

## The Relation between Language Skills and Functional Literacy in University Graduates

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**Abstract.** This study is one of the consecutive stages of a macro project designed to identify the relation between language skills and functional literacy in Turkish adults with varying educational backgrounds. Within this framework, earlier stages investigated how elementary and high school graduates in the Turkish society could functionally use their language skills. The consideration is that one's level of functional literacy observed in his linguistic practices involves how successfully he expresses himself through written and oral language, as well as how successfully he comprehends and interprets written and oral discourse in line with the dynamics of the idealized social and linguistic norms in the information society (Baynham, 1995, Barton, 1987). Although schooling is assumed to be providing individuals with the basics of such linguistic skills, the development or maintenance of these skills to meet the demands of the modern society may present individual- or group-specific characteristics. It is thought that the quality of social interactions, either during or after school, can create a potential for the development of functional language skills. Whatever is gained at school may or may not be long-lasting once the formal education is over. Depending on the level of education and the types of social networks, individuals are assumed to be displaying varying degrees of functional literacy performance. In individuals with limited education, sometimes horizons are broadened through positive social networks, and functional literacy performance, especially in the language use, appears to be more successful than expected. The results of the previous stages of the project presented supporting evidence for this consideration. This time focusing on a more educated group, the presented study aims to investigate the relations between the written and oral language skills and functional literacy in university graduates who have been working either at the state or private institutions. The subject group in this study consists of 240 university graduate Turkish males and females over 25 years of age. The subjects, grouped according to (a) their sexes, (b) their years of experience at work, (c) the type of institution they presently work at, and finally (d) their majors at university (independent variables), have been given a personal information questionnaire and have been tested on four language skills, i.e., reading, writing, speaking and listening through specially prepared materials. The oral performance of the subjects have been evaluated in terms of (a) standard pronunciation, (b) morphological, syntactic and semantic well-formedness of utterances, (c) use of discourse markers and idea organization, and (d) communicative competence. Their written performance has also been tested in terms of (a) use of standard language, (b) idea organization and development, (c) syntactic and semantic well-formedness, (d) use of simple and complex sentence structures, and (e) punctuation and spelling. The data have been analyzed with the SPSS programme and the results have been evaluated in the light of linguistic and sociological theories to find out if the level of functional language skills is bound to the nature of independent variables under consideration. It was hypothesized that the level of functional literacy in university graduates would tend to be somewhat higher than that of the lower-level graduates. Results present supporting evidence; however, findings also reveal statistically significant differences among university-graduate subjects, particularly when independent variables are matched with the results of language skills tests.

### Introduction: Functional Literacy as a Social Practice

In former periods, when the individual shaped his conduct by the demands of self-sufficient and isolated communities where limited educational opportunities were offered and where higher education was a privilege for the elite, being able to read and write was satisfactory enough for many people. With the scientific and technological advancement and with the greater rapidity and complexity of changes in modern culture, most societies in the world have been characterized by cultural transformation and readjustment. Such reconstruction of societies brought about the translation of simple virtues into more comprehensive forms, particularly in the 20th century. Among the consequences of these obvious changes were the uprooting

of habitual modes of action, social expectations, educational objectives and requirements. Therefore, individual rules of conduct had to be revised to meet the new conditions wrought by science, technology and social change. In a period of such profound changes, one of the political and educational tasks in modern societies was helping individuals find meaning and significance for themselves and creating new personalities adequate to the social expectations emerging from the new conditions in a challenging world. For this reason, one's being able to read and write, as the term "literacy" once meant in its basic sense, was no longer seen as a satisfactory skill in most developed countries, especially after the 60s. UNESCO's definition of literacy in 1962 was the acknowledgement of this fact:

A person is literate when he (*sic*) has acquired the essential knowledge and skills which enable him to engage in all those activities in which literacy is acquired for effective functioning in his group and community, and whose attainments in reading, writing and arithmetic make it possible for him to continue to use these skills towards his own and the community's development.

