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The role of cultural context in continuing vocational training: A study on auto repairmen in Turkey

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This study analysed how auto repairmen working in micro-enterprises undertake continuing vocational training in relation to cultural context. The study was conducted in Kırıkkale, a city in central Anatolia in Turkey. To this end, the descriptive research technique of structured interview was used. Interviews with 33 auto repairmen were recorded and analysed. The results revealed the means used by auto repairmen to receive vocational training. It was found that the auto repairmen who participated in this study mostly consulted their co-workers as a means of vocational training. In addition, almost all of the craftsmen and foremen seemed to receive help from their co-workers when they encountered a problem which they could not solve on their own. The second most common means included computers and the Internet.. On the other hand, face-to-face education and printed materials were the least commonly used means for vocational training. These findings show that, although

they are literate, auto repairmen, who mostly do not take full advantage of formal education and grow up in traditional cultural environments, prefer to use oral communication instead of printed materials as their information sources. These results should be taken into consideration while developing vocational training programs for auto repairmen and other similar groups that are not born into a written culture.

Introduction

One criterion used in determining the developmental level of a country is the quality of that nation's human resources. The importance of education in development and economic growth was recognised after the 1960s, and the role of individuals' mastery in education, science, technology, entrepreneurship and management was identified (Mayor & Forti 1995: 90). Bagnall (2000: 462) pointed out that education has come to be a source of economic growth with the use of information in production, and consequently gained increasing importance in developed and developing countries. In recognising the relationship between technology and productivity, which emerged as a result of the transformation of information to output, both education and science started to be considered national investment.

The dissemination of and the rapid increase in information and technology has caused modern societies to be labelled as information and learning societies. These societies which produce and distribute information through networks, which know how to reach the existing information and which can use it effectively and efficiently, are known as information societies (State Planning Organisation 1999). Computers and the Internet, which are the products of technological advancement, are a symbol of information societies. The precedence of the value of information over other economic tools has made

the dissemination of information and the presence of educational institutions even more important. In recent years, certain terms such as learning companies, learning organisations and learning societies have come to signify the rapid change of information and harmony between institutions.

Concepts such as 'lifelong learning', 'lifelong education', 'continuing education' and 'adult education' emphasise the need for education to last for a lifetime. Stating that individuals should remain in the process of learning throughout their lives, Hines, Frey and Swinker (2005: 55) assert that key responsibility lies with the individual in realising what information is needed, determining how to locate information, and deciding how the information will be used and evaluated. This process is called 'information literacy'. A person with information literacy knows how to learn. During this process of learning how to learn, continuous personal and vocational education is needed.

Continuous vocational education practices in Turkey vary. The main provider of adult education is Public Education Centres affiliated with the Ministry of Education. Adult education programs are run by different institutions. These institutions, whose primary purpose is adult education, can be examined under three headings: governmental, private, and non-governmental and voluntary (Ural 2007: 198).

Continuing vocational education in micro-enterprises in Turkey

Defined as the vocational education received by workers throughout their lifetime or as the training for workers to keep up with developments in a given field and gain new skills related to their profession (Alkan, Doğan & Sezgin 2001: 5), continuing vocational education involves education offered by employers, trade chambers, universities and ministries of education.

With changes in tools and equipment used for work, continuous vocational education has become a necessity. Problems emerge in the continuity of institutions and individuals when they can not attune to new methods and applications. Starting from this fact, the continuity of education and open access to it have become the principles of the Public Education Law. In light of these principles, it has become a legal obligation for businesses with 20 or more employees to offer vocational education to their employees. These businesses have obligations such as offering in-service training (skills training) or making a financial contribution to vocational training. Businesses with 50 or more employees, on the other hand, are obliged to offer courses to ensure the development of their staff and also enable their employees to attend other courses (Ministry of National Education 2009: 42). It is observed that there are not any legal regulations concerning the continuous vocational education of those working in businesses with 20 or fewer employees. For people working in such businesses, there are craftsmanship and foreman education programs available in Vocational Education Centres. After these educational programs, the responsibility for vocational development lies with the individuals themselves.

