Bilingualism and reading proficiency: Experiences of Armenian, Persian and Azeri students

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Abstract

The study presented here is an attempt to investigate the role of bilingualism in EFL students’ reading comprehension proficiency, and to that end six classes of three high schools were randomly chosen. These high schools were Soghomonian (Armenian bilinguals), Taleghani (Turkish bilinguals) and Ershad (Persian monolinguals). They were given a questionnaire and a reading comprehension test and the obtained data were analysed through one-way analysis of variance test. The performance of the three groups was significantly different. Tukey’s HSD showed that the Armenian bilingual group was the first and best group and the Persian monolingual group was the second one; however, the Turkish bilingual group was the poor third. The results suggest that L1 literacy practices of the Armenian bilinguals have worked to their advantage to the extent that they have outperformed the other two groups. This has not been the case with the Turkish bilinguals whose lack of L1 practices has worked to their detriment.

Keywords: Bilingualism, literacy, reading comprehension, EFL students.
1. Introduction

Speaking two languages is often referred to as bilingualism. Since 70% of the Earth’s population is thought to be bilingual or multilingual (Trask, 1999), there is a good reason to believe that bilingualism is the norm for the majority of people in the world. For many people, the term bilingualism seems to be easy to define but there are various kinds and degrees of bilingualism, including passive, dominant, balanced, compound and coordinate, each with different consequences for learning subsequent languages.

A bilingual person may be literate in two languages or literate only in one of the two languages, particularly in the second language. The majority of the research studies concluded that L1 literacy enhances L2 and L3 acquisition. In The Power of Reading, Krashen (1993) maintained that reading in and of itself is powerful enough to result in language acquisition. Swain, Lapkin, Rowen and Hart (1990) showed that literacy in the heritage language is the key element when determining the positive impact that being bilingual has on subsequent language acquisition, and they further found that the link to more efficient L3 acquisition is biliteracy not bilingualism. Furthermore, researchers have shown that ‘the level of proficiency in a third language acquisition was affected more by the ability to read and write in the heritage language than by the oral level of proficiency’ (Wojtowicz, 2006, p. 6).

In many second or foreign language situations, reading receives a special focus. There are a number of reasons for this. First, many foreign language students often have reading as one of their most important goals. They want to be able to read for information and pleasure, for their career and for study purposes. Second, written texts serve pedagogical purposes. Extensive exposure to linguistically comprehensible written texts can enhance the process of language acquisition. Reading, then, is a skill highly valued by students and teachers alike (Richards & Renandya, 2002).

Iran is a country in which various languages are spoken. People in Iran speak a few different languages including Persian, Turkish, Kurdish, Turkmani, Armenian and Arabic. Minority language children acquire their mother tongue at home and Persian either at home, at community or at school when they are submerged in L2 to receive their elementary schooling. Among these bilingual groups, only Armenians experience literacy development in their first language. Research in this area in Iran has not focused on this variable among bilinguals. The researchers wonder whether bilinguality in general (without considering the literacy variable) and bilinguality interacting with literacy in the first language makes any difference among bilinguals and monolinguals.

2. Literature review

In spite of the fact that bilingualism is a universal reality, it is still difficult to define the phenomenon in a straightforward manner. As defined by Wei (2000), the term ‘bilingual’ primarily refers to the possession of two languages. The issue seems easy, on the face of it, to delineate the fact that bilingualism is a relative concept, as it refers to a complicated phenomenon that has not been clearly categorised. That is why there exist multiple interpretations and descriptions of a bilingual person. During the last century, linguists have referred to this dual knowledge by pointing to particular features. Among these references to bilingualism, one is that of Bloomfield (1933, p. 55–56):

‘In the case where this perfect foreign-language learning is not accompanied by loss of the native language, it results in ‘bilingualism’, native-like control of two languages. After early childhood few people have enough muscular and nervous freedom or enough opportunity and leisure to reach perfection in a foreign language; yet bilingualism of this kind is commoner than one might suppose, both in cases like those of our immigrants and as a result of travel, foreign study, or similar association. Of course, one cannot define a degree of perfection at which a good foreign speaker becomes a bilingual: the distinction is relative.’
Weinreich (1968), considered as a pioneer of research on bilingualism, stated that ‘the practice of alternately using two languages will be called bilingualism, and the person involved, bilingual’ (Weinreich, 1968, p. 1). According to Weinreich (1968), a bilingual person is one who uses two languages irrespective of his/her command, the linguistic skills (speaking, listening, reading or writing) mastered or the context in which the languages are used. This does not provide defining features, which may involve a certain degree of ambiguity.