(Unesco 1962, cited in Baynham, 1995: 8)

Redefined educational objectives aiming the individual to be equipped with a veneer of skills, information and technological knowledge through either formal and informal learning or sense making was not merely for the sake of individual development per se, but also for the construction and development of what today is referred to as "information society". Within the realm of broader social goals and practices, one of the modern senses of literacy, which is "functional literacy", does not treat the individual as an isolated or self-sufficient being, but places him in the social practice of advanced interactive relations. In other words, being functionally literate in this age of information is an issue addressing social purposes. It is "an ideological shift towards work-based, work-oriented skills learning as a means to increase productivity levels" (Rassool, 1999: 7).

Starting in the 1970s, mass functional literacy campaigns accelerated round the world put a special emphasis on language skills, because only through developed listening, speaking, reading and writing skills was it possible to enhance the capacity to think, to understand, to question and to explain efficiently in social practices. Barton and Hamilton (2000: 7) mention that "the notion of *literacy practices* offers a powerful way of conceptualising the link between the activities of reading and writing and the social structures in which they are embedded and which they shape". In terms of this, developed language skills can be considered as the basics of many other forms of literacy. As in the case of many other forms of literacy, behind each of the four basic language skills also are socially, historically, culturally, educationally and politically situated practices. This implies that the importance attached to the development of language skills and their treatment within the framework of "information society" is specific to a given society. Depending on the ways literacy is utilised in that society, various degrees of achievement are observed in individuals' performance and in the community's advancement.

If literacy is to be contextualised within the notion of "information society" and if successful language skills are to be identified as key components in communicatively competent individual's coping strategies, then, an evaluation of individuals' present functional language skills can shed light on how general nation-wide strategies work and can help planners predict what further steps can be taken in order to train individuals into functionally more efficient citizens in that society. This evaluation is what we have attempted to do in our multi-level extensive project.

## **The Research: Purpose, Hypotheses and Research Questions**

The research presented in this paper is part of an extensive project we initiated in 1999. This project, aiming to investigate the relations between language skills and functional literacy in Turkish adults, is divided into 7 stages, each of which is designed to gain information about the language skills of educationally different groups. The basic assumption in the macro project is that educationally different groups will tend to display comparatively changing performances in the functional practices of language skills. Taking educational background as the main independent variable, two previous stages involved an evaluation of language skills in elementary school and high school graduate adults in the Turkish society (see König, Büyükkantarcioglu and Karahan, 1999; 2000). In this third stage, the subjects are 240 employed university graduate adults whose reading, writing, speaking and listening skills have been tested. In designing this study, it was thought that observing university graduates would be one obvious way of gaining insights into the nature of their language skills and the factors influencing these skills. It was also thought that the gained results, together with the results of other stages, would not only make cross-comparisons possible, but would also create a basis to question the nature of formal and informal learning processes. Although various steps of formal education in Turkey may be assumed to be providing individuals with useful information on how to develop language skills, whether or not such core information is internalised by individuals, thus becomes part of functional daily practices is a matter of discussion. In the highly heterogeneous structure of any society and in the midst of complex social interactions among individuals, it would be totally misleading to stereotype the graduates of a certain level of education. It was with this consideration that we also considered various other variables (such as sex, employment, patterns of social interactions, types of leisure activities and reading habits) as influential factors that help informal learning and sense making develop after formal processes of education. Similar in nature to the questions we raised in the previous stages, the research questions for this stage are as follows:

1. In terms of their reading, writing, listening and speaking skills, what characteristic features and problems do university graduates display?
2. Does one or more of the following variables influence the degree of language skills in the subject group?  
(a) sex, (b) length of experience at work, (c) major field of science that specialization at university belongs to (e.g., social sciences, physical sciences, health sciences), (d) type of presently employed institution (governmental or private), (e) patterns of social interactions, (f) extent of book reading, (g) types of leisure activities (watching movies, plays and TV, attending cultural events)

### **Study Design**

The design of the study involved three basic steps: (a) selection of the subjects, (b) selection of the means of data collection, and (c) specifying the criteria and the means of data evaluation and analysis.

