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Implementing effective learning techniques in work with pupils with learning disabilities

For over ten years I had been working as a revalidator in a Special Rehabilitation and Educational Centre for mildly mentally retarded children and youngsters. At work I applied traditional methods usually employed in the education of pupils with learning disabilities. This notwithstanding I was constantly searching innovative methods that would facilitate the learning process. In 1998 I came across effective learning techniques on the training course in the Fast Reading Method. I found many interesting publications on that subject and, first of all, I started applying these techniques myself. Since then fast and effective learning have become my passion. I have been giving classes in that subject for children, youngsters, teachers and- at present-for students as well.

Why are effective learning techniques so important for teachers working with pupils with learning disabilities ? Are they important solely in the work of tutors teaching pupils with learning disabilities ? Are they important only at work?

Nowadays we are constantly flooded with new information. The skills of effective learning techniques application assume the proportions of essential social competence. In order to tackle freely a mass of information, assimilate relevant information, take fast notes of it, or systematize it we need specific skills, such as: fast and selective reading comprehension, symbolic and intelligible note taking, concentration, and relaxation. If we want to constantly self-improve and develop, we require effective learning competence.

Constant self-improvement is the duty of all teachers, not solely pupils with learning difficulties. This duty encompasses deepening knowledge through the systematic study of professional literature, enriching teaching methods employed in one's own work and acquiring new teaching and educational skills. On that account the speed and effectiveness of one's own learning are of the utmost importance, both at work and in everyday life of all teachers.

Our self-improvement results in the teaching quality of children and youngsters in Educational Centres. If teaching gives us a lot of satisfaction and we can see its long term effects, we are likely to 'pass' this enthusiasm on to pupils. The more knowledge and skills we have at our disposal, the more interesting and dynamic our classes will be.

Effective learning techniques that teachers apply are part of the lesson component; they enable pupils to master more freely the knowledge required and to derive complete satisfaction from getting to know the world we live in.

Mnemotechnics - memory improvement¹

For several years I have been applying mnemotechnics as part of individual revalidation to mildly mentally disabled youngsters. As we know, the ability of abstract thinking and logical induction among such people is impaired, which does not mean that it is inaccessible. An active and creative imagination, that puts disabled pupils to a great deal of trouble, forms the basis for effective learning. At the initial stages of mnemotechnics application I focused mainly on fostering, stimulating and firing residents' imagination by means of associative games, imaginative games, and visualization exercise. The next stage of education was based on introducing and arousing pupils' interest in the most popular and, at the same time, the easiest mnemonic techniques available, that is: the Link Method, the Roman Room Method, the Number/Rhyme Mnemonic and the Picture Alphabet.

Some of the basic rules of a memory application can be summed up in one sentence:

Image Plus Action = Memory²

In Polish each of the above mentioned letters indicates one of the components of an ideal memory.

Positive Images – such images bring better conditions for memorization, as the brain stores them in memory more willingly, whereas negative memories are relegated to the subconscious.

Colour – wherever the colour appears in our associations, ideally a full range of colours, it is good to fit our associations into it since they will be more powerful.

Movement – In our associations something should ideally be in movement. If the images are made more vivid, they will be stored in the long term memory.

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D. Gamon, A. Bragdon, *Ucz się szybciej, zapamiętaj więcej*, Warszawa 2003.

² T. Buzan, *Pamięć na zawołanie*, Łódź 1997, s.52.

The absurd and humour – everything that is funny, amusing, ridiculous will remain in our memory for a longer period of time.

Links – regardless of what we want to remember, we should link it with something constant and unchanging that has already been coded in our memory.

Exaggeration – exaggerated images (with regard to their size, shape or quantity) will facilitate our memorization.

Numbers/numbering – numbering ensures that every item of information will be recalled, promoting harmony and setting our memory in order.

Meticulousness – the more meticulous our images are, the easier it is to recall them.

Synesthesia/ sensuous sensations – synesthesia consists of transferring certain sensuous sensations onto others and mixing them. Mnemonic works by stimulating all sensations.

Cupid/Erotism – we all well remember sensations concerning erotic experiences; we should make use of them.

Sequence – our sequenced associations help to access freely every item of information at any time.

The daily routine/uncommonness – the more extraordinary and weird our associations are, the better it is to recall them. The brain does not code monotony, boredom, humdrum routine.

'I' – we should appear personally in all associations, as what is of personal concern to us plays an important role in our lives.

Active imagination – Einstein maintained that imagination is more important than knowledge.