Another description of the bilingual phenomenon is provided by Mackey (1970, p. 555) as follows:

‘It seems obvious that if we are to study the phenomenon of bilingualism, we are forced to consider it as something entirely relative. We must moreover include the use not only of two languages, but of any number of languages. We shall therefore consider bilingualism as the alternate use of two or more languages by the same individual.’

Considerations should be taken into account when describing bilingualism. There are social, psychological and other environmental factors that add to the complexity of depicting bilingualism, so a narrowed down definition is required. One of these specialised definitions was provided by Skutnabb-Kangas and Tokoma (1976, p. 90) as follows:

‘A bilingual speaker is someone who is able to function in two (or more) languages, either in monolingual or bilingual communities, in accordance with the sociocultural demands made of an individual’s communicative and cognitive competence by these communities or by the individual herself, at the same level as native speakers, and who is able positively to identify with both (or all) language groups (and cultures) or parts of them.’

With respect to the research studies conducted in the area of bilingualism, different results have been gleaned. The studies carried out in the 1920s and 1930s indicated that bilinguality negatively affected bilinguals’ educational achievement, intelligence and language learning (Bloomfield, 1933; Pinter & Keller, 1922). Some later studies indicated no significant difference between monolinguals and bilinguals (Elhampoor, 1998; Sadeghi, 1997). Some other researchers came up with the results indicating advantages for bilinguals in terms of cognition and language learning (Abbasifard, 2001; Cummins & Gulustan, 1974; Diaz, 1985; Javandel, 2001; Nilipoor, 1986; Omidi, 1995). However, what is absent from these studies is the issue of literacy in the first language which is hypothesised to have an effect on the learners’ ability in learning subsequent languages. In this respect, Sanz (2000) showed that, while balance in the oral skills of the first and the second language did not predict higher L3 scores, balance of the written skills was a significant predictor of L3 scores.

Montrul (2008, p. 136) stated that as simultaneous and sequential bilingual children acquire basic proficiency and literacy in L2, their use of and proficiency in the L1 and L2 change over time.

‘There is a threshold for vulnerability to language loss in sequential bilinguals. Minority speaking children younger than 10 years of age show a more rapid shift the L2 and a large degree of L1 loss than children older than 10. This gradual vulnerability to loss is consistent with the Critical Period Hypothesis for L1 acquisition and loss.

The ability of language minority children to acquire the L2 and maintain proficiency in their L1 is in part related to the type of support the minority language receives in the school environment.’

The 1970s and 1980s’ studies demonstrated that bilingualism positively affected the pupils’ cognitive and social functioning and development. Among these studies are Bialystok (1988), Cummins (1976), Diaz (1985), Feldman and Shen (1971), Ianco-Worall (1972) and Segalowitz (1977). More enhanced awareness of the arbitrary relationship between words and their referents and superior metalinguistic skills were the positive points that these studies attributed to the bilinguals participating in their projects. With regard to metalinguistic awareness, Segalowitz (1977) suggested that the internalisation of two languages rather than one would result in a more complex, better equipped mental calculus enabling the child to alternate between two systems of rules in the
manipulation of symbols. Bialystok (1988) hypothesised that bilingual children have an advantage over monolinguals in their control of the linguistic processing needed for metalinguistic problems. However, some scholars conducted experiments with more controlled variables and found no difference between bilinguals and monolinguals, which led to a neutral attitude towards bilingualism. Barik and Swain (1978) and Lambert and Tucker (1972) measured the performance of larger samples controlled for gender and age, and in terms of their intelligence, mental development and school achievements no significant difference was found between bilinguals and monolinguals.