(a) *Selection of the subjects*: The subjects, aged 25 and over, were selected among the university graduates residing in Ankara and working either at governmental or private offices. Using the *Disproportionate Stratified Sampling Technique* (Kumar 1999: 158-9), we specified the ideal number of subjects to work with as 240. The sample consisted of:

- 118 females 122 males;
- 144 working at governmental offices, 96 working at private institutions;
- 129 graduates of social sciences, 111 graduates of physical or health sciences;
- 92 with work experience 0-10 years, 80 with work experience 11-20 years, 68 work experience over 20 years.

(b) *Selection of the means of data collection*: In designing the study, the aim was to create a controlled environment in which subjects would take the tasks required in the materials prepared by the researchers. The first means of data collection was a personal information questionnaire which included questions about the subject's personal and social details. The answers given to these questions provided information about the subjects' sex, social interactions, leisure activities, reading habits, employment, and studies at university. The second means of data collection was a set of testing materials devised for each of the four language skills. To test the reading skill, the subjects were given an upper-intermediate level of reading text accompanied by 10 multiple-choice comprehension questions. The text included a good number of complex sentence structures, vocabulary of both concrete and abstract concepts, and devices of cohesion and coherence. Testing the writing skill involved a two-step process. First, the subjects were to write their answers to the questions asking about the children either of their own or the close children in the family. Among these questions were also the ones requiring explanation about what they expect from the child at present and in the future. In the second step of the controlled writing activity, the subjects were provided with the beginnings of four different sentences which marked the introduction, development and conclusion parts of an essay, the rest of which they had to develop on their own. The given clues of sentences have led to writing on a current social problem in Turkey, which they have found the most important. Testing the speaking skill involved the narration of a movie or a TV serial the subjects had recently watched. Recorded narrations were

later transcribed paying special attention to the segmental and supra-segmental features of standard pronunciation. Finally, to test the listening skill, the subjects were asked to listen carefully to a medium-length story read on a cassette. The four related questions basically relied on the subject's inference rather than his tracing the bits of simple factual information in the story.

(c) *Specifying the criteria and the means of data evaluation and analysis*: Depending on the correct answers given in the test papers, the receptive skills (reading and listening) were evaluated out of scale of 10 points for each subject. On the other hand, to evaluate the performance of the subjects in productive skills (speaking and writing), the researchers developed two different evaluation forms respectively and observed the criteria below:

Speaking Skill Evaluation Criteria (graded out of 10):

- standard pronunciation and selection of standard lexical items
- idea organization, development and oral discourse management
- morphological, syntactic and semantic well-formedness
- distribution of simple and complex sentence structures

Writing Skill Evaluation Criteria (graded out of 10):

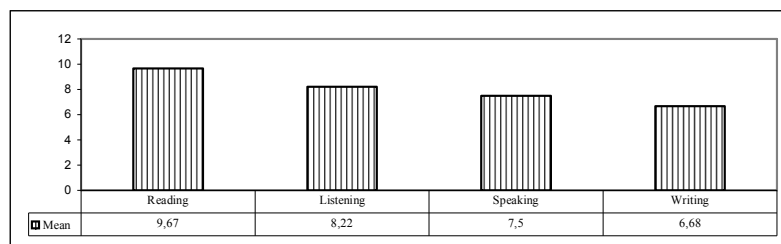
- use of standard language on the lexical, morphological and syntactic level
- idea organization, development and written discourse management
- morphological, syntactic and semantic well-formedness
- distribution of simple and complex sentence structures
- punctuation and spelling.