According to the General Industries and Businesses Inventory carried out in 2000 in Turkey, micro-enterprises with fewer than 10 employees comprise 94.7% of all companies (Ministry of Industry and Trade 2009). In Turkey, there are approximately 200,000 businesses with employees fewer than nine (OECD 2004: 27). The personnel employed in these businesses have problems in developing vocational knowledge and skills related to new technological and scientific equipment and methods. It is apparent that these people need help in topics such as locating information, developing skills pertaining to new technological equipment, and acquiring new literacies. Sağlam (2009: 208) states that small and middle scale enterprises in industry and trade zones operate to a large extent with the help of those who are ‘trained from the cradle’. This is also true

for today's greatest technologies in the areas of communication and computers.

Developed countries place great importance on continuing vocational education, whereby workers continuously develop their vocational knowledge and skills. They especially focus on increasing the qualities of youth and preparing educational programs to the advantage of those who have made little or no use of educational opportunities (Commission of The European Communities 1995: 23; OECD 2003: 7; Szekely 2006: 76). Most non-formal training programs in Turkey, apart from in-service training offered as a legal obligation, are 'spare time programs' (Ural 2007: 202). There are problems concerning the continuing vocational education of those who are employed in micro and small sized enterprises, particularly those who have not had much opportunity to participate in general and vocational education.

Continuing vocational training and cultural context

It is stated by proponents of contemporary learning-teaching approaches that the social structure within which an individual is immersed affects his/her perception of the world, values, attitudes and cognitive structure (Brooks & Brooks 1999; Caine & Caine 1995). The key proponent of transformative learning theory, Mezirow (1997: 7), believes that the meaning schemas and perspectives that emerge within a cultural context affect individuals' perceptions, perspective, moral and esthetic preferences and learning styles. According to Billett (2002b: 458), people think and behave together with the social world they live in. Cultural context affects many areas including how educational institutions function, the methods used in the classroom and teacher-student roles. These findings and observations may suggest that cultural context affects continuing education and continuing vocational education practice and behaviours.

Cultural context also determines literacy habits and functions, which are the most important variable in the process of learning-teaching. The theoretical construct of Ong (1982), who analysed past and present cultures as 'oral' and 'written', sheds light on the continuing vocational education of staff in micro-enterprises in Turkey. Ong (1982: 23) analysed cultures under three headings: those where the concepts of writing and print do not exist and for whom communication is only achieved through oral means are called 'primary orality cultures'; those in which information is no longer stored in the oral stores of memory but is preserved in written scripts are called 'written cultures'; and those which are formed by the 'oral' qualities of the telephone, radio, television and other electronic media entering our lives through today's advanced technologies are known as 'secondary orality cultures'.

Another quality which makes Ong (1982: 74) views as important is that he focused on 'mentality' differences in oral and written cultures. According to him, in order to change thinking processes, writing should first of all be totally internalised. In oral cultures, continuous repetition is necessary to ensure that the learned and gained information does not get forgotten or lost. Structured ways of thinking are necessary for both wisdom and effective public administration. In contrast, since information is preserved in scripts in written cultures, there are more authentic and abstract means of thinking for the mind (p. 38). In oral cultures, there is a necessity for another person who asks questions of the thinking individual and who converses with them. It is not easy for one to talk to oneself for hours. In oral cultures, thinking on one subject at length depends on communication (p. 49). It may be useful to examine Mezirow's (1997: 5–6) transformative learning theory. According to this, there are two kinds of learning: instrumental and communicative learning. Instrumental learning focuses on learning through task-oriented, problem solving and empirical-analytic discovery. Communicative learning, on the other hand, is learning involved in understanding

the meaning of what others say (Taylor 1998: 13). Billett states that (2002a: 61) individuals' learning will always be unique in some ways, but knowledge is co-constructed reciprocally between the individual and the social experience. As can be seen, today's adult educators focus on social interaction without making a distinction between oral or written culture.

Another example that makes Ong (1982: 21) relevant to the present study is his writing on how vocational learning takes place in oral and written cultures. In oral cultures, when one is learning both a vocational skill and religious knowledge (discipleship), one does so in a mentor system. They use methods such as listening, repeating what has been said, creating authentic expressions from clichés, and viewing the common past from one perspective, none of which can be considered analysis. Ong (p. 59) states that there is no such thing as a guidebook that teaches a profession in oral cultures. He also adds that such books are rare even in written cultures and that they gained the acceptance they have today long after the printing press was in common use. For the individual who can not acquire a profession through books and formal education, the way forward is through apprenticeship. Ong (p. 59) asserts that the situation is the same even in advanced technology cultures. In these cultures, apprenticeship is also based on observation, application and minimum oral explanation. Since words are made up of sounds in oral cultures, one may try to remember them, yet there is not a concrete source to look up and find them (p. 46). Billett (2002b: 459) writes that we resort to text-based vocational education when we need urgent vocational training, thinking it is useful; however, it may not respond to individual needs and readiness levels. He believes that (p. 459) interactions with the social world then become key bases for learning.