Many research studies conducted in Iran have resulted in the same controversial results as well. Some of these studies have associated bilingualism with positive effect; some have found some repercussions for bilingualism and some others have ended up with no significant difference between bilinguals and monolinguals. Arefi (1996), Niliipoor (1986), Bastani (1997), Yousefi (1995), Keshavarz and Astaneh (2004), Abbasifard (2001) and Javandel (2001) have obtained the evidence for positive effects.

These researchers have investigated the relationship between bilinguality and creativity, academic achievement, learning English as the third and foreign language, and bilinguals’ cognitive advantages. Taghizadeh (1974) has stated that she has not found any significant difference between bilingual and monolingual subjects. Dinarvand (1993) and Bahrainy (2003) have found the evidence for negative effects.

Attitudes towards bilingualism have changed over time. From the early 19th century till the 1960s, there was a common belief that bilingualism impinged on students. Saer (1923) studied Welsh–English bilingual children in rural and urban areas of Wales and there was a significant difference between bilinguals and monolinguals. However, there were some problems with Saer’s study as Wei (2000) mentioned; the correlation between bilingualism and lower IQ was confined to rural areas, and in urban areas bilinguals and monolinguals were the same. According to Wei (2000), bilinguals in rural areas had little opportunity to use English and the results were not indicative of sociopsychological problems. Besides, the language in which tests were administered was the second or non-dominant language for the bilinguals.

Peal and Lambert (1962) have criticised many of these studies for their methodological defects. Some variables in these studies such as gender, age and socioeconomic status (SES) were not controlled; moreover, according to Cummins (1976), they failed to control the degree of bilinguals’ knowledge of their languages.

3. Methodology

3.1. Participants of the study

The participants were chosen from a high school population studying English as a foreign language. Each group consisted of 34 male high school students in the third grade aged between 17 and 19. Since the researchers were looking for an Armenian high school and there was only one Armenian high school situated in district 8 in Tehran, Persian monolinguals were randomly chosen from this district, too. Turkish bilinguals were randomly chosen from Zanjan high schools since there was no such school in which the researcher could find any Turkish bilingual classes in Tehran. There was an Armenian high school called Abraham Soghomonian there. Armenian bilingual students chosen from this high school were studying mathematics and natural sciences. From the same district, that is to say, district 8, a high school called Ershad High School was chosen by cluster sampling from which the researchers chose monolingual students who were studying mathematics and natural sciences. In Zanjan from district 1, a high school called Taleghani High School was chosen from which Turkish bilinguals studying mathematics and natural sciences were selected. The subjects were provided with a questionnaire in Persian inquiring them about their English learning experience elsewhere. Based on their responses to the questionnaire items, those who had attended language institute classes were
removed from the study. After providing Armenian bilinguals with the questionnaire, 34 students remained who had not attended language institute classes. For the other groups, the researchers conducted the same process. Due to this procedure, and the fact that randomisation had determined the selected groups, the remaining students were similar as far as the language level was concerned.

4. Instruments

The instruments utilised in this study were a questionnaire in Persian asking for information about students’ language learning experience and mother tongue and a general reading comprehension test in English, which included six passages accompanied by 30 questions. These passages were extracted from *English Tests for Third Grade High School Students* (Anani Sarab & Nikooopour, 2010). The difficulty level of these passages was close to that of the textbook passages. These items were piloted for item facility, choice distribution and validation purposes. The test was piloted with 50 high school students in the third grade. The obtained reliability was 0.67.

5. Procedure

Based on the purpose of the study, six classes of three high schools were randomly chosen. These high schools were Soghomonian (Armenian bilinguals), Taleghani (Turkish bilinguals) and Ershad (Persian monolinguals). First, Armenian bilinguals were supplied with the Farsi questionnaire to screen those who had attended language classes in institutes. The students’ responses to the questionnaire showed that 34 of them did not have the experience of language learning elsewhere, i.e., anywhere else other than school. The researchers used the same procedure with the other two groups. After removing the subjects who had received extra language learning experience in private institutes, the remaining subjects who were considered homogenous regarding their background in English language learning were supposed to be compared as far as their reading comprehension proficiency was concerned. In order to investigate whether there was a difference among these groups in their proficiency in reading comprehension, the participants were assigned to three groups called Armenian bilingual group, Turkish bilingual group and Persian monolingual group.

