



**PRACTICAL USE OF INNOVATIVE METHODS
OF INSTRUCTION FOR PERSONNEL TRAINING FROM
THE POINT OF VIEW OF HUMAN CAPITAL DEVELOPMENT
IN ORGANISATIONS**

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Abstract

Human Resource Management has recently encountered a number of new tendencies. Among them the most important is a transition of requirements from narrow expertise to the skillset that allows employees to be flexible and able to adapt to the new work environment and job requirements. Technological progress also requires mobility, foreign language skills and ability to continuously learn and acquire new skills.

The EU countries have experienced new conditions as a result of the economic crisis of 2007-2008. The new economic environment required employers at all levels to reconsider their attitudes towards personnel. Employers cannot afford to maintain an excelerated numbers of staff and are compelled to reduce numbers of employees. By the end of 2011, the rate of unemployment has reached 13% in Latvia and has essentially raised competition in the labour market.

As a result of the recent economic crisis, many employees have lost their jobs. At the same time, those who managed to stay employed, suffered through cancelled bonuses, salary reductions, prolonged working hours and an increase in the workload.

The new economic situation requires employees to be able to acquire new skills quickly, adapt to the changing situations and constantly confirm their competitiveness. This requires strong motivation from each employee, however maintaining high morale at workplace becomes difficult due to the lower compensation levels.

According to the author, it is crucial to consider opportunities of using all skillset and potential of the employees. Those who have kept workplaces after major layoffs are compelled to work under constant pressure. These employees became responsible for the jobs previously performed by their former colleagues. As a result, these employees require effective methods that would allow them working faster and more effectively.

Current article is devoted to the description of the personnel training methods that provide the maximal results within minimal timeframes. Many articles are dedicated to the subject of what employees need to learn, however effective learning techniques have not been widely



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spread until now. The author suggests conducting speed reading and speed memorising trainings before any professional personnel trainings. This approach allows achieving higher efficiencies from the professional trainings and work results within short time periods. For example, the speed reading techniques training conducted for three hours during a six day course allows increasing the speed and efficiency of information processing in 2-3 times.

During the period of 1999-2011 the author conducted a number of corporate trainings in the largest organisations of Latvia and abroad. All results of these trainings were consolidated into reports and questionnaires completed by all trainees, both before and after the testing.

It has been confirmed that during these trainings each trainee increased the speed and accuracy of information processing in 2-3 times without additional pressure. It looks as if a person starts thinking 2-3 times faster. Imagine, if you come to the office to realise you can think three times faster than your colleagues! You start noticing that people talk slowly. Did you become smarter? No, you have just acquired new skills and abilities. It should be noted that the efficiency and effectiveness of the training increases significantly when a team or a department are trained together.

The importance of this work increases as a result of continuous outflow of human capital from Latvia to the foreign countries. From the state economic efficiency point, it would be more beneficial to export highly skilled human capital, instead of cheap labour. At the moment, Latvia possesses great opportunities for establishing a system of personnel speed re-training techniques and its successful adaptation to the new economic conditions.

Introduction

In the recent decades in Europe and in the world, new tendencies such as globalization, migration, creation of the single European labour market, absence of boundaries, consequences of the global financial crisis, and ageing of Europe can be observed that caused significant changes in the sphere of adult education and personnel development in organizations. At the informal Summit of the leaders of the EU member states held at Hampton Court in October 2005¹, it was noted that demographic ageing is one of the main problems to be solved by the European Union in the nearest future. The negative demographic tendencies connected with population ageing and, as a consequence, with workforce ageing, in the near future will also unavoidably affect the quality of employees and will require more active processes of refresher training, competence development and mastery of additional skills and capabilities for professional development. Therefore, at the present stage, finding ways for improvement of educational activity of adults becomes more topical. Due to rapid professional, skill and competences obsolescence, new approaches and tendencies become topical and demanded in adult education that is aimed at professional development, i.e., the development of professional competences in the field of realisation of the concept of lifelong learning.

In the EU countries, at the level of state policy it has been recognized that knowledge increasingly becomes the basis for the development of society, and that there is need for transforming humanity into society that uses the concept of lifelong learning for the development.

