Abstract: This paper presents the results of research that was aimed at testing the performance of deaf and hard of hearing (D/HOH) high school students in learning English as a foreign language (EFL). The research examined the correlation between the age (number of years of learning EFL), the degree of hearing loss, the sex and the school success in the Serbian language with the achievements of the D/HOH students in solving an English Placement test. The differences in achievements between D/HOH students and those with a normal hearing status were also compared and analyzed. The results of the research indicate that although the D/HOH students achieve poorer results in learning English compared to students with a normal hearing status, they can be successful in learning English as a foreign language. The D/HOH students have some difficulties in learning English vocabulary and grammar. They need more time to successfully master a foreign language, so it is necessary to take into account the specificities of this category of EFL students and to adapt teaching methods and resources to suit their needs.

Keywords: deaf and hard of hearing (D/HOH) students, hearing students, English, foreign language, test, achievements, grammar, vocabulary

Why this research?

Soon after the English language lessons were introduced to the D/HOH students in Serbia, it became evident that there are significant differences in English language achievements between the students in the same class as they are very often on different levels of acquiring foreign language skills. Most of the D/HOH students need highly individualized approach during lessons that will provide progress and obtaining optimal results in English language learning. In order to be able to prepare better for classes, the
teacher tried to find a way to determine areas that present potential difficulties for the students and to plan the curriculum accordingly. We used the Macmillan’s Placement Test, at first as a diagnostic tool, to define the level of English knowledge and to determine weak and strong points of D/NOH EFL learners. Later, we decided to use the Macmillan’s Placement test to compare achievements in EFL of the D/NOH students with their hearing peers. A placement test is usually based on the syllabus the student will follow, and it tests vocabulary and grammar knowledge and assess students’ productive and receptive skills. Diagnostic test is used to identify student’s difficulties, gaps in their knowledge and skill deficiencies during the course.

The macmilan’s placement test

Macmillan’s Placement Test was published in 2002. According to the publisher, the test has been designed to be used for placing students into groups depending on their level of English language knowledge: from elementary, over pre-intermediate and intermediate to advanced level of English. The test comprises of 120 multiple choice questions and includes a language usage (80 questions) and a vocabulary section (40 questions). In order to answer each question the student had to choose an answer he considers to be correct, between four offered options. The other three offered answers are so called ‘distracters’. According to Dimitrijević good distracter, looks like the correct answer only to a student who does not know the right answer. This format of the test was chosen as it is easy to explain to the D/NOH students what they are supposed to do. It is also more appropriate for this category of students, compared with, for example, filling in the gaps or transformation type of exercises, as the students do not need to worry about their writing and they can be more relaxed while doing the tests. It puts all the students into the same situation, and all have the same chance to successfully solve the test items, no matter their individual differences. Test is easy to administer and mark correct answers. Testing gives an approximate estimation of the English language knowledge of the D/NOH students.

Students with no previous knowledge of English at all were not required to take the test. Hearing and D/NOH students were tested at the end of the school year after they have been learning English for one to four years, depending on their age and class they were in. As suggested by the publisher, students were given 60 minutes to do the 120 items test.
The questions in the Placement Test become progressively difficult. Students should only attempt as many questions as they feel they are able to do within the time allowed.

Placement according to the scores on the Test is based on the assumption that students have attempted to answer all 120 questions. Each correct answer was marked with one point, and the results were evaluated as the publisher recommended:

- under 30 points – elementary level,
- 31-60 points – pre-intermediate level,
- 61-90 points – intermediate level,
- above 90 points – advanced level.

The test has also been used for analyses of errors, as we wanted to see what were the questions that the most of the D/HOH students solved correctly and which ones were difficult for them.

The research sample

Research sample consisted of 80 students - 43 D/HOH students from the “Stefan Decanski” School for Hearing-Impaired Students in Belgrade (19 male and 24 female students) and 37 students (14 male and 23 female students) with normal hearing from the mainstream Grammar School in Smederevo (Serbia). All examinees started learning English at the beginner's level, in high school. They are also from the same age group (15 to 19 years old) and with an IQ in the normal range. Students from the “Stefan Decanski” School for Hearing-Impaired Students” were also divided into groups in accordance with the degree of hearing loss. For this purpose, a classification of hearing impairments by the World Health Organization was used. Degree of auditive deficiency in tested students varies in a range from moderate to profound hearing loss.