In order to seek any effect of being bilingual or monolingual on the students’ proficiency in reading comprehension or to find out whether there was any relationship between bilinguality and reading comprehension proficiency, a one-way analysis of variance (ANOVA) was run to compare the mean scores of the three groups, i.e., Armenian bilingual group, Turkish bilingual group and Persian monolingual group.

6. Results

To answer the questions posed for the study, a one-way ANOVA was run to compare the mean scores of the three groups on the reading comprehension test.

<table>
<thead>
<tr>
<th>Source of variation</th>
<th>Sum of squares</th>
<th>D.F</th>
<th>Mean square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between groups</td>
<td>1,661.88</td>
<td>2</td>
<td>830.94</td>
<td>9.47</td>
<td>0.000</td>
</tr>
<tr>
<td>Within groups</td>
<td>8,684.32</td>
<td>99</td>
<td>87.72</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>10,346.20</td>
<td>101</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

As can be seen in Table 1, the observed F-value = 9.47 exceeds the critical value of F at 2 and 99 degrees of freedom. Therefore, it can be stated that there is a significant difference among the mean scores of the three groups in the reading comprehension test.
The results of the ANOVA test showed a significant difference among the three groups but it did not show exactly where the difference was placed. To find the significant differences among pairs of groups, Tukey’s HSD was run on the results of the ANOVA test. The results are presented in Table 1.

Table 1. Tukey’s HSD test

<table>
<thead>
<tr>
<th>L.A</th>
<th>L.B</th>
<th>Mean difference (A-B)</th>
<th>Std. Error</th>
<th>Sig.</th>
<th>95% Confidence Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Lower Bound</td>
</tr>
<tr>
<td>P.M</td>
<td>T.B</td>
<td>5.17</td>
<td>1.36</td>
<td>0.001</td>
<td>1.92</td>
</tr>
<tr>
<td>A.B</td>
<td></td>
<td>-3.94</td>
<td>1.36</td>
<td>0.013</td>
<td>-7.18</td>
</tr>
<tr>
<td>T.B</td>
<td>P.M</td>
<td>-5.17</td>
<td>1.36</td>
<td>0.001</td>
<td>-8.42</td>
</tr>
<tr>
<td>A.B</td>
<td></td>
<td>-9.11</td>
<td>1.36</td>
<td>0.000</td>
<td>-12.36</td>
</tr>
<tr>
<td>A.B</td>
<td>P.M</td>
<td>3.94</td>
<td>1.36</td>
<td>0.013</td>
<td>.69</td>
</tr>
<tr>
<td>T.B</td>
<td></td>
<td>9.11</td>
<td>1.36</td>
<td>0.000</td>
<td>5.87</td>
</tr>
</tbody>
</table>

*The mean difference is significant at the 0.05 level.

The results of this study showed that the three groups (Armenian and Turkish bilinguals and Persian monolinguals) with different backgrounds and various degrees of proficiency in their first language performed significantly differently from one another in the English reading comprehension test. Therefore, on the one hand, the results show the Armenian bilinguals’ superiority over the Turkish bilinguals and the Persian monolinguals; on the other hand, they show the Persian monolinguals’ superiority over the Turkish bilinguals. The Armenian bilingual students who had learnt L1 and L2 (Armenian and Persian) both academically and orally were more successful than the Turkish bilingual students who had learnt their L1 only orally in a naturalistic setting.