¹ http://eur-lex.europa.eu/LexUriServ/site/en/com/2005/com2005_0621en01.pdf



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The most substantial changes occur in vocational training of adults specifically in the sphere of professional development and guarantee of competitive ability on the Pan-European labour market.

In accordance with the Pan-European 2020 Strategy², human capital, knowledge and innovations have been recognized as the basic resources that need development.

At the same time, it should be admitted that an adult cannot learn constantly. He/she must have enough time for the realisation of his/her own interests, for the family, reading of literature, sport activities, hobbies, etc. From this point of view, the use of innovative methods of instruction can become a tool that would allow them to free up time for these activities.

This article is dedicated to findings ways for adult and personnel training that would allow adults to preserve their flexibility, to react to the changes flexibly and would ensure a possibility to retrain and acquire new knowledge fast regardless of their age. Such instruction can be carried out both on the basis of formal and informal education, which will ensure practical implementation of the Bologna process [1].

Topicality

Implementation of the Bologna process [1] requires introducing into the unified system the factors, which have recently become crucial in the management theory, i.e. human capital, innovations, creative work and lifelong learning. On the basis of such approach, the author sets herself a task to unite these factors into a unified system to use it in personnel training.

Analyzing approaches in the sphere of adult education, it seems necessary to point out the fact that the analysis of the employees training programmes shows *what* exactly adults should be taught, but the attention is rarely paid to *how* they should be taught, what methods would contribute to making adult education more effective.

The methods of instruction described in this article are effective as such, but from the point of view of the author it would be interesting to examine the possibility of their use as a basic model for personnel training. It is meant here that, first of all, adults should be taught how to perceive new information, how to learn, and only afterwards to conduct any training necessary for professional development and maintenance of competitive ability.

Such approach becomes even more topical in the European Union and it is being used not only on the basis of informal but also on the basis of formal education, which proves that the need for finding and using more effective ways and means of working with information has been recognized. In many European higher education establishments searching for innovations in the process of instruction becomes a priority. Thus, for instance, in 2010, the University of Copenhagen³ together with the University of South Denmark developed a programme for more effective teaching of students. According to the statistics of the university, students do not often have necessary skills for mastery of information. For this purpose, training modules were developed for determining and improving the speed of reading and the quality of comprehension of the read material. The training materials are prepared for educational purposes in order to involve students and increase their interest and include graphic representations and examples of speech.

² http://ec.europa.eu/regional_policy/sources/docoffic/working/regions2020/index_en.htm

³ http://socialsciences.ku.dk/students/news_students/tutorials/



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The Cambridge University Students' Union⁴ (Great Britain) developed basic recommendations on how to increase the reading speed, pointed out the factors, which retard the reading speed as well as specified the conditions necessary for improvement of the reading speed. Following the example of the Cambridge University, the University of Manchester⁵ (Great Britain) placed training materials on speed-reading on its website in the section Study Skills with the aim to provide information on skills that would help obtain and comprehend information more effectively.

De Montfort University⁶ (Great Britain) offers to its students to master the speed reading skills in order to more effectively use their time during the study of materials for research activities and reading of educational literature.

Alongside Europe, a new wave of interest in these methods of instruction is observed in the USA and Canada. This way, the Regent University⁷ (USA) developed lessons on speed reading in order to increase the reading speed of students while fulfilling daily training exercises.

The employees of the University of Victoria⁸ (Canada) set themselves a task to facilitate the process of comprehension of the training material by students and developed a set of rules on more effective reading methods. These rules include improvement of concentration while reading, determination of motivations and purposes of reading, the analysis of the reading speed during several days, increase in the reading speed and the analysis of mastery of the material. These rules were developed for independent use by students during their extracurricular activities.

Such explosion of interest in the methods of speed reading in the world is caused by the fact that in the contemporary world when the total volume of information doubles every six months and the volume of information on the Internet, according to the data of the analytical company IDC, doubles every eighteen months, the old proven methods of working with information are not enough anymore. And if the question of improvement of the information processing methods becomes ever more topical for students, i.e., people who were successfully admitted to universities having initially being focused on earning money in future by intellectual labour, then this question becomes even more topical in the sphere of personnel training, especially if adults had obtained their diplomas more than twenty years ago.