Imagination is the basis of memory – let's train it!

Applying the above mentioned rules, we can introduce successive mnemotechnics.

The Link Method³ consists of combining information to be remembered in a funny and amusing way. The Roman Room Method⁴ enables to memorize through 'laying out' information in a well-known place, either real or imaginary. Numbers and Rhymes as well as the Picture Alphabet use sound and graphic similarity of specific objects with numbers. Other effective learning techniques include: the Fast Reading Method and Mind Mapping.

The Fast Reading Method

Fast reading is an extremely useful method. Not only do we read books, magazines, or scientific publications, but we also acquire plenty of information from the Internet. An

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H. Lorayne, Superpamięć dla uczących się, Łódź 1999, s.29.

⁴ M. Szurawski, Pamięć. Trening interaktywny, Łódź 2004, s.138.

average Pole reads with the speed of 200-250 words per minute. From my experience, however, I can say that this average has decreased in recent years and is running at about 150-180 words per minute with an average intellectual standard adult. This standard among mentally retarded people is still inferior. After completing a professional course we can speed up the pace of reading from three to five times. But we can speed up the reading pace ourselves by systematic exercise. There is a great variety of manuals and course books that are helpful in mastering this skill. Many writers, both abroad (for instance T. Buzan 1997, G. Hörner 2002, G. Dryden, J. Vos 2003) and in Poland (for instance J. Jamruszkiewicz 2002, I. Krop 2002) deal with the fast reading subject. Plenty of web sites offer fast reading courses in the demo version that may be used free of charge.

Mind Mapping⁵

A significant role in a field of effective learning is occupied by the maps of thoughts, or Mind Mapping, also called non-linear note taking. A non-linear note has several essential characteristics. It is a personal note, since we make use of our own associations and symbols in it. The sheet of paper on which we write is placed horizontally and the notes have a picture form, not a line under line notation. In Mind Mapping we utilize a few colours in order to make an item of information easier to memorize. Besides we use symbols and patterns because the brain better assimilates images to abstract signs or handwriting. Equally important are also footnotes, arrows and pencil marks, which emphasize the links between certain themes. With the use of Mind Mapping we can prepare ourselves to the lesson (instead of traditional lesson plan), lecture or presentation. Moreover, we can apply this technique in the work with pupils, for example while revising particular parts of material, or as an analysis of a complicated task. Using this method we can also discuss recommended school reading or prepare for an exam.

The above mentioned techniques may easily be used for one's own self-improvement and in the work with pupils. By taking certain elements of various techniques, one can work out a well adapted pattern for specific needs and pupils' capacities.

Basing on my observations, reflections and work experience I came to a conclusion that the knowledge of fast, effective learning techniques is applicable and necessary at every stage of education. We should first begin with training a student to well prepare a teacher, as - by applying the selected techniques in real teaching- students will pass them to their pupils as teachers.

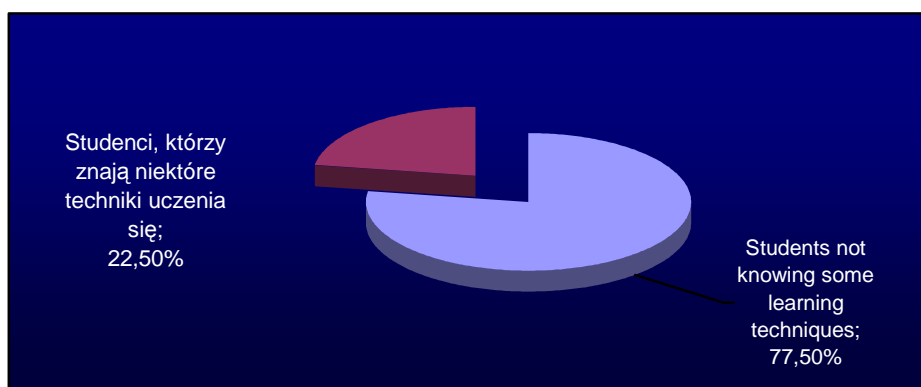
⁵

T. Buzan, *Mapy Twoich myśli*, Łódź 2003.

Pilot Study

At the beginning of my work at the UMCS Lublin University, in October 2005, I conducted a pilot study in the group of forty first-year students of Special Education. The study dealt with the students' knowledge and interests in effective learning techniques. I assumed that first-year students do not know these techniques but would like to apply them.

The results of the study were as follows: almost 80 % (77,5%) of the questioned students did not know any special effective learning techniques. The others claimed they had come across such mnemotechnics as mind mapping and fast reading (pie chart 1).