To ensure maximum objectivity in evaluation, individual researcher scores given for each subject were added together and divided by three. Complete results received both from the questionnaire and from the testing materials were statistically analysed by the SPSS program.

### Findings and Discussion

The data were evaluated both quantitatively and qualitatively to provide answers to the research questions. The tables below present quantitative analyses of the data, particularly in reference with the details in the research question #2.

**Table 1.** Average performance of university graduates in four language skills



Spearman Correlation Test applied reveals that receptive skills have marked better scores than productive skills. While the reading skill surpasses the others with a mean of

9.67, the writing skill displays the least successful performance in comparison to the rest (mean: 6.68). There is a statistically significant correlation between the reading

and writing scores (.277). In other words, the higher the reading score of a subject is, the higher his writing score is.

A similar correlation is also observed between the speaking and writing skills.

**Table 2.** Average performance distribution according to each sex

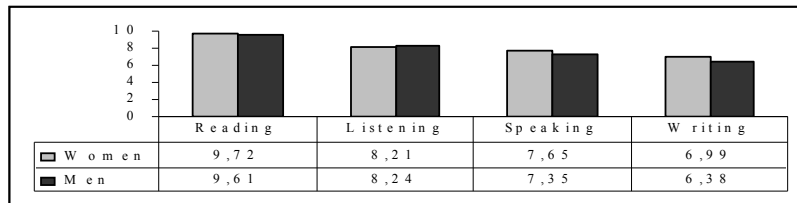
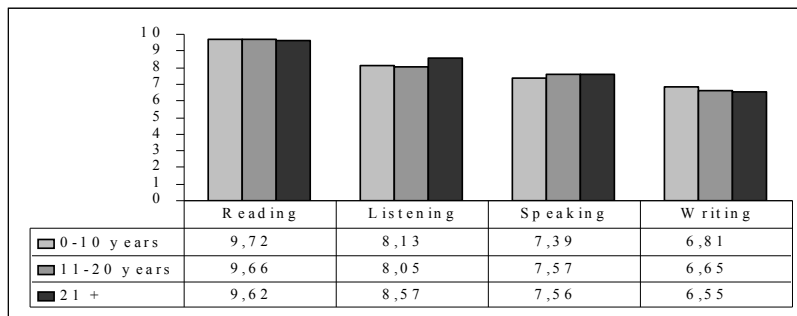


Table 2 displays the results of t-test evaluation which mark a statistically significant difference between the speaking and writing scores of women and those of men. In the

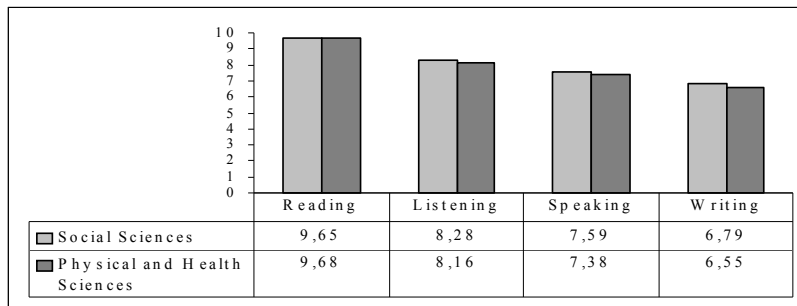
mentioned skills, standard deviation values for the female group are apparently higher.

**Table 3.** Average performance distribution according to years of experience at work



ANOVA (One Way Analysis of Variance) application displays no statistically significant relation between years of experience and language skills performance.