Armenian bilinguals outperformed the other two groups in the reading comprehension test. This result supports the finding of studies on bilingualism which have demonstrated the supremacy of bilinguals in foreign language learning (Abasifard, 2001; Cummins & Gulustan, 1974; Cummins, 1979; Diaz, 1985; Javandel, 2001; Nilipoor, 1986; Omidi, 1995). With regard to advantages and disadvantages of bilingualism or multilingualism this finding – that Armenian bilinguality has worked to their advantage – is in line with the above-mentioned studies. However; Turkish bilinguals did not have any advantage over the other two groups and their poor performance suggests that their bilinguality has worked to their disadvantage. Therefore, this finding is in line with those studies conducted in the 1920s and 1930s which indicated that bilinguality negatively affected bilinguals’ educational achievement, intelligence and language learning (Bloomfield, 1933, Pinter & Keller, 1922).

The Armenian bilingual group was the first and best group and the Persian monolingual group was the second one; however, the Turkish bilingual group was the poor third. How can this contradiction be resolved? How is it possible that bilinguality, on the one hand, is advantageous to the subjects of this study and, on the other hand, it is disadvantageous?

A possible explanation for the negative consequences of bilinguality among the Turkish subjects and its positive consequences among the Armenian subjects lies in literacy. This is in line with Thomas’s (1988) claim that those bilinguals who possess literacy skills in L1 and L2 perform better in the kind of tests that require manipulation of language. To support this finding, there are some other studies that the researchers deem appropriate to mention.

In writing about the benefits of L1 literacy, Hudelson (1984) noted that it develops in children an understanding of what reading and writing are for. It provides the children with resources to use as they move into second language reading and writing. Based on a variety of tests and measurements, Swain et al. (1990, p. 73) showed that ‘literacy knowledge in the heritage language, regardless of whether learners are currently making use of those literacy skills, had a strong positive impact on the learning of a third language’. This supports the claim that third language students who are literate in
previous languages have advantages over those who are not. Likewise, Cenoz and Valencia (1994) conducted a research which concluded that literacy in L1 aids in L3 acquisition. Furthermore, the researchers determined that the level of proficiency in the third language was affected more by the ability to read and write in the heritage language than by the oral level of proficiency to the extent that those heritage speakers who could not read or write in the heritage language had no advantage over the monolinguals. They cited Troike (1984, cited by Swain et al. 1990, p. 66) who believed that children who are educated (i.e., literate) in their heritage language learn a second language better and are more academically successful than those who are not.

A possible explanation lies in the way bilingualism is developed. Developed well, it can be a strong foundation for academic achievement; however, when developed poorly, bilingualism is not only an advantage, but also a disadvantage. Peal and Lambert (1962) and Darcy (1953) argued that bilingual children performed poorly on the verbal parts of intelligence tests as well as on academic tasks because bilingualism itself was a cause of ‘mental confusion’ and ‘language handicap’. As cited in Cummins (1979, p. 223), a somewhat different hypothesis in this field was the statement that a mismatch between the home and home language of the school results in academic retardation (Downing, 1974; UNESCO, 1953).

Another possible explanation lies in the threshold hypothesis and the developmental interdependence hypothesis. Cummins (2000) cited Cummins (1979) on the issue of threshold hypothesis and concluded that in minority language situations a prerequisite for attaining a higher threshold level of bilingual competence is maintenance of L1 skills. This suggests that the threshold hypothesis can provide a framework with which one can predict the academic and cognitive effects of different forms of bilingualism. Therefore, there is a level, upper threshold, above which the child enjoys the ‘additive bilingualism’ with positive cognitive effects.

The finding that the Persian monolingual students performed better than Turkish bilingual students implies that literacy in the mother tongue is an invaluable asset because the Persian monolingual students in the current study were literate in their mother tongue while the Turkish bilingual students in this study were literate only in their second language (Persian). As a matter of fact, Turkish bilingual students’ literacy in the second language cannot be of that much quality because their illiteracy in the mother tongue has affected their second language learning, too. Cummins (1976, 1979, 1981) reported that developing L1 literacy skills of bilinguals led to academic achievement as well as better language learning. Jorgensen (2008) concluded that the implication for schooling lies in the idea that the level of L1 development of minority students predicts chances of an L2 medium teaching to succeed. If a child has not developed his mother tongue to the lower threshold, teaching in L2 will have negative effects. UNESCO (1953) suggested that mismatch between the language of the home and language of the school results in academic retardation. Therefore, it seems that providing extracurricular classes to develop L1 literacy skills of bilingual students can be of great advantage and help.