Students knowing some learning techniques: 22,50%

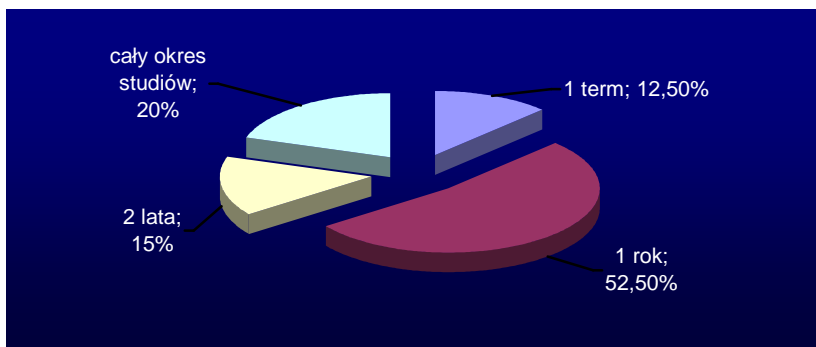
Students not knowing learning techniques: 77,50%.

Pie chart 1. The knowledge of effective learning techniques among first-year students of Special Education

80% of the students involved in the study were showing interest in the subject of the fast reading method, and as many as 90% stated that this technique may speed up their learning process.

More than 80% (87%) of the students held an opinion that effective learning classes should be included in the university syllabus. 95 % declared the techniques should be introduced in the first year of study to master material in a faster way and to better prepare them for the examinations.

A bit more than half of the questioned (52,5%) expressed their willingness to participate in such classes for the period of two terms. 20% were of the opinion that such classes should be conducted through the whole graduate studies time (pie chart 2).



Pie chart 2. “Learning techniques’ span of time suggested by first-year students of Special Education the whole graduate studies time; 20%

2 years; 15%

1 term; 12,50%

1 year; 52,50%

The outcomes of the pilot study showed students' willingness to participate in effective learning techniques classes in order to use their intellectual potential to the maximum extent and, consequently, their exam results.

Extensive study

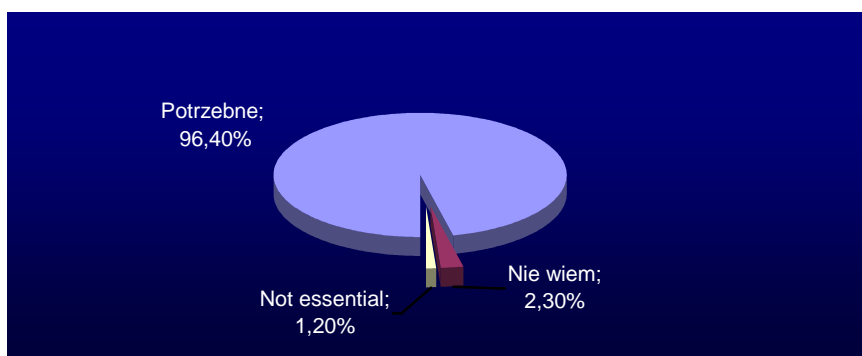
After having conducted classes in learning techniques as part of one-term optional course, I tested 170 first-year students of Special Education at the UMCS Lublin University. The study was held in May 2006 and 2007. This time I intended to test legitimacy and efficiency of effective learning classes. I also wanted to get to know students' preferences concerning individual techniques.

From among 170 students questioned, merely two people stated that such classes are not essential in the university syllabus, whereas over 95% were enthusiastic about participating in them (pie chart 3).

Essential; 96,40%

Not essential; 1,20%

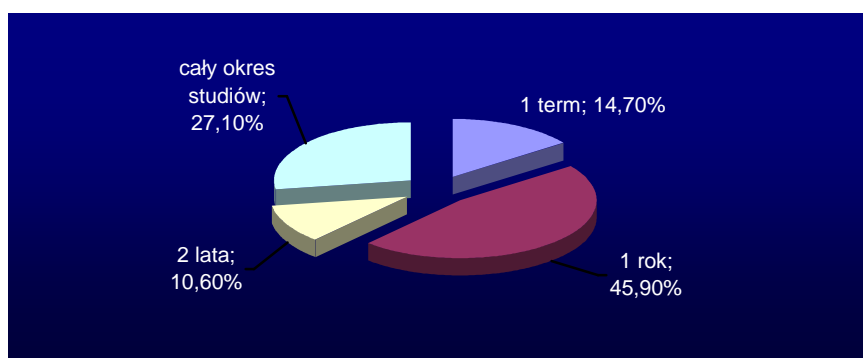
Do not know; 2,30%



Pie Chart 3. The demand for classes in effective learning techniques in the opinion of first-year students of Special Education at the UMCS Lublin University.