In the EU countries, even more attention is paid to these methods of adult instruction. Thus, for instance, the British Broadcasting Corporation⁹ (BBC) developed programmes for adults on skimming and scanning of texts and placed videos on its website. Having read the training texts and having viewed the videos, anyone who is interested can pass an online test to evaluate his/her own progress and determine skills necessary for further improvement of the reading speed and mastery of the read material.

Many EU member states develop at the national level the programmes on improvement of reading skills and ability to analyze information. For instance, in the spring of 2011 the daily

⁴ <http://www.cusu.cam.ac.uk/academic/exams/speedreading.html>

⁵ http://www.humanities.manchester.ac.uk/studyskills/essentials/reading/speed_reading.html

⁶ http://search.dmu.ac.uk/search?q=speed+reading&btnG=Search+DMU&entqr=0&ud=1&sort=date%3AD%3AL%3Ad1&output=xml_no_dtd&oe=UTF-8&ie=UTF-8&client=dmuweb&proxystylesheet=dmuweb&site=dmuweb_collection&filter=0

⁷ http://www.regent.edu/admin/stusrv/student_dev/online_workshops/speedreading/

⁸ <http://www.coun.uvic.ca/learning/reading-skills/speed.html>

⁹ <http://www.bbc.co.uk/skillswise/topic/skimming-and-scanning>



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London newspaper Evening Standard launched a massive current affairs programme in order to determine the general level of reading in Great Britain and to acquaint people with this growing problem, to obtain the support of population for the sake of improvement of reading skills in Great Britain. The initiative of the newspaper under the title Get London Reading had wide resonance and the dispute it had caused is still going on in various strata of society.

According to the data published in the newspaper Evening Standard on 25 January 2011, illiteracy costs the economy of Great Britain approximately 81 trillion pounds a year. Whereas, the report published by the World Literacy Foundation¹⁰ on 25 January 2011 states that people who do not read fast enough earn less, do not make substantial contribution to the growth of the British economy as well use government grants. The study carried out by the Foundation showed that an adult who reads slowly will earn at least 30% less than those who can read fast. According to the experts' opinion, the children of illiterate parents will most probably grow up unable to read, too.

The initiative of the newspaper Evening Standard attempts to combine volunteers in order to become instructors for schoolchildren experiencing difficulties with reading. As of January 2012, having been inspired by that campaign, 313 volunteers started working at schools. According to Andrew Kay, Director of Foundation, "This is the key to boosting employment and income of people".

The complete report of the World Literacy Foundation will be published at the World Literacy Summit that will be held in Oxford in April 2012. This is the first conference dedicated to solving the problem with reading and its interrelation with poverty.

All the above-mentioned factors testify the growth of interest in Europe and in the world in the speed reading methods and the urgency of development of new methods in this direction.

Description of the Issue

According to the data provided by EMC in the study *The Expanding Digital Universe: A Forecast of the Worldwide Information Growth through 2010*¹¹, the volume of worldwide information in the following ten years will show a 50 times increase. The analytical company IDC provides data that the volume of information stored on the Internet doubles approximately every 18 months¹². At such rate of global information expansion it becomes increasingly difficult to know what is what in the information traffic and separate important ideas from the secondary and unnecessary ones.

The increasing volume of global information makes personnel of organisations master new skills and capabilities, having which, until recently, was taken as a matter-of-course. The skills meant here are the speed reading skills, the ability to analyse information and memorise it fast, which make it possible for personnel to be more effective at their workplace.

The increasing competition in the labour market as well as the problem of demographic ageing in Europe and problems related to job placement and opportunities for youth career

¹⁰ <http://www.thisislondon.co.uk/standard/get-london-reading/article-24030751-cost-of-illiteracy-to-uk-tops-pound-81bn-each-year.do>

¹¹ <http://www.emc.com/collateral/analyst-reports/expanding-digital-idc-white-paper.pdf>

¹² Article Big Data Becoming Big Business (5 April, 2012) – <http://optimalsapblog.com/>



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development and, as a result problems with the income level of youth, makes employees more flexible. On the one hand, the problem of fast retraining is topical for persons of ripe age, since constant extension of the pension age in Europe forces people to master new trends and expand the range of their knowledge irrespective of the already existing experience and requires increasing the competitive ability at any age; on the other hand, the problem of quick mastery of new knowledge and possibility of fast training and retraining is important for youth, since the number of workplaces keeps decreasing and there are less opportunities for career development because workplaces are not freed due to extension of the retirement age. It requires a faster response to the changes in the environment. The work becomes ever more result-oriented rather than process-oriented. Similar changes also concern the employees of the government sector.