The results

The research has shown both D/HOH and hearing students achieved very diverse scores on the subtests in grammar and vocabulary knowledge, as well as on the complete MacMillan’s Placement Test. The research results indicate that the students’ age (number of years of learning EFL) have significant impact on the achievements of the \tested students. The students’ sex has no influence on their performance. The school success in Serbian
language has partial influence on the achievements of the D/HOH students, as on the subtest related to grammar knowledge and usage there is no statistically significant difference in achievements when their school grades in Serbian language were taken into account, but on the vocabulary related part of the test there is significantly important correlation between the students’ success in Serbian language and their performance on the Macmillan’s Placement Test of English language knowledge. The D/HOH students who have better command of the Serbian language and richer vocabulary in Serbian performed significantly better than their peers with lower school grades in Serbian language.

An interesting result of this research was that the degree of hearing loss has no influence on the D/HOH abilities to perform well on an English language test. The research has shown that great individualized variations in achievements exist between the students no matter their degree of auditive deficiency. Although both groups of students, either with normal hearing status or D/HOH high school students, had no previous experience with formal or informal learning of English as a foreign language, it became evident that the students with normal hearing achieved significantly better results than their D/HOH peers, especially in the first year of learning EFL. When we compared the results obtained by hearing and D/HOH students we concluded that hearing students performed approximately two times better than their D/HOH peers. In the first grade of high school this difference is even more visible, as hearing students achieved almost three times better scores, on both subtest and the whole test. This is shown on the following graphs:

Graph 1: Average number of correct answers on the subtest Language Usage in the groups of hearing and D/HOH examinees

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Graph 2: Average number of correct answers on the subtest Vocabulary in the groups of hearing and D/HOH examinees

Graph 3: Average number of correct answers on the Macmillan’s Placement Test in the groups of hearing and D/HOH examinees

Obtained results can be explained with the fact that although hearing students have not learnt English as a foreign language in elementary school or attended private lessons or courses in language schools they have been surrounded by English language in their daily lives through watching movies (which are not synchronized, but subtitled in Serbian language), listening to music, using the Internet, travelling etc. Hearing students have better skills in Serbian as a mother tongue and they have also been learning additional foreign language in elementary school, so they could use their previous
knowledge and skills in solving the test items. As the questions were of multiple choice type, by using their previous language learning experience and passive knowledge of English acquired in everyday life, hearing students could easier answer the test questions correctly or even guess the right answers.

As both group of students were informed that taking the test is on voluntary basis and the test results would not affect their school mark in any way, as well as there are no consequences for wrong answers on test items, they accepted to do the test and were relaxed in the test situation. While evaluating and analyzing the test results, the examiner noticed that most of the D/HOH students left unanswered those test items they did not know or were not sure what the correct answer was, especially in the first and second grade, and a group of hearing students rarely left a question unanswered, and more often they tried to guess the right answer (they often chose two answers when they were not sure what the correct answer is, although they were previously informed that there is only one correct answer for each test item).

In both group of examinees results obtained on the MacMillan’s Placement Test improve with the number of years of learning English, as it was expected. Achieved levels of English language knowledge in the groups of hearing and D/HOH students are shown on graph no. 4.

Hearing students achieved an average results that correspond to
intermediate level of English language knowledge in the first and second grade, and to advance level in the third and fourth grade of high school. Average test performance of all hearing students performance corresponds to intermediate level of English. The D/HOH group of students obtained average results on the test that correspond to elementary level knowledge in the first grade, and to pre-intermediate level of English in the second, third and fourth grades of high school. Average level of performance on the MacMillan’s Placement Test, for the whole group of the D/HOH students, is pre-intermediate.

**Errors analyses**

As it is previously mentioned the test has also been analyzed for typical errors in order to conclude what areas of English language syllabus are harder for the D/HOH students to adopt and what content need to be devoted more time and attention in class, so the D/HOH students could achieve their maximal potentials in EFL.

We wanted to determine what are the most common errors and problems that are experienced by the D/HOH learners in the domains of English language grammar knowledge and adequate application of grammar rules, as well as are what difficulties they experience in the vocabulary domain (understanding the meaning of words and their adequate usage in accordance with the context of the given sentence).

**Subtest Language Usage**

The research has shown that the greatest challenge for the D/HOH students is adequate use of verb tenses in English. This can be illustrated with their answers to the following test questions:

27. *He*_______ in an office every morning from eight to twelve.
   a) working b) works  c) work  d) am working
The correct answer is *b) works*, and this item was solved correctly by 91.9% of hearing test participants and 58.1% of the examined D/HOH students (who usually omitted the final –s for the third person singular in the Present Simple Tense).