Swain et al.’s (1990) study distinguished between biliterates and bilinguals and found that the link to more efficient L3 acquisition was biliteracy not bilingualism. It is clear from these studies that literacy and metalinguistic awareness, both in the first and subsequent languages, help learners produce language more effectively. The results showed that the biliterates obtained higher levels of proficiency in a third language and that literacy in the native language had a positive effect and it was essential for successful subsequent language acquisition.

7. Conclusion

The results showed that bilingualism in some cases had more positive effects on the students’ reading achievement in English as a foreign language, as in the case of the Armenian bilinguals in the current study, and in some cases, it had more negative effects on students’ reading achievement in English as a foreign language, as in the case of the Turkish bilinguals in this study who could not even
catch up with their Persian monolingual peers. Therefore, bilingualism can be a double-edged sword. To tackle this problem, academic instruction should be carried out through students’ mother tongues at schools.

The reason lies in the fact that when the mother tongue is taught formally at schools, it will have, without any doubt, desirable effects on students’ school achievement, but when these students are deprived of the formal teaching of their mother tongue, they will end up with lower achievement, poorer self-esteem, increased school absences and a slow acquisition of the second or subsequent languages.

It is suggested that Turkish be introduced in formal education in Iran from the very beginning of schooling. Turkish students in Iran should be encouraged by their parents to maintain bilingualism at home. Teachers should also be encouraged to maintain bilingualism at schools and encourage their students to use both languages (Turkish and Persian). This kind of education which calls for home language inclusion in the curriculum and the maintenance of real bilingualism by parents and teachers results in higher achievement and self-esteem and less drop out on the part of the students.

There are two options. The first option is the inclusion of Turkish as a subject matter in the curriculum. The second option is bilingual education. The first suggestion may be much more tolerated and welcomed by policy-makers in Iran. When the first option is applied to the educational system in Iran, it can make Turkish bilinguals catch up with their monolingual peers, which in turn will result in reducing underachievement. The second option is a strong form of bilingual education in which 50% of the curriculum is taught through the mother tongue and the other 50% is taught through the second language (Persian in the case of Turkish students). This form of education will have three fruitful outcomes. Firstly, it will lead to language balance of students; hence, they will turn out to be balanced bilinguals. Secondly, it will create perfect biliteracy and bilinguality in the students. Thirdly, it will have cost benefits because it can reduce drop out rates and the number of children repeating courses.

References


Appendix A. Reading comprehension test


Passage 1

For a long time, no one knew how or why rain came. Now, we know more about the weather and sometimes scientists can even make rain. They put things such as tiny pieces of dry ice into special clouds from airplanes and rain drops appear. This is called ‘Cloud Seeding’. This method is very new, however, and does not always work. They are looking for some modern methods.

However, there are other ways offered by some scientists like making high voltage electricity in the clouds by flying objects. This way seems much better because of the fact that no chemical is used in the process.

1. The scientists make rain by putting dry ice ............
   a. into airplanes  b. into clouds
   c. on the ground  d. into flying objects

2. The need for ‘cloud seeding’ probably comes from........... .
   a. the need for water  b. seas and rivers
   c. knowledge about airplanes  d. flying objects

3. The underlined word ‘tiny’ is closest in meaning to............
   a. average  b. large  c. hung  d. small

4. The underlined word ‘they’ refers to............ .
   a. scientists  b. clouds  c. methods  d. airplanes

5. The new method has improvement over the other methods since............
   a. it produces some high voltage electricity
   b. no cloud is needed even
   c. it is more economical
   d. no chemical is used
Passage 2

The railway made it possible to carry things and people over land for long distances at high speed. Railways were first built in Great Britain and in the 19th century as the Industrial Revolution developed, the railways were the most important and fastest growing form of transport.