If the majority of heads of organisations both in the business and government sector have a clear understanding of *what* the personnel should be taught, the issue of *how* to teach them becomes ever more topical today.

Any training of personnel requires time and specific efforts on the part of trainees. An adult cannot constantly work in parallel with learning. Any learning requires time. And the question where to find this time becomes ever more crucial.

Another problem that appears in relation to personnel training is the percentage of the material proposed that an adult is able to memorise, comprehend and use. This question becomes particularly important in case if training is conducted after work. Constant pressing, shortage of time and the need of continuous professional development may lead to the effect of “professional burnout” [2].

These problems forced the author to start finding possible solutions in this direction. Today, the methods described in this article allow personnel to be not only more effective, but also to essentially save time necessary for professional development. Thus, for instance, one of the clauses of the contract of a marketing director of a large network of supermarkets was the requirement to read during the first year of employment 52 books on business according to a specified list of literature. It means that he/she had to read one book per week, which implied that he/she had not just to read it, but also analyse it, correlate the data, and arrive at conclusions. Taking into account that at this position the rate of intensity of work must be very high, and an adult is obligated to read all these books during his/her non-working hours, the question should be asked as to where such employee can find time for the family or rest. It is clear that there are grounds for such requirements to the contract and that to be competitive the employee will have to read this literature. At the same time, it is easy to imagine how long it will take a manager to perform this work, if he/she does not have the skills of accelerated perception of information. And such examples are far from rare.

To solve such problems, the author proposes to more actively use the innovative methods of personnel instruction, which would allow reducing substantially the time necessary for mastery of new knowledge and skills. In the opinion of the author, it is important now than ever to examine the possibilities of maximum use of the employees’ potential.

Novelty

Teaching of speed reading, fast memorization and skills of fast processing and structuring of text information using logico-graphic symbols [3] was first used in order to train personnel in organisations. Given methods were used not only as having the effect as such, but also as the methods, which would make it possible in future to use the human capital of an organisation



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more effectively under the conditions of abrupt changes in the environment caused by the crisis, the situation in Europe, introduction of a new organisational strategy, reduction in the number of workplaces. The methods described in this article allow preparing personnel for the abrupt changes connected with the activities of the organisation.

Despite the fact that the speed reading and fast memorization methods with the use of associative thinking have been known from long ago, for the first time they were purposefully tested for training of personnel in organisations on the request of the heads of the organisation, heads of a division or subdivision.

For trainings, the curricula based on practical instruction were developed (minimum of theory, maximum of practice). In the course of the training carried out, the rate of information exceeding the speed by three times a second (or 208 beats per minute on the metronome) was used for the first time. Such rate of information in the course of training developed in people the skill of accelerated perception of information, raised attention (since there simply was no time for distraction) and respectively, improved perception.

For the first time, a speed reading programme showing real and measurable results after six days of daily 3-hour trainings with the rate of information 208 beats per minute on metronome was developed and put in practice. The basic effect of speed reading lies in the fact that the programme allows adults to learn thinking two or three times faster. It does not mean, though, that an adult will immediately become cleverer; at this rate of processing of information a person may reveal specific capabilities.

The methods of fast memorization of information were first used for corporate training with the aim to increase the volume and speed not only of memorization, but also of subsequent retention of the learned information that must be used for fulfilment of the work responsibilities [11]. Programmes were specially compiled under the corporate order taking into account the requirements of a specific organisation.

It was the first time that these methods were used so widely, since the methods described in the article were tested in ten EU projects, PHARE and Socrates programmes; training was also conducted for the implementation of the national programme of the Republic of Latvia *Support of Vocational Education*, which was developed and put in practice within the framework of the international project *Vocational Education 2005-2006*. All in all, 2562 people in 119 groups in 21 regions of the Republic of Latvia underwent training within the framework of only this training programme [4]. All materials of the project were recorded and submitted to state bodies and the EU bodies within the framework of lifelong learning.