35. *Where* is Mary? *She*_______ over there.
41. When_______ you go to the USA? Last year.
   a) did  b) was  c) went  d) have
94,6% of students with normal hearing and 39,5% of D/HOH students solved this item correctly and recognized they should choose a) did as the correct answer to this question.

51. They usually _____ at home, but today they ______ lunch in a restaurant.
   a) are eating, have  b) eat, have  c) eat, are having  d) are eating, are having
This item presents two requests related to adequate use of the present Simple and the Present Continuous tense, and it was difficult for both hearing and D/HOH examinees, as the correct answer c) eat, are having was chosen by 53,9% of hearing and only 13,9% of D/HOH students.

53. I think most people _______ English for their job in the future.
   a) need  b) are needing  c) will need  d) will have needed
The correct answer to this item, c) will need, was given by 48,6% of hearing and 25,6 D/HOH examinees. This test item and the use of future tense presented a difficulty for both groups of students.

The D/HOH students have also had significant problems with words used for describing the quantity, which can be illustrated with the following test items:

20. _____________________ brothers have you got? Only one.
   a) How much  b) How old  c) How are  d)How many
89,2% of hearing and 44,2% of D/HOH students have chosen the correct answer d)How many.

23. There aren’t ________ people here today.
   a) many  b) a lot  c) much  d) the many
This test item was solved correctly (a)many) by 67,6% of hearing and 44,2% of D/HOH examinees.

The D/HOH students have also experienced some problems in the area
of comparison of adjectives. Examples for this are their answers to the following test items:

38. Switzerland is ____________ than Britain.
   a) as small       b) smallest  c) more small       d) smaller
The correct answer is d) smaller, and it was given by 86,5% of hearing and only 18,6% of D/HOH examinees.

39. Motor racing is the ____________ sport in the world.
   a) most expensive b) expensivest c) more expensive d) as expensive
75,7 of hearing and 41,8% of D/HOH students have chosen the correct answer (a) most expensive) to this test item.

   The D/HOH students were relatively successful in answering the questions that were related to the usage of common prepositions in English, as it can be seen from their answers to the following test items:

29. I go_______ school in Vienna.
   a) at    b) to      c) in     d) on
The correct answer to this item, b) to, was given by 75,7% of hearing and 69,8% of D/HOH students.

32. I stay at home_______ the morning.
   a) at    b) to      c) in     d) on
The correct answer, c) in, was given by 86,5% of hearing and 69,7% of D/HOH students.

   In most cases, the D/HOH students adequately used possessive adjectives in a sentence, as in the following examples:

   a) you    b) your   c) yours   d) you’re
This question was answered correctly by 100% of hearing and 86% of D/HOH students (b)your).

7. _____ name is John Smith.
13. Is that ____ car?
   a) they   b) their   c) there   d) they’re
81,1% of hearing and 67,4% of D/HOH students has chosen the correct answer to this test item (b) their).

This research results can be compared with the results of two researches performed by Đimić (2003), who examined the use of basic verb tenses in Serbian language, in the population of D/HOH elementary school students (higher grades), and Đimić, Dinić, Isaković (2012), who did a similar research with the D/HOH high school students. The results of these researches have shown that the D/HOH students experience great difficulties in attempt to adequately use basic verb tenses in Serbian language (present, perfect and future tense). As the mother tongue of the great majority of Deaf people in Serbia is Serbian sign language, Serbian language (oral and written) is practically the second language they learn and English is practically their third language.

Domagala – Zysk (2012a) performed a research on problems in written production in EFL in a group of D/HOH primary school students in Poland. The results of this research also indicate that the D/HOH students often make mistakes in adequate use of verb tenses, as well as plurals and the use of articles in English.

Subtest Vocabulary

After analyzing the vocabulary part of the test we can conclude that it is easiest for the D/HOH students to learn those words which have concrete meaning (concrete nouns and verbs). Abstract nouns and abstract meaning of words are difficult for them to understands.

7. My favorite ____________ is dinner.
   a) lunch   b) drink   c) food   d) meal
The correct answer, d) meal, was circled by 73% of hearing and 37,2% of D/HOH students (who have often chosen the answer c) food as the correct one).

17. What was the ____________ like in Vienna? It was cold and cloudy
a) time  b) weather  c) cold  d) temperature
This question was answered correctly by 78,3% of hearing and 34,9% of D/HOH students. (b) weather. Here, the D/HOH students have often chosen answers marked with a) time and d) temperature as right ones.