In written cultures, reading and writing are activities that individuals engage in on their own. Societies are examined differently according to the way information is transferred: 'orally' or 'written'.

According to what Ong (1982: 41) cites from Tanen (1980), there are many modern cultures which have not yet transformed into written cultures, despite being literate for centuries. Other Mediterranean cultures such as the Arabs and Greeks are examples of these cultures. These cultures still continue with structured phraseology. Many sources state that the 'word' is still an effective means of transferring the heritage of information in Turkish culture. Göka (2009b) believes that, although Turkish people know how to read and write and the numbers point to a high literacy rate, they exhibit a state of mind specific only to oral culture. It is maintained that the functional literacy rate in Turkish culture, which may be defined as using the knowledge obtained from literacy in daily life, is 25%. The preference of colourful newspapers to black and white ones and television to books (Göka 2009a), the shift to electronic culture without passing from oral to written culture (Ungan 2008) and the regression in reading and writing skills or the common instances of total forgetting (Yıldız 2008) are given as evidence of an oral culture in Turkey. Göka (2008: 138) attributes the low rate of literacy in Turkey to oral culture and states that, especially in groups where traditional values still exist, literacy is seen as an activity only specific to elite administrators. According to him, people want their children to 'read' but they themselves do not have a passion for such 'vain' activities. The author of many works in Turkish history, Ortaylı (2007: 34) states that writing is not enough to promote an idea in Turkey—it also needs to be discussed orally.

Based on these explanations, oral culture may be expected to exist more commonly among groups which have made less use of educational opportunities, both in other cultures and the Turkish culture. It is apparent that, in cultures which depend heavily on oral culture, oral communication will be used more than written sources in transferring knowledge and skills, and in locating information. That is why attention should be paid to certain basic requirements when preparing educational programs for adults in environments

where an oral culture is dominant. These requirements involve having attention-grabbing books that are easy to understand (Ungan 2008), learning to take place more in the context of 'on the job' settings, and needing a narrator or an instructor rather than learning from a book (Goody 1992). Billett who proposed workplace pedagogic practices (2002b), Andresen, Boud and Cohen who suggested experience-based learning (1995), and contemporary educators such as Felstead, Fuller, Jewson, Unwin and Kakavelakis (2007) who see the workplace as a learning environment, advocate that the workplace and work itself should be used for educational purposes in continuous vocational education.

In his book entitled, *Communication conflicts and empathy*, Üstün Dökmen (1997), a writer with important observations and assertions related to traditional Turkish culture, divides societies into two as 'adult society' and 'child-parent society', and defines the Turkish society as the latter. While the characteristics of such societies are 'dependence, sense of trust and fear of reasoning', those of adult societies are 'loneliness, individualization and trust in one's own reason'. When people of child-parent societies look at societies with more individualised—more adult—people compared with themselves (for example, western societies), they find them 'lonely' and even 'selfish'. The dependent individuals of child-parent societies live in the comfort of their social surroundings (Dökmen 1997: 270). In child-parent societies, individuals take on the role of either the child or the parent. They are not welcome to speak out; knowledge is transferred as it is; and asking the idea of someone who knows is expected.

Another characteristic of child-parent societies mentioned by Dökmen (1997: 268) is hiding information from the public. Dökmen (1997: 262–268) analysed stories about the traditional mentor system and found that, while foremen are preached in these stories not to be disrespectful to their craftsmen and not to act ungratefully, craftsmen are given the message that they should not teach everything they

know to their foremen otherwise they might replace them. Ong (1982) states that in some ages and societies, literacy was attributed only to certain classes in society, especially to religious functionaries.