There were railways long before there were railway engines or ‘locomotives’. As early as the 16th century, wagonways made of wooden rails were used to convey wagons loaded with coal from the mines in Durham and Northumberland in northeast England. It was found that horses could pull heavier loads along a smooth track than a rough road. Later, iron plates were used to protect the wood and around 1800 L-shaped rails came into use for guiding the wagon wheels. These ‘plate ways’ and ‘tramways’ were also used in South Wales and it was there in 1804 that the Cornish mine owner Richard Trevithick worked on a steam locomotive able to pull a load of 20 tonnes (22 US tons). With the development of the steam engine, the way was open for the start of the railway age.

6. Which sentence about railways is **NOT** true?
   a. Railways carried people at high speed.
   b. Railways made it possible to carry things far away.
   c. The first railway was used to carry coal from the mines.
   d. The steam locomotive was first made in the 16th century.

7. The word ‘convey’ in the 2nd paragraph is closest in meaning to..............
   a. carry         b. stretch         c. control         d. follow

8. Wagon-ways made of wooden rails were used .............
   a. First in the 18th century.
   b. to protect the wagons.
   c. to convey coal in wagons pulled by horses.
   d. in mines in South Wales.

9. What happened after the steam engine was made?
   a. The railway age began.
   b. L- shapes rail came into use to guide the wagon wheels.
   c. The ‘plate way’ and ‘tramway’ were used until1804.
   d. The first steam locomotive weighing 20 tonnes was used.

10. The passage is mainly about................ .
    a. the railway engine     b. the wagon wheels
    c. the Industrial Revolution     d. The development of railways
Passage3

Some children require programmes of special education and may have to attend special schools, where what is taught and how it is taught is different from what is available in regular schools. There are different types of special schools. Special schools exist for children who are deaf (or partially deaf); for the blind (or partially visually handicapped); for mentally retarded children; for physically handicapped children; and for children with behavioural problems. In some countries, there are also schools for clever children, those who are either exceptionally intelligent or artistically or musically talented.

In Western Europe and the United States, the first programmes of special education were developed during the late 18th and the 19th centuries, but were not widely available. These schools were residential (boarding) establishments, and were often in the countryside. This meant that children who attended them rarely mixed with other children.

11. The first paragraph is mainly about……………
   a. special schools
   b. school programmes
   c. regular schools
   d. the uses of special education

12. According to the passage, which of the following is NOT true?
   a. There are some children who need to go to special schools.
   b. The method of teaching is different in the two kinds of schools.
   c. what is taught in special schools is different from that of regular schools.
   d. Most countries have schools for clever children.

13. According to the passage, special schools are for……………. .
   a. deaf children only
   b. handicapped or talented children
   c. children who have artistic and musical abilities
   d. children who do not have physical problems

14. The first programmes of special education in the West……………. .
   a. lasted for 100 years
   b. began in the second half of the 18th century
   c. Were developed outside the United States
   d. were free for most people to benefit from
15. Which one is NOT a feature of special schools in the 18th and 19th centuries?
   a. Everybody had access to them.
   b. They were often in the countryside.
   c. They were boarding schools.
   d. Children in such schools were rarely in contact with other children.

Passage 4

That’s hardly surprising if you know something about their background, because they met while taking an art class in college together. However, they are artistic in different ways.

Of the two, my father is probably more imaginative. He was trained as an architect and is able to look at problems in different ways. In fact, he usually has so many different ideas that it's difficult for him to settle on just one solution to a problem. Take the house I grew up in, which he designed. He came up with a great plan and built it that way, but after it was finished, he wasn’t happy with it for long. He decided to try a new design. He kept working on that house the whole time we lived there.

My mother is a fashion designer. She’s also very artistic, but in a different way. When she's designing, she thinks about what she wants for a while and then usually makes just one design.

However, it’s a very good design. Generally speaking, you could say that she's more practical than my father. Perhaps that’s why my mother is the one who I like to think I'm similar to both of my parents. I have an artistic side, but I'm practical, too. I guess you could say that both of those sides are reflected in the career path I've chosen. I just started my own business, designing websites.

16. What is the best title for this passage?
   a. My parents completely different from me.
   b. I rarely see my parents.
   c. I don’t understand my parents.
   d. Both my parents are artistic and talented.