18. I’ve got a new dishwasher and a fridge in my ___________.
   a) bathroom   b) study   c) office   d) kitchen
94,6% of hearing and 60,5% of D/HOH students has given the right answer (d) kitchen) to this test item.

Understanding the meaning and adequate usage of adjectives and adverbs, in the given context in a sentence, present a problem to the group of D/HOH students.

22. I’m too ___________ today. I’ll phone you back tomorrow.
   a) crowded  b) interested  c) polite  d) busy
The correct answer to this item, (d) busy), was given by 89,2% of hearing and 27,9% of D/HOH students.

23. Take your umbrella. It’s raining _____________.
   a) heavily  b) strong  c) hardly  d) much
The right answer, (a) heavily), was chosen by 32,43% of hearing and 16,3% of D/HOH students.

28. He lets his wife do everything for him. He’s very _____________.
   a) careful  b) bored  c) quiet  d) lazy
This item was solved correctly (d) lazy) by 75,7% of hearing and 27,9% of D/HOH students.

The D/HOH students are successful in performing tasks like adding the adequate word in order according to some criteria, such as: numbers, days in a week, month in a year and similar tasks.

six  seven  ____________  nine  ten
   a) three  b) twelve  c) eight  d) five
The correct answer, c) eight, was given by 97,3% of hearing and 95,3% of D/HOH students.

4. Sunday  Monday  ____________  Wednesday
   a) Saturday  b) Thursday  c) Tuesday  d) Friday
It is interesting that this test item was solved correctly by 86% of D/HOH and
70.3% of hearing students, probably because the D/HOH have better visual picture of the word (the most common wrong answer was \textit{b)Thursday}, instead of the right one - \textit{c) Tuesday}.

This results can be compared with the research about the D/HOH children in Serbian language vocabulary knowledge and skills (Dimić, 2003), that concluded the Deaf children vocabulary consists mostly of nouns and verbs (words with concrete meaning), while the other categories of words are much less used.

Conclusions and recommendations

The D/HOH students, just like their hearing peers, come to school with the great range of different abilities, weaknesses and strong points, which certainly should be used in teaching EFL to this population of students. It is necessary for the teachers to develop knowledge and skills that would provide to the D/HOH students to be successful in learning the English language.

We know that in mainstream schools and specialized language schools foreign languages are mostly learnt by listening and speaking, thus engaging in communication by using oral and auditory approach, which is not appropriate for the D/HOH students, who need adapted or different approaches in a foreign language classroom. The D/HOH students also need more time to master certain aspects of English, so it is necessary to pay attention to make an adequate teaching plan and use appropriate, mostly visual teaching materials, in working with this group of students.

Teaching English to the population of the D/HOH students in Serbia presents the challenge for both teachers and students. It would be useful to create a network of teachers from different schools for the Deaf, on national and international level, in order to provide them an opportunity to exchange experiences and knowledge, as well as to share good practice examples from their classrooms.

Although achievements in EFL vary individually in the population of the D/HOH students, depending on their degree of hearing loss, peculiar abilities, number of years of learning English, as well as their motivation for learning, we can conclude that they can be successful learners of English as a foreign language.

Literature


Urdarević I., (2009), *Test nivoa znanja engleskog jezika kod slušno oštećenih učenika (Test of English language knowledge level of hearing impaired students)*, Zbornik rezimea, Dani defektologa Srbije, Zlatibor.

Urdarević I., (2016), *Specifičnost nastave engleskog jezika u školi za gluve i nagluve učenike (Specificity of Teaching English Language at School for the Deaf and Hard of Hearing Students)*, Masters thesis, Faculty of Special Education and Rehabilitation, Belgrade.


Dimić D.N., (2003), Govorno – jezički deficit kod gluve i nagluve dece *(Speech and Language Deficiencies in Deaf Children)*, Društvo defektologa Srbije i Crne Gore, Belgrade.


Urdarević I., (2009), *Test nivoa znanja engleskog jezika kod slušno oštećenih učenika (Test of English language knowledge level of hearing impaired students)*, Zbornik rezimea, Dani defektologa Srbije, Zlatibor.

Urdarević I., (2016), *Specifičnost nastave engleskog jezika u školi za gluve i nagluve učenike (Specificity of Teaching English Language at School for the Deaf and Hard of Hearing Students)*, Masters thesis, Faculty of Special Education and Rehabilitation, Belgrade.