When Ong's (1982) and Dökmen's (1997) studies are considered together, it is seen that oral words are used more than writing to transfer knowledge in traditional Turkish culture, and individuals are raised to become 'parents' or 'children' who are dependent and distrustful of themselves, instead of developing adult characteristics such as loneliness, individualisation and using one's own reason. It can be said that an individual who has these characteristics would consult other people instead of books in the process of learning. This happens as individuals remain alone in learning from a book, and they have to form and apply their own opinions and hypotheses towards finding solutions. Individuals who can not be alone, have not become individualised and do not trust their own mind, according to Dökmen (1997: 269), would naturally not play a highly active role in their own vocational development.

The cultural properties mentioned above should be taken into consideration in providing continuing education to disadvantaged groups. In the vocational training of groups under the dominance of an oral culture, it would not be fair to say 'you know how to read and write, develop yourselves'. The interpretations of the principle of willingness in parent and child societies should also be considered. It seems that individuals do not demand education without the guidance and encouragement of the 'benevolent state'. That is why it is necessary for institutions commissioned to be more active in guiding people. The fact that disadvantaged groups in an oral culture prefer their learning experience to be through face-to-face training by hearing, seeing and doing rather than by printed materials, places important responsibilities on the institutions that will offer continuing vocational training.

That learning and teaching is not independent from an individual's social and cultural environment is a principle accepted by educational approaches such as constructivism, thematic learning and brain-based learning (Caine & Caine 1995: 23, 126). That is why the target population and their social and cultural context should be taken into consideration when designing educational programs, and planning and implementing instructional processes. All formal and non-formal training systems are affected by a given society's culture and values as much as its economic needs (Winch & Hyland 2007: 30).

In the light of this information, the aim of this study is to determine how auto repairmen working in micro-enterprises meet their educational needs and interpret these in relation to their cultural context

Method

This study used the descriptive research technique of structured interviews. In addition, descriptive and content analysis has been utilised. Some answers in the video recordings have been reported without any interpretation in order to directly present people's views. During analysis, data were coded in categories. The analysis continued by adding data to the related category and forming new categories for those that did not fit existing ones.

Study group

Participants in this study were employers and employees working as auto repairmen in micro-enterprises in the auto industrial estate in Kırıkkale. It was found that approximately 150 micro-enterprises existed in the auto repair business, and that all of these auto repair enterprises had fewer than nine employees. While deciding on the sampling of this group, enterprises that dealt with specific jobs like auto painting, tyre changing and selling spare parts were excluded, and only personnel working in enterprises that dealt with auto mechanic and electronics repair were included in the study.

Employees working as foremen and craftsmen in these enterprises were included in the study, while those in apprenticeship were excluded. Factors such as geographical distribution, economic status and number of employees were used in deciding on the study group, and face-to-face interviews were carried out with 33 auto repairmen.

The city where participants are located: Kırıkkale

Kırıkkale is a city located in the Central Anatolian region of Turkey, 76 kms away from the capital city of Ankara and with a population of 256,263. The educational status of people living in Kırıkkale above the age of six is as follows: of the total population, 7.5% are not literate and 18.7% are literate but have not graduated from a school. Those who have graduated from primary school (five years' basic education) comprise 26.5%, graduates of primary school (eight years' basic education) comprise 17%, and graduates of high school comprise 19%. The proportion of college and university graduates is 4.6%; and that of people holding a post-graduate degree is 0.3% (Turkstat 2008).

Data collection instrument and implementation

In order to collect data, an interview schedule with open-ended questions was used with the auto repairmen. In addition to the personal questions on the interview schedule, the following questions were asked: How do you receive vocational training?, Did you have any face-to-face training after your apprenticeship?, Do you use books, for your vocational training?, Do you know how to use the computer and the Internet?, Do you make use of these tools for your vocational training?, Do you and your co-workers help each other? and How do you reach information when you encounter a problem you can not solve? Probing questions were also asked. A total of 33 auto repairmen were interviewed face-to-face and the process was videotaped. This assisted the analysis and interpretation.

Findings

The results obtained from the study are presented below. First, personal information on the auto repairmen involved in this study is given, followed by interpretations of the findings concerning their means of reaching vocational training.

Personal information

More than half (17) of the auto repairmen in this sample were within the age range of 26-35 years. More than half of the participants (18) were primary school graduates, and 11 had been through secondary education. While two-thirds (22) of the auto repairmen included in this study worked together with two to three people in their workplace, seven worked alone.