Nearly all students (98,2%) opted for introducing effective learning techniques **in the first year** of graduate studies. Three of the others said such classes should be carried out in the second year because of a greater self-awareness and responsibility for one's own learning process.

Like in the pilot study, the questioned students mentioned various suggestions concerning the time span of classes. The majority - 45,9% opted for a-year course (pie chart 4).



Pie chart 4. Time span of 'Learning techniques' classes suggested by first-year students of Special Education at the UMCS Lublin University

the whole graduate studies time; 27,10%

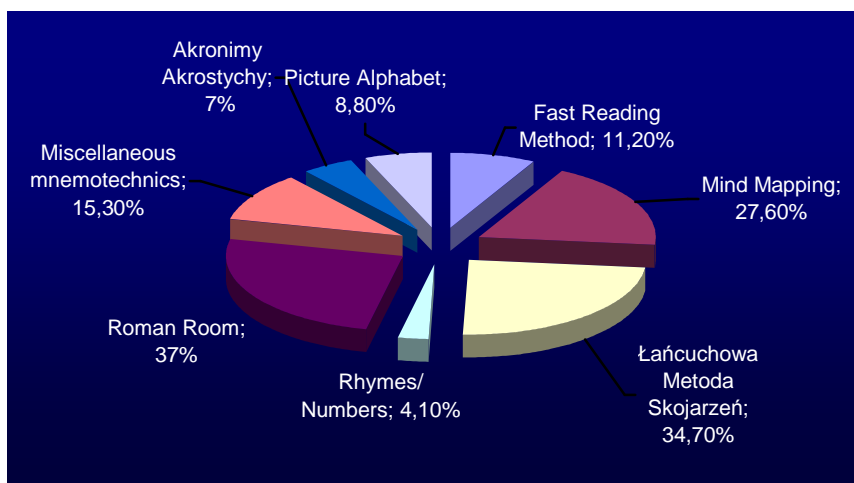
2 years; 19,60%

1 term; 14,70%

1 year; 45.90%

The efficiency of 'Learning techniques' classes and, consequently, the acceleration of their own learning process were observed by 70 % of the students participating in the study. Only 4 people did not observe any changes.

Of the techniques presented so far the most positive recognition was gained by: the Roman Room Method, the Link Method, and Mind Mapping. These techniques are most frequently used by students in the process of self-study (pie chart 5).



Pie chart 5. Students' preferable effective learning techniques

Acronyms; 7%

Picture Alphabet; 8,80%

Fast Reading Method; 11,20%

Mind Mapping; 11,20%

Link Method; 34,70%

Rhymes/ Numbers; 4,10%

Roman Room; 37%

Miscellaneous mnemotechnics; 15,30%

In the view of the research outcomes one can acknowledge that:

- ✓ The skill of effective learning techniques is essential social competence
- ✓ The knowledge and systematic application of selected techniques speed up substantially the pace of learning
- ✓ Effective learning techniques should be applied at every stage of education, and at all ages to make the learning process easy and efficient
- ✓ Considering their mental disabilities, we can adapt some elements of effective learning techniques and apply them in the teaching process for the majority of students,
- ✓ A competent teacher with an active imagination has a fair chance to direct their pupils towards creative development.

References:

1. T. Buzan, Pamięć na zawołanie, Łódź 1997.
2. T. Buzan, Rusz głową, Łódź 1997.
3. T. Buzan, Szybkie czytanie, Łódź 1997.
4. T. Buzan, Mapy Twoich myśli, Łódź 2003.
5. G. Dryden, J. Vos, Rewolucja w uczeniu się, Poznań 2003.
6. D. Gamon, A. Bragdon, Ucz się szybciej, zapamiętuj więcej, Warszawa 2003.
7. G. Hörner, Szybkie czytanie. Intensywny kurs, Łódź 2002.
8. J. Jamruszkiewicz, Kurs szybkiego czytania. Katowice 2002.
9. I. Krop, 1000 słów na minutę. Podręcznik do samodzielnej nauki szybkiego czytania, Warszawa 2002.
10. H. Lorayne, Superpamięć dla uczących się, Łódź 1999.
11. M. Szurawski, Pamięć. Trening interaktywny, Łódź 2004.