Altogether, in the time period from 1999 until 2012 inclusive a total of 4587 people underwent training under the programmes described in this article. The research of the possibility of applying the innovative methods of instruction were conducted on the basis of the licensed Training Centre Lando® (license of the Ministry of Education and Science No. 3360800220) established specifically for the implementation of such training.

Materials and Methods

Personnel instruction using the speed reading and fast memorization methods as well as the methodology of text information processing was conducted in the form of trainings, since the basic wish of the clients of training (owners of companies, heads of organisations) was



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conducting of training activities in the shortest possible time. Moreover, the clients of training assigned the facilitators to ensure that after completion of training personnel would be able to work as fast and more effective as possible.

Therefore, in the course of training all information was given at the rate 208 beats per minute. This rate was selected on the grounds of studies conducted by Lozanov and Novakov [5]. In 1977, according to the results of studies conducted by Lozanov and Novakov, the most convenient rate for perception of information by a person was established at the rate 60-64 beats per minute on the metronome. In the opinion of the author, this rate of information can be increased 2 and 3 times (proportionally). The greatest effect is observed upon transfer of the rate of information to 180-184 beats per minute, which exceeds the tempo of classical music three times, which was investigated by Ericsson and Cooper who found that people memorize and learn best of all after they have listened to the sound of the metronome at the rate of sixty beats per minute. During personnel training, the rate of the metronome was 208 beats per minute, but this speed was used not only for listening; information was given at this rate [6].

One 3-hour training day is sufficient to achieve the effect of perception of information at this rate by an adult. The trainees' purpose on the first day of training was getting accustomed to working at this speed.

During the second training day, the rate of information remained as high, but the purpose was to determine the leading strategies for perception of information while reading at this rate and specify the most convenient motion of the eyes at the rate of reading 208 beats per minute on the metronome.

On the third day of training, the basic theme of instruction was the work with semantic structures and the ability to emphasize the main idea. Working with semantic blocks occurs at the same speed.

On the fourth day of training, the basic emphasis is made on the rate of switching from one process to another with the aim to retain understanding during such work.

On the fifth day, the trainees learn to conduct three processes in parallel. It is achieved by placing three books (which they need for their work) in front of them and each trainee reads one line switching attention from one book to another three times per second. This exercise is done not less than twenty minutes in a row after which the degree of comprehension of the material is checked in the course of retelling each book separately.

On the grounds of the results of the fifth day, the speed of reading of an unknown text and the speed of reading of three different books is fixed.

On the sixth day, all skills acquired in the course of training are reinforced. The results are fixed during reading of twelve unknown texts of different degree of complexity, style, length, and content. The average speed of reading is derived according to the results of the reading of texts. Afterwards, the results of speed of reading of three books that are different in style are fixed. Then, the initial results are compared with the results achieved.

When teaching the methods of fast memorization, the method of associative thinking is proposed to be used for memorization and subsequent retention of the learned information; in the course of exercises the trainees learn to use associative thinking for the memorization of information that is not interrelated, memorization and subsequent reproduction of names, surnames, foreign words with translation, digital information, texts, etc [10]. To increase the



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effectiveness of instruction, examples for memorization are taken from practice in accordance with the request of trainees or upon the demand of the clients of training (usually heads of organisations). The personnel can immediately use the skills acquired in the course of training in practice.

In their turn, logico-graphic symbols [3], are used for work with text information if there is a necessity to memorize it precisely and reproduce later [7]. The purpose of such training is to provide the personnel with a tool, which would allow them to more rapidly and effectively work with any information [8], process it, draw logical conclusions, set up alternatives, memorize complicated texts, structure information, generalize basic concepts and categories and logical thinking, including synthesis, analysis, and data classification.

Depending on the purpose set by the clients of training, the modules of training programmes can be changed and the materials specified by the client may be used for instruction.