Almost all of the people interviewed started their apprenticeship between the ages of 11–14 years. All learned their profession within a mentor system and then took lessons (once a week) from Apprenticeship Education Centres and obtained their certificates.

Methods and tools used for vocational training

The methods auto repairmen used for their vocational training are given in Table 1 below.

Table 1: Methods and tools auto repairmen used for their vocational training

Type of vocational training	Participation status	n	Subgroups
Participating in face-to-face training	Participants	10	**Those who participated in short-term commercial training** The majority of those who participated in face-to-face training seminars did so by going through the commercial training provided by advertisers of products such as oil, battery and shock absorbers. **Training in authorised services** A few of the craftsmen pointed out that they had gone through training in authorised services before they started running their own businesses. **Training in the military** Two of the craftsmen said they participated in a course during their military service.
	Non-participants	23	Non-participants indicated that they had not participated in any other vocational training programs after completing their craftsman and foreman training.

Type of vocational training	Participation status	n	Subgroups
Using printed material	Those using printed material	8	**Catalogue users** Catalogues were used for the purpose of familiarising oneself with the items, looking at the circuit diagram and seeing the critical value. **Book and photocopy users** Those consulting printed materials for circuit diagrams and injection timing fall within this group. **Those who used printed materials in the past** A group mentioned that they had used books during their craftsman and foreman training. The latter were stated to be useless.
	Those not using printed material	25	**No books** The majority of those who did not use printed materials indicated that they did not have books, did not need to look through them and could not find information in books. **Those who can not learn through books** The majority of those who did not use printed material held the view that learning through books was not possible. They stated that learning will occur on the job by practice and observation. **Those who can not learn because books are in English** Some of those who did not use books said that the books on new automobiles were in English and that they did not know the language.

Type of vocational training	Participation status	n	Subgroups
Computer use	Users	15	**Diagnostic purposes** Computer users in this group made use of computers for diagnostic purposes. **Semi-professional purposes** They used computers to see photos of automobile parts from the Internet. Some also used it to play games.
	Non-users	18	**Those who realise the importance of computers** The people in this group knew the importance of computers, although they did not necessarily use them. **Those who want to use a computer as a diagnostic instrument** The majority of non-users wanted to learn how to use computers in order to be able to use a diagnostic instrument.

Type of vocational training	Participation status	n	Subgroups
Internet use	Users	15	**Technical information** Internet users mostly used it to obtain information about technical subjects such as injection timing and functions of EGR valves. **Those who search for the prices of auto parts** A few of the craftsmen used the Internet to learn the prices of auto parts and to buy them. **Those who use it for non-professional purposes** Those in this group made use of the Internet but not for professional development purposes.
	Non-users	18	**Those who realise the importance of the Internet** The mechanics in this group realised the importance of the Internet for professional development. **Those who do not realise the importance of the Internet** The mechanics in this group were not aware of the opportunities the Internet offers for professional development.
Consulting co-workers	Consulters	30	The mechanics in this group asked for their co-workers' help when they could not solve a problem on their own. They mentioned that their greatest asset was helping each other out.
	Non-consulters	3	Those who did not consult their co-workers pointed out that there was jealousy in industry and no sharing of information.

According to the answers given to the question, 'How do you ensure vocational development?', the auto repairmen used five different methods for their vocational training: face-to-face training, printed materials, computers, the Internet and consulting co-workers.

Participating in face-to-face training

It was found that most continuing education programs the auto repairmen in this study participated in were a few hours of commercial seminars, training programs in authorised services which was their prior workplace, and courses attended during military service. The auto repairmen voiced their opinions related to the training programs they attended as follows:

> I received craftsman and foreman education as part of my vocational training. Apart from this, we did not participate in any training programs. We just received some information about oil from the travelling salesmen that came here. We did not receive any education other than that.
> (age 30, primary school graduate)

Some auto repairmen worked in authorised services before working in private services and received training there.

