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Second language acquisition: New perspectives. A critical investigation into the Lozanov method

Background

The monograph *Nytt perspektiv på andrespråkslæring. En kritisk undersøkelse av Lozanovmetoden* was published in Norwegian in 2021 (Hetland and Lunde 2021, 180 pp.). Here we report on research carried out over a period of several years at Volda University College, Norway, within the framework of the project *Language learning and its neural correlates*.

Compared to the accessible literature on learning, there exists an overwhelming amount of literature and investigations on *teaching* and *assessment*. Leslie A. Hart, in his book *Human brain and human learning* (2002), comments on this fact: "Go into an educational library and check the evidence on the shelves. For every volume ... on 'learning' in general, one can find yards of books on teaching and assessment" (p. 4). The driving force behind *our* research project has been a strong wish to find out more about *learning* – learning in general, and language learning in particular. Our focus has been on the learning perspective; we have examined teaching as a *preparation for learning*.

The point of departure for the research project *Language learning and its neural correlates* was the human brain: What goes on in the brain when we learn? What factors influence learning? How do these factors come together to make learning possible? To get closer to an answer to these questions we chose two very different approaches. On the one hand, we collected and discussed relevant knowledge on learning from neurology, psychology, and linguistics, a purely theoretical project. On the other hand, we conducted a comparative empirical (qualitative and quantitative) pilot study on the learning achieved by means of two different teaching methods used in second language education in Norway: 1) what we may call 'standard' education, and 2) education according to the Lozanov method, also called *suggestopedia* (Lozanov 2009). At a later stage, the results from the empirical investigation were discussed in the light of relevant knowledge gathered from neurological, psychological, and linguistic research.

The Lozanov method

The Lozanov method was developed in Bulgaria during the 1960s and -70s by the psychiatrist Georgi Lozanov, who later initiated and directed a pedagogical research institute in Sofia with at the most 100 associated researchers and teachers. In today's Norway, the method is applied on a small scale for teaching Norwegian as a second language to adult speakers of minority languages. In Hetland and Lunde (2021), chapter 6, we give a first introduction to Lozanov's methodology. In chapter 11, we discuss how the effects of Lozanov teaching, as documented in our empirical pilot study, can be related to Lozanov's own theory and instructions, and to the theoretical knowledge available to us.

As a psychiatrist, Lozanov particularly treated patients with schizophrenia, often by means of psychotherapy and hypnosis. Through this work he gained in-depth knowledge of what may be stored in the unconscious, and how the individual may get access to unconscious memories. In his method, he attaches great importance to unconscious/implicit learning processes and to the transition between unconscious and conscious/explicit learning. Unconscious learning – by means of 'peripheral perception' – is understood as and termed 'the reserve potential of the brain'.

Lozanov also emphasizes

- a comprehensive teaching material, with extensive and carefully prepared varied repetition of the linguistic structures
- the use of classical art, music, and songs
- teachers and students' belief in successful learning
- the importance of positive emotions for learning
- the importance of the teacher's 'prestige': he or she must be highly competent
- that the teacher must show genuine respect, warmth, and love for the students.

This little catalogue gives just a small hint of the Lozanov method. The didactics is complicated and strictly structured, and Lozanov's own presentation (Lozanov 2009) makes great demands on the reader. A good Swedish introduction into the method is given by Cramér (2011), cf. also Dhority (1991), Stevick (1980, 1998), and Bancroft (2013). The reader is also referred to Hetland and Lunde (2021).

The reasons why we chose the Lozanov method for comparison in our project on language learning are diverse. First, the method has been reported to yield exceptionally good results (cf., in addition to Stevick 1980, 1998 and Bancroft 2013, Krashen 1982). Second, it differs sharply from traditional methods used in second language education. Third, it is highly controversial: it is easy to find strong opinions on the Lozanov method among educationists, both for and against. And finally, as far as we know, the method has never before been subject to critical and controlled research in Norway.¹

On the lack of – and need for – reliable studies in the field of second language acquisition

Generally, reliable effect studies on methods in second language education of adult immigrants have been scarce both in Norway and internationally. This goes especially for the second language education of immigrants with little or no schooling. On a global scale, the Norwegian Institute of Public Health (NIPH) has carried out a literature search for studies on learning effects from the use of different methods in second language education of adult immigrants with little or no schooling (Flodgren et al. 2018).² Out of 13,198 potentially relevant references, only two investigations were found that could be included in the study! Ultimately, these two investigations also had to be discarded due to low credibility. This is a disheartening result. (On the positive side, the NIPH concludes that the two investigations that were first included and later excluded show that it is *possible* to carry out controlled studies on the effects of different methods of teaching and learning for this group of students!)