Judging from practice, the optimum form of teaching speed reading is practical training for a period of six to seven days during three or four hours a day (it depends on the region of instruction, national and cultural peculiarities). Fast memorization can be taught in two to four days during six hours a day (the quantity of days depends on the quantity of modules selected by the client). As to work with logico-graphic symbols, the most effective time for training is five days during three to four hours a day. These data have been acquired in the course of the many-year experience of conducting practical training.

Results

Altogether, in the time period from 1999 until 2012 inclusive, a total of 4587 people underwent training under the programmes described in this article. Trainings were conducted in open groups and in the corporate form. The methods of speed reading and fast memorization of information proposed by the author were used on the basis of informal education for training of top managers and C-level executives, owners of business in Latvia, Lithuania, Estonia, Russia, Kazakhstan. Trainings in the corporate form were carried out for personnel instruction in 56 organisations in five countries.

In the process of planning of personnel training in the corporate form, the clients of training were interviewed in order to determine the directions in which the results obtained in the course of training will be used. During interviews, the purpose of trainings, the reasons why they were conducted as well as the desired results were specified.

Upon completion of trainings, the participants were asked to fill out questionnaires and protocols were collected confirming the results of training per each day of training as well as the owners or directors of organisations who were direct clients of training were interviewed. Repeated interviews with the clients of training were carried out immediately at the end of training and two weeks after the training in order to assess the results gained and understand the degree of the client's satisfaction. On the grounds of the analysis of the obtained data it is possible to arrive at conclusions listed below.

The clients of training send their subordinates to learn the programmes described in this article in the following cases: staff reduction in the organisation when those who were lucky to preserve their workplace must take upon themselves the fulfilment of the part of the work of



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colleagues who were made redundant; expansion of the organisation into new markets; recruitment of new employees who will have to master large volumes of new information related to the fulfilment of working responsibilities; working under time pressure conditions; instruction can also be used as a reward; some organisations train only promising employees or top managers creating this way the Big League of the organisation, i.e. people who possess such techniques and skills which the rest of employees do not possess; preparation for the introduction of a new strategy.

The trainer should take into consideration peculiarities of the motivation of employees undergoing corporate training. If the owner of the organisation pays for his/her instruction him/herself, the hired employees most frequently learn at the expense of the employing organisation. During learning, the employees have a somewhat different motivation. It is important for them to spend time well, raise their self-esteem and make use of the personal development opportunity. The difficulty of the trainer's work consists in meeting the expectations of the hired employees, who learn, and the expectations of the clients of training, who pay for this process. In the course of the conducted training, the results are recorded at every lesson.

Fast Memorization. When teaching techniques for fast memorization, it is necessary to record the results gained on a regular basis. Testing is carried out before lessons. Adults are given a task to memorize 10 unrelated words. The analysis of initial tests of 967 employees from different organisations who underwent training under this programme showed that the spread of data is rather wide, i.e. from 4 to 10, $Mo=7$, $Me=6$. These data correspond to the results acquired by Miller, G. A. [8] in his research conducted in 1956 in which he established that short-term memory is capable of holding only 7 (+2) pieces of information simultaneously. This is what causes main difficulties with memorization in adults.

Initial testing prevents adults from assessing their capabilities subjectively, since the majority of them subjectively describe their memory capacity as "good" or "bad", but cannot express it in quantitative indicators. Initial testing also allows building a complete picture of how a person memorizes information using methods to which he/she is accustomed to.

Then, adults are given explanations regarding how the methods of memorization work after which adults start applying them. A repeated testing is carried out in one hour and a half after the beginning of the lesson. This time, the same control group is to memorize 20 unrelated words. In terms of repeated testing, the spread of data is narrower than in the initial test, i.e. from 15 to 20, $Mo=16$, $Me=16$. In both cases, simple words denoting objects are used in tests. This is the way how adults are taught to memorize simple information.

In the following test, adults are to memorize 10 words denoting abstract notions (something that cannot be depicted). The data spread from 6 to 10, $Mo=8$, $Me=8$. In one hour, after the theory has been explained and the new method has been mastered, one more testing is carried out. 10 out of 10 newly given abstract words are memorized by 84% of trainees.