> I worked in an authorised service in Istanbul. There were seminars there. They would offer training on Tuesdays. They would train us by saying if there is a problem with the car, the first place you should look is this. Whenever there was a problem not encountered before, they would call the factory and find the solution to share with us. (age 29, secondary school graduate)

Two thirds of auto repairmen did not participate in any training activities after their craftsman and foreman training. The statements below are examples from the people in this group:

> We received apprenticeship, foreman and craftsman training related to our vocation. Apart from that, I did not participate in any other training programs.
> (age 27, secondary school graduate)

> I have not participated in any vocational training. Since we are in private business, I have not had internship in companies like WW, BMW and AUDI. We did not have any training.
> (age 28, primary school graduate)

Printed material use

Less than one third of the craftsmen and foremen made use of printed materials for their vocational development. These materials comprised catalogues, off-print books, brochures and photocopies. The skill of reaching necessary information through printed materials seemed to be limited among the craftsmen. Below are some statements by those who made use of printed materials for their vocational development:

> When there is a problem, we sometimes refer to prospectuses and catalogues in order to get to know the auto parts. We do not always use them.
> (age 27, secondary school graduate)

> For instance, when there is a new car and we have to pour oil into it, now that there are many kinds of oil, we find which one to use by referring to printed materials. We do not use books. We look up from the catalogues.
> (age 29, secondary school graduate)

Several participants among those who did not consult printed materials for vocational development said: 'there are no books'. A greater majority pointed out that either they could not find information in the books or it was impossible to learn from them. Those in this group were of the opinion that learning could take place on the job and by observation. Below are the opinions of those who did not use printed material:

> I have never used books. We were only given a book during our apprenticeship training. Other than that we have not received any books. We have not had anything to do with books.
> (age 33, primary school graduate)

> I do not make use of tools like books, brochures, etc. I find out and fix the problems only by observation and trial and error. (age 40, primary school graduate)

Computer use

Almost half of the craftsmen and foremen stated that they made use of computers while they were working and for their vocational development. The majority of those who used computers for vocational training were those who used computerised diagnostics instruments. Another group made use of computers for the purpose of using the Internet and getting to know automobile parts. Below are some of the opinions of craftsmen who used computers:

> We have a diagnostic instrument and while using that we learned how to use computers. It shows the location of the parts. It shows how to fix them. We use it.
> (age 29, secondary school graduate)

> When there are new cars released, we connect through here and look at their features. There are CDs that introduce the car parts. We look at the pictures in them.
> (age 28, primary school graduate)

It is possible to divide the auto repairmen who did not use computers into two groups. The first includes those who regarded computers as 'the basis of everything', and the second includes those who wanted to learn how to use computers in order to be able to use diagnostic instruments. The statements below are examples showing the opinions of those who did not use computers for their vocational training:

> The computer is the bottomline. You should have a computer. You should understand it. That is our problem. In other words, we should stop running things with old methods here.
> (age 32, primary school graduate)

> I do not have a computer. We do not know how to use it. We would not be able to use it even if we had one. That is why we should have training.
> (age 30, primary school graduate)

Internet use

Analysis of the interviews revealed that almost half of the auto repairmen working in micro-enterprises used the Internet. They use it for purposes such as getting technical information, learning the price of auto parts and personal reasons. Among the group who made up the majority as non-users of the Internet, there were some who realised its importance. However, there were also some who had no idea about it:

> There is an Internet connection in our workplace. We log on at night. When you type something there you immediately come across it. For instance, you type EGR valve. You find the details. (age 29, secondary school graduate)

> There is an Internet connection but I do not always use it related to our profession.
> (age 36, secondary school graduate)

The majority of those who did not use the Internet realised the importance of it. Another group, on the other hand, was not aware of the role of the Internet in vocational training:

> I do not use the Internet because I do not have the money. But it is a must.
> (age 40, primary school graduate)

> I have never used the Internet. I do not know how to use it.
> (age 27, primary school graduate)

> The findings suggest that the computer and the Internet were foreign to most of the craftsmen and foremen and that they only just started using the Internet for vocational training.

Consulting co-workers

The answers show that all of the auto repairmen in this study often consulted their co-workers for their vocational training and when there was a problem. The findings reveal that, when they had difficulty in solving a problem, almost all of the auto repairmen

consulted their co-workers. Only a small minority stated that they did not help each other out.

Below are some examples which show the opinions of the auto repairmen who consulted their co-workers when confronted with a problem:

> Of course we make use of each other's experience. That is our greatest asset. Whenever we have a problem, we talk with each other.
> (age 29, secondary school graduate)

> Let's assume that a windshield wiper motor of a car is broken. You go to a craftsman while he is doing the job and stay there for 1–2 hours and you learn it. The next time you have a case like that, you do it yourself. This is our training.
> (age 27, primary school graduate)

One of the people in the group who did not consult his co-workers said: 'There is no sharing in the industry. Information is not shared. There is the 'I know it all' attitude. Noone says 'we know' (age 46, primary school graduate). Another craftsman explained why he did not help others as follows: 'I grew up with them. I know what they know and what they do not know. I think they know as much as I know'.
(age 33, primary school graduate).