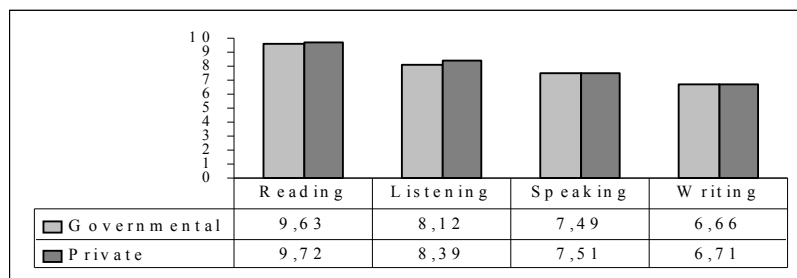
**Table 4.** Average performance distribution according to the major field of science that specialization at university belongs to



T-test application marks a statistically significant difference mainly in the speaking skill. The speaking skill performance of those whose majors were of social sciences

at university is comparatively higher than that of those whose majors were either of physical or health sciences.

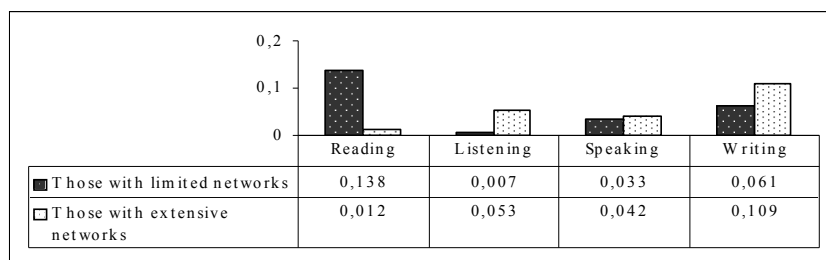
**Table 5.** Average performance distribution according to the type of presently employed institution



Even though the performance of those working at private institutions slightly differ for four language skills, T-test

application does not mark this difference statistically significant.

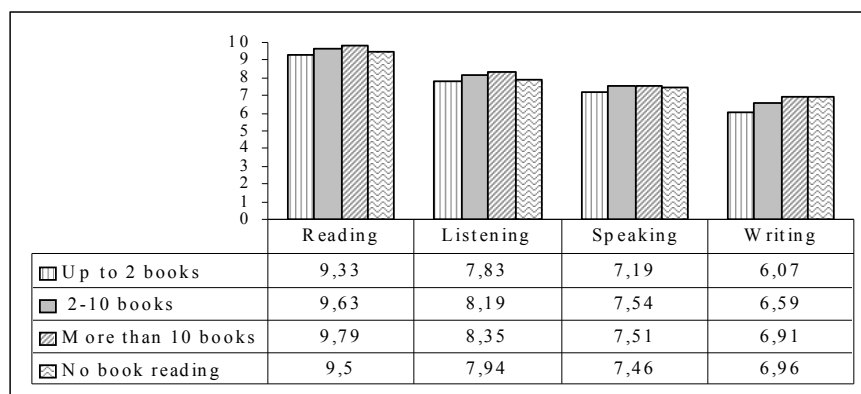
**Table 6.** Average performance distribution according to social interactions



Spearman Correlation Test application displays the subjects whose social interactions take place mostly within the close circle of the family score better results in the reading skill than in other three skills. However, those

who report having developed extensive social interactions with different people outside the family circle mark higher scores in listening, speaking and writing than in reading.