We need reliable knowledge as to what methods for second language education are effective. Without reliable knowledge, all political decisions in the field will be unfounded (cf. NOU 2017: 2, p. 198). In our own study, we have attached great importance to impartiality, reliability, and precision. We have also set great store by recording and explaining possible biases (cf. Hetland and Lunde 2021: 112ff. and below).

Language learning and its neural correlates. Results

The results from the project *Language learning and its neural correlates* are documented in Hetland and Lunde (2021). Our *theoretical* investigations into the current state of research confirm that many of the elements important to the Lozanov method are supported by evidence from neurological and psychological studies. This goes for brain research investigating the very basis for learning and memory (e.g. Hebb 2002/1949; Scoville and B. Milner 1957; Squire and Dede 2015; Pulvermüller 1999, 2019), research within implicit/statistical learning, where an extensive and varied material is recommended (e.g. Plante and Gómez 2018; Torkildsen 2018), research on the role of emotions in learning (e.g. Immordino-Yang and Damasio 2016; Pessoa 2019), research on music, emotions, and learning (e.g. Schwarz and Clore 1983; Isen 2002; Fredrickson 2001), and research on motivation and learning (e.g. Bandura 1997; Ryan and Deci 2017). Thus, many of the factors included in the Lozanov method seem to be corroborated by neurological and psychological findings.

The *empirical* part of our study was conducted as a pilot study at two different locations in Oslo during a three-month period in 2019. Here we observed and tested the learning achieved by two parallel groups of adult learners of Norwegian as a second language. 'Standard' education was observed and tested at Oslo Voksenopplæring Helsfyr and education following the Lozanov method at the LIN centre, Furuset. The students participated in courses at M0-level, i.e. courses for beginners with little or no schooling from their home countries. From the relevant literature in the field, it appears that it is difficult for students at this level to achieve quick and robust progress. We therefore assumed that clear-cut results as to learning effects at this level would be of great significance.

The main argument for promoting the Lozanov method on a greater scale than is the case today is *the learning effect*. Does the method work? And does it work better than comparable methods? This is what we wanted to find out in the empirical part of our project.

In our *qualitative* investigation, we observed the *process* of learning in the two groups. For both groups, considerable learning was documented (Hetland and Lunde 2021, Ch. 8). Our *quantitative* effect study, which was conducted as a progression study, tested the development of language proficiency in the two groups according to 8 different criteria (Hetland and Lunde 2021, Ch. 9). As in the qualitative study, both groups showed substantial learning, but the results for the Lozanov group were higher than the corresponding results for the 'standard' group in all eight measurements. We were surprised by these results. It was impossible for us to predict the outcome on group level before the measurements and the meticulous analyses were completed.

It is important to underline that the two groups of our quantitative investigation were small. We tested 7 participants from the Lozanov group and 5 from the 'standard' group. To achieve statistically significant results ($p \le 0.05$) we would need larger samples. It is also important to add that our investigation had biases, biases that manifested themselves in both directions. For the group with 'standard' education, the disadvantages were at the structural level:

- *Group size*. Our 'standard' group of five was part of an ordinary class; the class was two times the size of the original Lozanov group.
- *Replenishment of participants during the course*. In the 'standard' group, new participants were added in several rounds during the observation period; in the Lozanov group no new participants were allowed.
- A comprehensive curriculum that included writing instruction, the use of electronic equipment and aids, and mathematics. Much of the instruction took place in a computer room. In the Lozanov group, focus was on understanding and talking everyday Norwegian in addition to some reading instruction.
- *Breaks*. In the 'standard' group, there were no shared lunch breaks, whereas the Lozanov group had a shared lunch break four days a week with the teacher present.