Results

The results obtained from this study are consistent with the information provided through the conceptual framework. Auto repairmen who have grown up in traditional mentor systems use oral communication for their continuing vocational training and consult their co-workers in solving the problems they encounter. Although all of them are literate, obtaining information from printed materials is very rare. Usually catalogues are used as printed materials. Drawing on Dökmen's (1997) proposition, it can be said that the

auto repairmen who have grown up in a mentor (child-parent) system rarely resort to their own reason and instead prefer behaviours such as transferring information verbatim and asking someone who knows.

Not making enough use of printed materials despite literacy shows that writing is not fully internalised. This finding can be interpreted as the fact that the effects of oral culture persist in people who learn their profession in a mentor system and who have not made much use of educational opportunities. That the auto repairmen in this study consulted their co-workers when they encountered a problem shows that they used 'words' as a means for vocational training. It is known that in oral cultures another person is needed for thinking (Ong 1982), and the person who 'does not exhibit the characteristics of an adult' prefers to consult others instead of using their own reason (Dökmen 1997: 271). The internalisation of literacy skills may be affected by a number of other factors than an oral culture, such as not making enough use of formal educational opportunities, not needing these skills in social and professional life, and the lack of printed materials relevant to people's level.

This study showed that almost all of the Turkish auto repairmen who were raised in the Turkish culture and did not make full use of formal education opportunities contacted their colleagues for their continous vocational training. Although the study focused on the Turkish context, this seems to be the case in other cultures too. Studies conducted particularly by Billett (2002a, 2002b) corroborate this argument. A contemporary educator, Billett (2002a: 156) stresses the issue of making room for social practices in workplaces and ensuring participation in these. The findings of the present study offer support for his view that 'adaptable learning occurs outside of educational institutions' (p. 158). The auto repairmen studied here found their contacts with colleagues valuable and stated, 'This is our training'. Workplaces were found to be an effective environment for vocational practices too (Billett 2002b: 458). Learning is a

co-constructive event (p. 459). Historical and cultural practices were also found to be effective in workplace relationships (p. 462). These results show that in our day known as the second oral culture age, learning via interaction with colleagues at the workplace is important. Whether people are raised in oral or written cultures, they value social interaction in their learning processes and interact with others for meaning sharing. In brief, the situation observed among auto repairmen in Turkey who have not made much use of formal education can actually be generalised to people of other cultures involved in similar sectors. After all, instead of writing which is perceived as 'artificial', humans prefer speaking which is deemed more 'natural' (Ong 1982: 101).

It was found that an awareness of using computers and the Internet for vocational development existed, but they were not used by the majority due to lack of knowledge and skills. The group who did use the Internet and computers did not use them for vocational development. It is a serious issue that computer and Internet literacy is not created in our day known as the second oral culture age. Increasing the computer and web literacy of groups who can not effectively use the materials of a written culture may be an important step towards overcoming their lack of knowledge. The oral culture related materials, such as drawings, animations, films, music and sound, offered by computers and the Internet in addition to text, and their help in facilitating interaction between people, make them useful in the process of vocational education.

References

Alkan, C, Doğan, H & Sezgin, Sİ (2001). *Basics of vocational and technical education,* Ankara: Gazi University Communication Faculty Printing House.

Andresen, L, Boud, D & Cohen, R (1995). 'Experience-based learning', in Foley, G. (ed.), *Understanding adult education and training*, Sydney: Allen & Unwin.

Bagnall, NF (2000). 'The balance between vocational secondary and general secondary schooling in France and Australia', *Comparative Education*, 36(4): 459–475.

Billett, S (2002a). 'Critiquing workplace learning discourses: Participation and continuity at work', *Studies in the Education of Adults*, 34(1): 56–68.

Billett, S (2002b). 'Workplace pedagogic practices: Co-participation and learning', *British Journal of Educational Studies*, 50(4): 457–481.