17. In the second paragraph, Ray describes
   a. the place where his father grew up
   b. his father's personality
   c. his father's employers
   d. his relationship with his father

18. Which words best complete the last sentence in the third paragraph?
   a. handles the money in the family
   b. married my father
19. According to the text, it is difficult for Ray's father to .......... 
   a. live with his mother any longer 
   b. change his mind and his field of study 
   c. try a new design 
   d. focus on one single way to solve a problem 

20. The writer says that he is similar to his parents in that .......... 
   a. he is also a fashion designer 
   b. he is so artistic and less practical 
   c. their artistic sides are reflected in his job 
   d. their personalities are different from his 

Passage5 

My rich neighbour is always so busy that I can't see him often. The whole business of his life is to get money. The more money he earns, the more he seems to want. He owns a large company and many expensive cars. He has a beautiful garden at the back of his house, but I've never found him walking around or being happy there. It seems that he likes the fresh air and the beautiful garden flowers, but he only passes on beside the flowers and plants without having much feeling for the beauty of nature. I am so tired of having to argue with him. He will never accept any other person's ideas. I often tell him that the search for happiness must not be concentrated on worldly wealth. There is something else which man should think of. He believes that he should do whatever he can. 

21. The writer believes that his neighbour is too much involved in ................. . 
   a. searching for happiness  
   b. buying and selling expensive cars  
   c. growing garden flowers  
   d. searching for more money 

22. The writer's neighbour has never been found spending some time in his beautiful garden because he may not ................. . 
   a. be able to walk  
   b. feel happy while walking  
   c. find free time  
   d. love his garden 

23. We understand from the passage that money ................. . 
   a. can certainly make a man happy 
   b. doesn't necessarily bring happiness
c. comfort and happiness are together

d. is something that we feel tired of

24. The writer doesn’t see his neighbour very often because the neighbour ……………. .

a. works all week days
b. is always very busy
c. needs money
d. does not accept other people’s ideas

25. According to the text, the writer believes that……………. .

a. his neighbour should get more money
b. he should search for money somewhere else
c. money doesn’t bring happiness for us
d. we should think of worldly wealth

Passage6

Some people think they have an answer to the troubles of automobile crowding and dirty air in large cities. The answer is the bicycle. In some great cities, hundreds of people ride bicycles to work every day. Some bicycle riders have formed groups of active people who try to get their city governments to help bicycle riders. They believe if more people rode bicycle, there would be fewer automobiles in the downtown section of the city and therefore less dirty air from car engines. They suggest that there should be some special lanes on some of the main streets for bicycles only. They believe when bicycle riders use the same lanes as cars, there are accidents. Also, if there were special lanes, more people would use bicycle. But a group of taxi drivers and some shopkeepers don’t like the idea.

26. According to the passage, bicycle riders believe when cars and bicycles use the same lane, there may be……………. .

a. no accident b. more dirty air
c. no traffic d. more accidents

27. The idea of using special lanes for bicycles is supported by……………. .

a. bicycle riders b. city governments
c. shopkeepers d. taxi drivers
28. If more people ride bicycles to work, there will be…………….  .
   a. less clean air in the downtown
   b. less automobile crowding
   c. more business for shopkeepers
   d. more dirty air from car engines

29. A lot of people in some big cities go to work by bicycle because…………….  .
   a. the governments would like them to do so
   b. they would like to cause less pollution
   c. they are more active people
   d. there are special lanes for bicycles.

30. The underlined word ‘they’ in line 4 of the paragraph refers to…………….  .
   a. taxi drivers
   b. people in the street
   c. bicycle riders
   d. governments

Appendix B. Background language information questionnaire in persian

کی زبان مادری شما چیست؟
الف) زبان فارسی
ب) زبان ترکی
ج) زبان ارمنی
د) سایر

و دتا چه حد به خواندن و نوشتن به زبان مادری خود تسلط دارید؟
الف) کاملاً
ب) تاحدي
ج) کمی
د) اصلاً

آیا به غیر از کلاسهای زبان مدرسه خود در آموزشگاه‌های زبان نیز به فراغتی انگلیسی پرداخته اید؟
الف) بله
ب) خیر