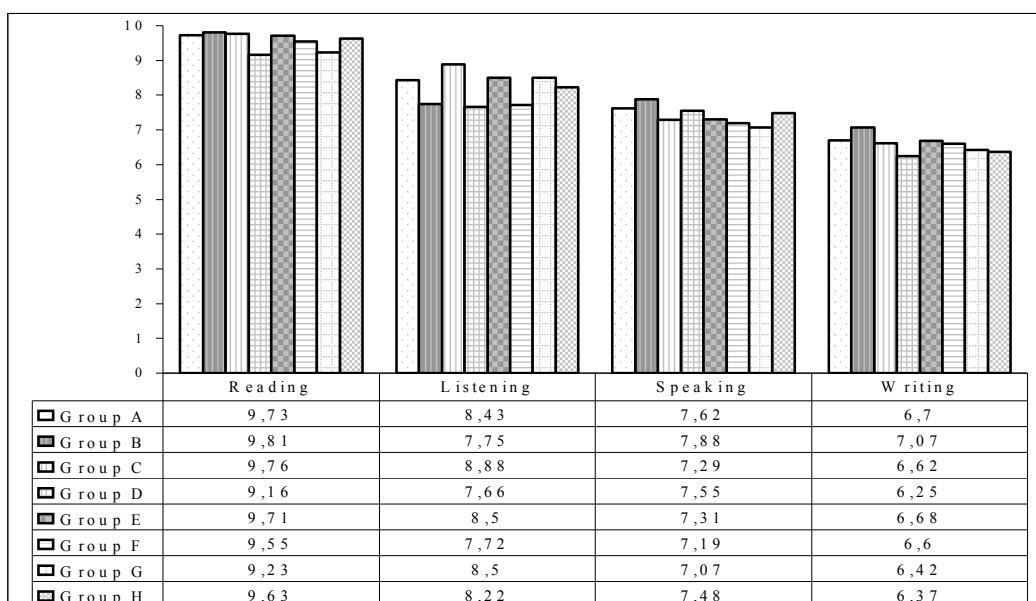
**Table 7.** Average performance distribution according to the extent of book reading



ANOVA application displays a worth-mentioning fact which highlights book reading as an influential factor in language performance. In terms of the reading skill, for example, those who report reading more than ten books in a year display a higher performance than those who report reading only up to two books. But those who report

reading few or no books do not at all display a failing performance in any of the four skills. We may assume that these subjects have not totally isolated themselves from the reading activity, even if this activity is not in the form of intensive book reading.

**Table 8.** Average performance distribution according to the types of leisure activities



Group A: Those going to the cinema, theatre and attending conferences

Group B: Those going to the cinema, theatre but not attending conferences

Group C: Those going to the theatre, attending conferences but not going to the cinema

Group D: Those only going to the theatre

Group E: Those going to the cinema, attending conferences but not going to the theatre

Group F: Those only going to the cinema

Group G: Those only attending conferences

Group H: Those neither going to the cinema, theatre nor attending conferences

The subjects grouped according to the types of activities they mostly prefer are referred to by the capital letters representing the activity types in the table. Depending on this classification, one may assume that certain groups are somewhat less successful in certain skills (for example, Group G in reading and speaking skills or Group B in listening). However, statistical evaluation brings forth no significant difference among groups, particularly because of the unequal distribution of the number of subjects into the given groups. Results also highlight TV watching as the most favourite leisure time activity, but no statistically significant relation is apparent.

Besides the aforementioned quantitative results, the following qualitative results provide descriptive explanation mainly for the research question #1:

The best average performance observed in the reading skill and the next better performance observed in the listening skill support predictions about the development of passive receptive skills through the processes of formal education in Turkey. Again, depending on the fact that the nature of these skills in a community are socially, culturally, politically or educationally situated, one may look for social-psychological reasons behind this picture as well. However, we are not inclined to go to these lengths, at least within the limits of this study. Both reading and listening skills display active deductive reasoning and inference processes in the subjects.

The speaking skill, which marks the third successful performance in the subject group, presents the following characteristics:

To the exception of a few subjects who still retain their local accents, which become evident particularly in the pronunciation of certain glottal sounds, an important majority of the subject group use the standard pronunciation and lexical items in their speech. During narration, it has been observed that women are more keen on details, also adding their emotional impressions on the characters and events. While organizing and developing their ideas, the subjects mostly kept to the flow of factual events in the movie or TV serial they narrated. Few subjects attempted to reorganize the taken for granted structure, also adding some critical or creative motives. Almost all the subjects displayed expected features of the spoken language as they ended up with incomplete sentences, sound droppings at the end of syllables, frequent use of gap-fillers, lapses of memory, tag questions and mostly simple sentence structures.