The Lozanov group had other challenges:

- *Level of language proficiency.* 5 of the originally 10 participants could not speak any Norwegian when the course started; two of them were absolute illiterates, i.e. they could not read or write in any language. In the 'standard' group, all the participants could speak some Norwegian at the beginning of the course; they could also to some extent read and write simple Norwegian texts.
- *Age.* In the literature on second language learning, it has been documented that increasing age is associated with harder and slower learning (Birkeland et al. 2019; Lerfaldet et al. 2020). At course start, 4 out of the 10 participants in the Lozanov group were over 50 years of age. The average age of the group was 45.8 years, whereas it was 34.6 years in the 'standard' group.
- *Age range*. According to documented knowledge (Hvenekilde et al. 1996: 296), large age differences make it difficult to provide engaging and motivating instruction to all students. In the original Lozanov group, the age range was from 17 to 60 years, whereas the range was from 29 to 44 in the 'standard' group.

One of the most striking differences between the groups was the absence statistics. For

the Lozanov group, the absence rate was a remarkable 6.6 %; for the 'standard' group, it was 34.7 %.

Second language education and societal utility

Adequate knowledge of the language spoken in the society where an individual lives may be decisive for successful integration. It is essential that methods of high quality are found and put into use – methods that lead to good learning, better health, and personal growth – and at the same time contribute to an optimal utilization of public resources.

In their external evaluation of the EU-financed Swedish project *Suggestopedisk SpråkInlärning* (SSI), Huldt and Tranquist (2019) recommend that education according to the Lozanov method should be included as part of the *Swedish For Immigrants programme* (SFI). This recommendation is justified by qualitatively documented learning effects and beneficial influence on the participants' health, and also – last, but not least – by a careful and thorough analysis of the potential *societal utility* ('samhällsnytta') of the project.³ Huldt and Tranquist's reasoning is of general relevance. We render part of their argumentation below.

According to Huldt and Tranquist, *societal utility* consists of two main factors, *socio-economic utility* and *social capital*. Socio-economic utility includes *production value* and *financial effects* (the two blue squares in Fig. 1). Production value is the contribution created through a person's employment; the financial effects comprise wages, taxes, and national assistance.

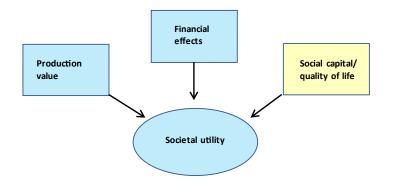


Figure 1. Societal utility. Based on Huldt and Tranquist (2019: 36, Fig. 6)

An individual's *social capital* (i.e., factors related to his or her *quality of life*, the yellow square in Fig. 1) is not considered part of the *socio-economic* utility, but it contributes substantially to the person's ability to integrate into society. Thus, it is an essential part of the *societal utility* (the blue ellipse in Fig.1).

The socio-economic utility of the SSI project can be estimated. Huldt and Tranquist do that, applying Payoff's model NyttoSam.⁴ The analysis of socio-economic utility gives an estimate of the total financial value of a given investment, and thereby it provides a financial basis for decision making as to what projects should be launched and prioritized. Taking the socio-economic utility into consideration is especially important for projects with high initialization costs that are considered profitable in the long run.

The financial effects of the SSI project are calculated as the difference between the value of increased production (reduced usage of resources included) and the costs of realizing the project. Huldt and Tranquist reason as follows: If a person is working full-time in a low-wage occupation without support schemes, the socio-economic value can be estimated at about SEK 500,000 per year. If the person works half-time, the economic value can be estimated at about SEK 250,000 per year. After a Lozanov course, it will hardly be possible for participants in the SSI project to get employed right away. But Huldt and Tranquist consider it likely that the participation in the SSI project will make it easier for the students to get a job than for students participating in standard SFI education. To determine this with certainty, it will be necessary to follow up the participants over time.

On the basis of the available data, Huldt and Tranquist make the following calculation: If one single person after the Lozanov course reaches a sufficient level of language proficiency one semester ahead of the foreseen time and is employed in a half-time job half a year earlier than would have been the case with standard SFI education, the production value will – according to the model applied – be about SEK 125,000.