Lessons are built in such a way that on the first and on the second day the trainees work with four different topics. During the first day of learning, adults learn to memorize 50 people by names and surnames just during one hour of the lesson which is achieved with the help of photographs and business cards. During the second day of learning, adults, depending on their individual peculiarities, memorize 50-150 unknown words in a foreign language with the



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translation thereof, memorize complicated terminology and carry out other tasks related to the fulfilment of their job responsibilities.

Use of fast memorization methods in adult training requires great flexibility of the trainer. The author believes that in order to increase the interest of trainees in the process of learning within the corporate training, it would be effective to use examples related to fulfilment of specific tasks at the workplace of the group of trainees. For instance, to memorize terminology necessary for their work, names and surnames of employees of other departments and subdivisions, i.e. something that can be practically used upon completion of training. Such approach increases the interest of trainees in the process of training and builds additional motivation.

Speed Reading. In the course of teaching speed reading, the initial speed of an adult usually varies within the limits of 180-250 words per minute. The results are very much different region-wise if the final quantitative result is taken.

During initial testing, after the trainees have read a text, they are offered to provide written answers to six questions and identify the main idea of the text. According to the results of initial testing it was established that the reading comprehension rate did not exceed 50%. Nonetheless, all trainees were sure that they fully comprehended the text. However, 83% of them gave answers only to 4 out of 6 questions and their answers were not complete. At initial testing, the task is to read a text at the speed at which one can comprehend it well. In the course of practical training, the speed of reading grows by two or three times given that the information is comprehended completely (6 out of 6 questions are answered). At that, the faster the initial speed was, the more a person can speed up while doing the exercises. Initial testing is performed on the texts of medium degree of complexity. The rate of comprehension of the material is then checked by written answers to questions about the text. Final testing is conducted on 12 texts of different speed according to the results of which the average speed is calculated, and on three different books which differ in topic, style, and content. In terms of books, the average speed is not calculated, since they differ in the degree of complexity, but a final result showing that a person can read an easy book 30% faster than a complicated book is checked. The results are shown in graphs. The author can provide the results of tests of each student who had undergone training.

From the author's point of view, a good speed of reading for an adult is 500-1000 wpm with full and complete comprehension of information. The topicality of this research increases due to the fact that for the new generation of adults reading is not leisure but hard work. It should be pointed out that the initial reading rate in adults who read little may be just 120-180 wpm, which equals to the reading rate of a Grade 4 student. It implies that an adult who can think minimum four times faster than a child is not able to perceive information in the text fast. It significantly restricts the development of adults, since they can acquire new information related to fulfilment of work responsibilities only through reading.

Discussion

The greatest distrust to the methods described above is caused by the fact that a number of authors pointed out in their articles that during fast reading some part of the information may be missed. From the point of view of the author of this article, this assumption is totally wrong.



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The whole information must be read letting the brain grasp the entire picture. At the same time, working at high speed in the course of exercises helps decrease the effect of silent speech or subvocalization (when during reading the words as if sound in the ears of the reader). This way, seeing the whole text, at fast perception a person sounds out not all the words like in regular reading but just the basic ones; whereas, he/she does not miss the rest of the words, he/she simply recognizes them without sounding them out. Another habit of perception is formed this way, the basic purpose of which is to perceive text information by blocks rather than separate words, as we do, for example, when speaking a foreign language.

Since learning occurs in the form of practical training, an important question for consideration becomes the training of teachers according to this system. Only a teacher having practical skills who can demonstrate them to the learners is able to conduct practical lessons using the methods described in the article. Instruction in the form of lectures in this case is not effective. A wide use of methods of fast memorization and speed reading will soon require the training of new trainers capable of practical instruction according to these programs.

Since at present, time is one of the most expensive resources in the life of personnel, the training programmes described in this article were aimed at giving a real, measurable and practically applicable outcome within a maximum short term. This way, it is possible to master the fast memorization technique in sixteen academic hours. However, twenty four academic hours are necessary to master the speed reading technique given that classes are taken during six days. It is connected with the fact that training is a stressful process and requires of the trainees the maximum feedback during the fulfilment of exercises. Only in this case a maximum possible result can be achieved. The activity of the brain during training can be compared to the training of muscles when a second breath is necessary. The same effect is observed when working under the pressure of time.

