. (2013). Rīga. Retrieved from: <http://likumi.lv/doc.php?id=257229>
- Pajares M., F. (1992). *Teachers' beliefs and educational research: Cleaning Up a Messy Construct*. In: Review of Educational Research. Vol. 62, 3 (pp. 307-332). American Educational Research Association. 310-310, 314 p.
- Pārresoru koordinācijas centrs. (2012). *Latvijas Nacionālā attīstības plāns 2014. – 2020. gadam*. Rīga, 42.lpp.
- Österholm, M. (2009). *Beliefs: a theoretically unnecessary construct?* Proceedings of the Sixth Congress of the European Society for Researching Mathematics Education January 28th - February 1st, Lyon France. 157-158 p.
- Schnurer, M., Snider, A. (2006). *Many Sides: Debate Across the Curriculum*. New York: Idebate Press. 9-10 p.
- Tūna, A. (2014). *Ikviens ir gaidīts skolā! Metodiskais materiāls pedagogiem jauniebraukušo skolēnu un viņu ģimeņu iekļaušanās sekmēšanai*. Rīga: Latvijas Cilvēktiesību centrs. 10-13 lpp.
- Xu, L. (2012). *The Role of Teachers' Beliefs in the Language Teaching-learning Process, Theory and Practice in Language Studies*. Academy publisher, Finland. 1398-1400 p.