Huldt and Tranquist emphasize that the participants themselves are the great winners if they get a job. The authors point out that the students who have studied by means of the Lozanov method are in better health after the course than earlier, they 'mår bättre'. They will probably need less health care in the future. They have – through the course – been well trained in tackling social situations, they have strengthened their self-esteem, they report that their everyday communication has improved, and they have developed an increased understanding for – and trust in – society. This increases their opportunity to get a job. Moreover, at the lowest course level, in Katrineholm (A-level), numbers indicate that the language learning in the SSI project has been faster than learning in the regular SFI class; this may – in addition to the health assets – increase the chances for becoming employed, and it may shorten the waiting time. If the participants get permanent jobs, their income will probably rise and exceed any national assistance.

Huldt and Tranquist assume that the extra cost generated by a Lozanov course is SEK 50,000 for a group of 20 students. Accordingly, for the extra expenses to be profitable (so that the result exceeds break-even), the socio-economic value for a Lozanov class must exceed the value for a standard SFI class by at least SEK 50,000. It has been estimated (see above) that one person who gets a half-time job at a low-wage level half a year earlier due to Lozanov education will create an economic value amounting to SEK 125,000. *This means that if a single one of the 20 students gets a half-time job only a little more than two months earlier by joining a Lozanov course than by joining an ordinary SFI course, the education according to Lozanov's methodology will be socio-economically profitable (Huldt and Tranquist 2019: 43)*. Huldt and Tranquist state that there seem to be good chances for these expectations to be met and even surpassed.

Summing up, according to Huldt and Tranquist's external evaluation of the EU project *Suggestopedisk SpråkInlärning*, there are good indications that an investment in Lozanov education can create significant societal utility, including socio-economic value (2019: 43). A necessary prerequisite for this is that motivated and well-educated teachers are available, and,

according to Huldt and Tranquist, that the courses are held in groups for which the method is suited. Based on the results from the SSI project in Sörmland, they assume that the method is especially successful at the A-level.⁵ They recommend that, preferably, Lozanov education is offered to students who have faced problems in traditional courses, to women, and to persons who have difficulties getting out of social isolation.

Recommendations

All in all, the results of our research project *Language learning and its neural correlates* – in spite of the biases – give a clear indication that the Lozanov method may be worth investing in, at least for beginners. We recommend that the method be implemented to a much greater extent than is the case today. We also recommend that arrangements be made to offer education for teachers in the Lozanov method within the university and college system. And we strongly recommend further investigations and testing, also at higher levels, especially at the B-level, where the largest group of students can be found.

With reference to Huldt and Tranquist's external evaluation of the Swedish EU-project *Suggestopedisk SpråkInlärning*, we see it as highly possible that extended use of the Lozanov method will contribute to increased societal utility, also to increased socio-*economical* utility. However, further investigations into the method are urgently needed – especially comparative investigations that examine learning effects – under controlled conditions, and with samples big enough to yield statistically significant results.

Notes

References

Bancroft, W.J. (2013). *Suggestopedia and language acquisition: Variations on a theme*. London: Routledge. Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York: Freeman.

¹ But see Hetland and Lunde (2021: 8f.).

² The survey was based on criteria applied in medical studies.

³ This project was conducted by *RAR Sörmland* and carried out in Katrineholm and Eskilstuna in the period 1.2.2017 - 30.6.2019. It was evaluated by the two consulting firms *Payoff* and *Tranquist Utvärdering*, who perform socio-economic analyses for municipalities, county councils, and the Swedish social assurance agency, among others. In the project, three groups of students received Lozanov education at three different proficiency levels (A-, B- and C-level), and were closely followed.

⁴ This model has been used for more than 100 socio-economic analyses on behalf of i.a. public welfare schemes, municipalities, and employment services.

⁵ 'A-level' is the lowest level for participants in second language education in Scandinavia.

Birkeland, P. et al. (2019). *Resultater på Norskprøven for voksne innvandrere 2014-2017*. Oslo: Kompetanse Norge.

Bjørkvold, J.-R. (2014). Det musiske menneske. 9th ed. Oslo: Freidig Forlag.

Cramér, A. (2011). Suggestopedi. Lära bättre – må bättre. Mariefred: Alla Sinnen Förlag.

Dhority, L. (1991). *The ACT Approach. The use of suggestion for integrative learning.* 2., extended ed. Philadelphia: Gordon and Breach.

Flodgren, G. et al. (2018). Språkopplæring for voksne innvandrere med lite eller ingen skolegang: En systematisk oversikt over effektstudier. Oslo: Folkehelseinstituttet/Norwegian Institute of Public Health.