The fact that in the course of training programmes described above an adult begins to think two or three times faster does not mean that he/she becomes cleverer. Nevertheless, he/she reveals completely different capabilities in comparison with others. The author understands that measuring of the speed of thinking can be problematic, but measuring of the reading speed and assessment of the degree of comprehension in this case can be quite precise.

The growing interest in such methods in Europe and in the world testifies the need for wider use of these methods in personnel training.

If ten years ago such instruction was conducted on the basis of informal education, the fact that a number of leading universities in Europe and in the world began introducing the given methods on the basis of formal education proves not only the effectiveness but also great demand for these methods. Therefore, from the point of view of the author, it would be expedient to discuss possible ways of more extended putting of these methods in practice, to organize scientific studies on the basis of formal and informal education and use the developments obtained in personnel training.

Conclusions and Recommendations

Training programmes on speed reading, fast memorization and processing of text information with the aid of logico-graphic symbols can be successfully used for personnel training in organisations both in the private sector and in public administration.



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These training programmes satisfy the needs of the management allowing the employees to achieve the goals set by the management. Simultaneously, these programs also satisfy the needs of the trainees in terms of raising their self-esteem, general development as well as contribute to more rapid and more effective fulfilment of their work responsibilities.

This type of instruction can be used in all spheres, since it does not require preliminary knowledge and skills except for the skills acquired at secondary school. Unfortunately, these skills fade year after year. The programmes developed by the author can also be introduced at an earlier age – at schools and higher education establishments. If we regard the growing generation as the future of the country whose task is to ensure and contribute to the growth of GDP, pension benefits and social allowances, then it should have skills in working under time pressure and freely use the techniques of fast memorization and speed reading.

Every three years, the Organisation for Economic Co-operation and Development (OECD) carries out an international study *The Programme for International Student Assessment (PISA)*¹³ focused on comparison of education attainment across the world. The level of cognitive development of children, who are the pledge of economic prosperity of any country, in Latvia also leaves much to be desired. In terms of the ability of students to analyse information and use the skills acquired at school in practice, Latvia ranks only 30th among 65 countries of the world; whereas, Estonia is ranked 13th and Lithuania – 40th.

In the author's opinion, it is not difficult to image the level of income to be gained by the adults into whom the children not able to analyse information and draw logical conclusions will grow up. It might happen that these children will grow up into people who will represent just cheap labour force.

The methods described in this article produce effect right after completion of training. Training programmes with the use of innovative methods of instruction can be used both as a whole and as separate blocks. The methods described in this article bring a real measurable result, which is noticeable already after the first lesson.

Usage of such methods also serves for the purpose of personal development of people who have undergone training. In the majority of questionnaires filled out after the training, in which adults evaluated the training they underwent and gave their free-form comments, they noted such aspects as improvement of the effectiveness at their workplace, increase in the rate of information processing, and raised self-esteem.

The basic effect due to which personnel is given a task to undergo such training programmes is the increase in the speed of thinking and processing of information. A person cannot read faster than he/she thinks. If a person is a slow thinker, he/she is not likely to be a fast reader. To increase the speed of thinking, it is advisable to work with texts. The speed of thinking, however, is rather difficult to measure just like, for instance, to measure motivation. But on the grounds of the practical experience of conducting lessons, the author can claim that if an adult learns to read fast, he/she will also be able to think fast. It refers to reading given that the information is comprehended fully and completely.

Apart from protocols and the results gained, the effectiveness of conducted instruction and training programmes can be proved by repeated corporate orders for trainings as well as the fact that 43% of people who underwent training in the corporate form were further attending

¹³ http://www.pisa.oecd.org/pages/0,2987,en_32252351_32235731_1_1_1_1_1,00.html



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classes in other modules of training programmes in open groups at their own expense or brought their children for training according to the analogous programmes.

On the grounds of the aspects mentioned above, the author recommends as follows: to expand the range of application of innovative methods of instruction using the techniques of speed reading and fast memorization; to summarize the results gained and make them available to general public for discussion; to describe the most demanded skills and capabilities adults should possess for the purpose of effective training within the concept of *lifelong learning* and successful integration into the European labour market.

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