Brooks, JG & Brooks, MG (1999). *In search of understanding: The case for constructivist classrooms*, Alexandria, Virginia: Association for Supervision and Curriculum Development.

Caine, RN & Caine, G (1995). *Making connections: Teaching and the human brain*, California: Addison-Wesley Longman Publishing Company.

Commission of the European Communities (1995). *White paper on education and training: Teaching and learning, towards the learning society,* Brussels: Com (95) 590 Final.

Dökmen, Ü (1997). C*ommunication conflicts and empathy: A framework for Turkish cultural understanding,* İstanbul: Sistem Yayınları.

Felstead, A, Fuller, A, Jewson, N, Unwin, L & Kakavelakis, K (2007). *Learning, communities and performance,* Leicester: National Institute of Adult and Continuing Education.

Hines, JD, Frey, DK & Swinker, ME (2005). 'Lifelong learning: Web-based information literacy module for merchandisers', *Journal of Family Consumer Sciences,* 97(4): 55–59.

Goody, J (1992). 'Oral culture', in Bauman, R. (eds), *Folklore, cultural performances and popular entertainments*, New York: Oxford University: 12–20.

Göka, E (2008). *Psychology of Turks*, İstanbul: Timaş Publications.

Göka, E (2009a). *What is our real literacy rate?*, www.hurriyet.com.tr/strateji/7064492.asp?gid=202&a=279370 [retrieved 14/11/2009].

Göka, E (2009b). 'Turks and innovation', *Çerçeve*, 52(13): 92–95.

Mezirow, J (1997). 'Transformative learning: Theory to practice', *New Directions for Adult and Continuing Education,* 74: 5–12.

Ministry of National Education (2009). *Structures of educatıon, vocatıonal traınıng and adult educatıon systems ın Europe: Turkey 2008*, http://eacea.ec.europa.eu/education/ eurydice/documents/eurybase/structures/041_TR_EN.pdf [retrieved 8/11/2009].

Ministry of Industry and Trade (2009). *SME strategy and action plan*, http://www.sanayi.gov.tr/ webedit/ gozlem.aspx?sayfaNo=1874 [retrieved 16/12/2009].

Mayor, F & Forti, A (1995). *Science et pouvoir*, Paris: UNESCO.

Organisation for Economic Co-operation and Development (OECD) (2003). 'Education policy analysis', http://www.oecd.org/ dataoecd/47/23/21062729.pdf [retrieved 7/7/2008].

Organisation for Economic Co-operation and Development (OECD) (2004). *Small and medium-sized enterprises in Turkey: Issues and policies,* http://www.oecd.org/ dataoecd/5/11/ 31932173.pdf [retrieved 7/8/2009].

Ong, WJ (1982). *Orality and literacy, the technologizing of the world*, London: Methuen.

Ortaylı, İ (2007). *Voyage to the borders of history*, İstanbul: Timaş Publications.

Sağlam, S (2009). 'Socio-cultural change in Turkey: Indicators, recommendations', Ankara: *Symposium for Prof. Dr. Mümtaz Turhan in his 40th Death Anniversary*. 2–3 November 2009, Gazi University Rector's Office.

State Planning Organisation (1999). 'Informatics technologies and policies special expertise commission report', Ankara: 8th Five Year Development Plan Pub. No.: 2560-ÖİK 576.

Szekely, R (2006). 'Adult education in Finland', *Convergence,* 39(2–3): 61–78.

Taylor, EW (1998). *The theory and practice of transformative learning: A critical review,* Columbus: ERİC Clearinghouse on Adult, Career and Vocational Education.

Turkstat (2008). *Address based population registration system (ABPRS) population census results,* http://tuikapp.tuik.gov.tr/adnksdagitapp/ adnks.zul?dil=2 [retrieved 11/12/2009].

Ungan, S (2008). 'Cultural infrastructure of our reading habits', *Gaziantep University Journal of Social Sciences,* 7(1): 218–228.

Ural, O (2007). 'Formal and nonformal education from the views of social change', in Oktay, A (eds.), *Introduction to educational sciences*, Ankara: Pegem A Publications.

Yıldız, A (2008). 'Reconsidering adult literacy in the context of oral cultures', *Ankara University Faculty of Educational Sciences Journal*, 41(1): 51–67.

Winch, C & Hyland, T (2007). *A guide to vocational education and training*, New York: Continuum İnternational Publishing Group.

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