The subjects kept to the use of standard Turkish also in the writing tasks. Besides the use of the standard daily vocabulary, expressive field-specific terms, such as the words of politics or economy, were appropriately inserted into the context. Although words of foreign origin were also used, the number of Turkish origin words was higher in proportion. The written discourse of some subjects suffered from double negative and double passive constructions. Such structures, though acceptable they may be in non-standard varieties, are not grammatically approved parts of the standard syntax. Some of the subjects had little or no awareness of the agreement between the noun and verb phrases in their sentences. This sort of

disagreement inevitably caused semantic ill-formedness, just as the lack of structure well-formedness monitoring did in other syntactically deviant sentences. While such problems were not to be underestimated, the subjects displayed the most extensive problems in punctuation. The use of capital letters in inappropriate places, incorrect writing of the suffix {dA} (this suffix in Turkish functions both as a case marker and as an adverb. In the former function, it is to be attached to the word, whereas in the second separately), using mostly full stops, commas or question marks but having little or no concern for the use of other punctuation marks were the most noticeable examples.

## Conclusion

Depending on the results, it is possible to mention that the nature of language skills in the university graduates is not directly influenced by the variables questioned in the study. This is assumed to be related with the fact that the subjects are all living in Ankara and have somewhat established or developed their levels of language skills throughout the processes of formal education up to their present state. However, results explain that some of the expected linguistic standards have not yet been attained or internalised by these individuals. Some of the social variables, if not all, seem to be influential on certain skills, yet this fact does not change an important finding about the university graduates in Turkey: in terms of functional language skills, they display quite homogeneous in-group features on the whole. However, their overall performance in four skills makes a better sense when compared with the performances of elementary and high school graduates which were previously studied. Among these two groups, elementary school graduates being the least successful group, displayed quite inefficient functional skills particularly in writing (mean: 3.42) and reading (mean: 5.68) skills. High school graduates were comparatively better with a mean value of 5.61 in writing and 7.53 in reading. Such comparative results are illustrative in the sense that educational processes play an important, if not the only, role in the development of functional language skills. This is evident in the subject group of this study.

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## Universiteto absolventų kalbos mokėjimo įgūdžių ir funkcinio raštingumo ryšys

### Santrauka

Siaurąja prasme “raštingumas” yra suprantamas kaip sugebėjimas skaityti ir rašyti. Tuo tarpu plačiąja prasme šis terminas yra suvokiamas kaip pažintiniai, psichologiniai, elgesio, socialiniai ir lingvistiniai procesai, kurių reikia efektyviam funkcionavimui informacinėje visuomenėje. Tokio tipo “raštingumas”, kuris yra vadinamas “funkciniu raštingumu”, yra “santykinis pasislinkimas nuo pagrindinių techninių sugebėjimų link labiau akivaizdžių sugebėjimų, tokių, kaip “susidorojimo su sunkumais sugebėjimai” ir “sugebėjimai padėti sau” informacinėje visuomenėje (Rassool, 1999:7). Tokiose ribose asmens funkcinis raštingumas lingvistinėje praktikoje yra suvokiamas priklausomai nuo to, kaip jis sugeba sėkmingai išreikšti save raštu ir žodžiu, taip pat priklausomai nuo to, kaip sėkmingai jis suvokia ir interpretuoja rašytinį tekstą ir diskursą žodžiu vienoje eilėje su idealizuotų socialinių ir lingvistinių normų dinamika informacinėje visuomenėje (Baynham, 1995; Barton, 1987). Nors suvokiama, kad mokymas individams suteikia tokių lingvistinių sugebėjimų pagrindus, jų kalbiniai sugebėjimai ir kompetencija, siekiant dalyvauti informacinėje visuomenėje, kelia abejonių.

Tai, ko išmokstama mokykloje, gali būti pamirštama, kai formalus lavinimas baigiamas.

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