- Fredrickson, B.L. (2001). The role of positive emotions in positive psychology: The broaden and build theory of positive emotions. *American Psychologist* 56, 218-226.
- Hart, L.A. (2002). Human brain and human learning. New York: Longman.
- Hebb, D.O. (2002). *The organization of behavior. A neuropsychological theory*. Mahwah, NJ: Lawrence Erlbaum. (Originally published 1949.)
- Hetland, J. and Lunde, K. (2021). Nytt perspektiv på andrespråkslæring. En kritisk undersøkelse av Lozanovmetoden. Rapport fra forskningsprosjektet Language learning and its neural correlates. Report no. 109/2021. Volda: Høgskulen i Volda. <u>https://bravo.hivolda.no/hivolda-xmlui/handle/11250/2755916</u>.
- Huldt, J. and Tranquist, J. (2019). SSI, Suggestopedisk språkinlärning. Samordningsförbundet RAR Sörmland. Report. Göteborg: Payoff.

Hvenekilde, A. et al. (1996). Alfa og omega. Om alfabetiseringsundervisning for voksne fra språklige minoriteter. Oslo: Novus.

- Immordino-Yang, M.H. and Damasio, A. (2016). We feel, therefore we learn: The relevance of affective and social neuroscience to education. In: Immordino-Yang, M.H. (ed., 2016). *Emotions, learning, and the brain. Exploring the educational implications of affective neuroscience*. New York: W.W. Norton & Company, 27-42.
- Isen, A.M. (2002). Missing in action in the AIM: Positive affect's facilitation of cognitive flexibility, innovation and problem solving. *Psychological Inquiry* 13 (1), 57-65.
- Kölsch, S. (2020). Gode vibrasjoner. Musikkens helsebringende kraft. Oslo: Cappelen Damm.
- Krashen, S.D. (1982). Principles and practice in second language acquisition. Oxford: Pergamon Press.
- Lerfaldet, H. et al. (2020). Kvalitet i norskopplæring for voksne innvandrere. Ideas2evidence, report no. 6/2020.
- Lozanov, G. (2009). Suggestopedia/Reservopedia. Theory and practice of the liberating-stimulating pedagogy on the level of the hidden reserves of the human mind. Sofia: St. Kliment Ohridski University Press.
- NOU 2017: 2 (2017). Integrasjon og tillit Langsiktige konsekvenser av høy innvandring. https://www.regjeringen.no/no/dokumenter/nou-2017-2/id2536701.
- Pessoa, L. (2019). Neural dynamics of emotion and cognition: From trajectories to underlying neural geometry. *Neural Networks* 120, 158-166.
- Plante, E. and Gómez, R. (2018). Learning without trying: The clinical relevance of statistical learning. *Language, Speech, and Hearing Services in Schools* 49, 710-722.
- Pulvermüller, F. (1999). Words in the brain's language. Behavioral and Brain Sciences 22, 253-279.
- Pulvermüller, F. (2019). Neurobiological mechanisms for semantic feature extraction and conceptual flexibility. *Topics in Cognitive Science* 10, 590-620.
- Ryan, R.M. and Deci, E.L. (2017). Self-determination theory. Basic psychological needs in motivation, development, and wellness. New York: The Guilford Press.
- Schwarz, N. and Clore, G.L. (1983). Mood, misattribution, and judgments of well-being: Informative and directive functions of affective states. *Journal of Personality and Social Psychology* 45, 513-523.
- Scoville, W.B. and Milner, B. (1957). Loss of recent memory after bilateral hippocampal lesion. *Journal of Neurology, Neurosurgery and Psychiatry* 20 (1), 11-21.
- Squire, L.R. and Dede, A.J.O. (2015). Conscious and unconscious memory systems. *Cold Spring Harbor Perspectives in Biology* 7 (3). doi:10.1101/cshperspect.a021667.
- Stevick, E.W. (1980). Teaching languages. A way and ways. Rowley, MA: Newbury House Publishers.
- Stevick, E.W. (1998). Working with teaching methods. What's at stake? Boston, MA: Thomson Heinle.
- Torkildsen, J.v.K. (2018). Utvikling av ordforråd hos barn: Fra hjernebølger til intervensjon. Presentation, Kognitivt sommerseminar. OsloMet, 4. juni 2018.