

**INFORMATION ENVIRONMENT AS A KEY
FACTOR OF CONTEMPORARY EDUCATION IN
LATVIA**

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ABSTRACT

One of the greatest challenges of an up-to-date society in Latvia in the information age is to prepare the youth to participate successfully in social and economic lives both in the native country and EC. In this context information environment is a key concept of the information society and is closely related to the technological changes. It enables young people to be effective information consumers and, moreover, enables individuals not only use information technically effectively and adapt to their constant changes but also think critically about the entire information enterprise and information society. This concept, information environment, involves knowledge consumers or participants, the communications (information) infrastructure and the content of communication.

The present paper discusses the concept of the information environment in describing and exemplifying these three components of social phenomenon in Latvia from the educator's point of view. For this reason the next questions deserves close attention:

Who owns information?

How to recognize the phenomena which mark out new and significant changes in a society development?

What types of information literacy compose "an effective information consumer "for educational needs? and at last

How can consumer citizenship education deals with the cognitive and social influences on the consumers' capacity to process information, i.e. the consumer-as-tutor and consumer-as-student?

Key words: information, environment, consumer, communications, technology, computer, acquiring, applying information, technology, media, education. Internet, infrastructure.

Introduction

The positioning of information is something like a living form and "information itself then constitutes the world itself and is no longer simply representation" (Krug, 2005:192).

The information environment represents a set of factors, resources and processes, which demonstrate the knowledge that has been accumulated and used by a specific society, community or individual, looking also at ideas and assumptions. There is also the issue of how this knowledge can be obtained, created, expanded, evaluated and applied. This means

that the information environment is a requirement for the survival and progress in the development of individuals and societies.

Analysis of an information environment is one way of recording and assessing changes in society, because various forms of communications do not replace each other or exclude former ones. Instead they tend to co-exist and supplement one another (Rantantien, 2005:26). For instance, in the 1960s many people predicted that television would mean the death of magazines and the cinema, but this has not happened – those industries continue to be very strong. Some thought that the Internet would threaten television, but television continues to attract a vast audience.

In Latvia, one of the greatest challenges of an up-to-date society is to prepare the youth to participate successfully in social and economic lives both in the native country and EC. In this context an information environment and its influence upon the *young people* have essential importance. Information literacy of an individual is determined by the influence of the information environment. The more the influence of the information environment on the society the more skilful and literate the young people are.

For these reasons, the information environment of up-to-date society and education consumers is becoming a new and important social phenomenon which involves participants or consumers, the communications (information) infrastructure and the content of communications, as defined by the information and communications needs of society. All this means that the analysis of an information environment can be one of the ways to:

- a) identify the participants of information environment;
- b) recognize the phenomena which mark out new and significant changes in a society development;
- c) identify what is necessary for information to be effectively and reliably transmitted and analysed;
- d) find out how can consumer citizenship education deal with the different influences on consumer's capacity to process information.

Some facts and comments based on the historical development

When the historical development of an information environment is analysed, it is important to look at the way in which processes of

information distribution and exchange have developed. Marshall McLuhan has defined the mechanical age and the electric age in terms of communication development, arguing that as the world has been narrowed by electronics, it is nothing more than a village in which the electric speed brings together all social and political functions in a sudden explosion (McLuhan, 1964:5-12).

During the analysis the development of the information society, Sandra Braman defines three periods (Braman, 1993):

- electrification of communications in the mid-19th century;
- convergence of technologies and the understanding of the central role that information plays in society during the mid-20th century, and
- harmonization of information systems in the 1990s, which evened out or eliminated technological differences among various systems.

In the 1990s, the Japanese futurologist Yoneji Masuda defined four levels of development in the process of computerisation, thus predicting when the information society might become a reality.”(Masuda, 1990:11-14):

1. major, science-based computerisation (1945-1970), when the processes related to major projects of a national scope i.e. outer space, defence;
2. management-based computerisation (1955-1980), which involves computerisation of business and governance, focusing on increases in GDP;
3. society-based computerisation (1970-1990) – introduction of information technologies for a wide range of social needs, the aim being an enhancement in national welfare;
4. individually based computerisation (1975-2000), when, according to Masuda, “...each person will be able to use computer information obtained from man-machine systems...to resolve problems and pursue the new possibilities of the future”.

It is also interesting to note that in the 1990s Manuel Castells proposed the assumption that the information and communication technologies

have created a new kind of society – the *network society* (Castells, 2000). In this society networks of electronic mediation promote the development and spread of knowledge and information.

Researchers of these processes explain the aforementioned changes not just as a new form of production, but also as a new lifestyle. Masuda, for example, has proposed not only that the industrial society will be transformed into the information society, but the species *Homo sapiens* will be transformed into *Homo intelligens* (Masuda, 1990:142). Changes are described as an “*information element*”, a “*new era*”, and as a set of dramatised and mystified phenomena. This idea is based on the assumption that technologies are the decisive factor in changes in society and that the description of these changes will spread to all other areas.

One may say that the information environment is a set of important factors, resources and processes which create change both in education of society and in the industrial society itself. Increased knowledge is a qualitative phenomenon, not just a quantitative one, because the old media transmitted standardised messages to a unified mass audience, while new communications media allow not just broadcasting but also narrowcasting. Information can be prepared, selected and obtained in line with the most specialised and individualised needs. That is why knowledge is not just based on an unprecedented level of technological innovations and economic development, but also becomes a cornerstone for a national economy and a key prerequisite for changes in employment structures (Kumar, 1995:10-11).

Participants in the educational information environment

In Latvia, people in the educational information environment can be divided into several groups on the basis of their interests and activities. First, there are individuals or consumers of knowledge for whom new technologies provide unprecedented opportunity to become directly involved in the public communications. Second, there are the media, which use traditional and new channels for educational needs as mass communications. Third, there are government institutions and private organisations which collect and maintain information, offering or selling access to it or underpinning the communications environment. Fourth, there are businesses, which use communications channels for marketing, to maintain links with clients. Fifth, there are various interest groups including political parties, public organizations and

associations, which promote their level of recognition, communicate with their participants and supporters, and provide information resources.

The traditional strength of the individual in relation with the press, radio, television, books, the cinema etc., has to do with the ability of the individual to be selective about the media and media content which he or she chooses. This selectivity is influenced by social categories – the structuring of societies into specific groups on the basis of the assumption that individuals recognise their belonging to a group, as well as that people in one group are different from people in others. Without any doubt people belonging to educational sphere compose one group of professional interests. There are social relations – the social contacts and interpersonal relationships of the individual, as well as individual differences – descriptions which are unique for the individual despite his or her belonging to a concrete social group.

Individualisation means “*disintegration of previously existing social forms – for example, the increasing fragility of such categories as class and social status, gender roles, family, neighbourhood, etc*” (Beck 2003: 2). For that reason, the priority factor in individual media choice is individual difference, not an orientation toward the relevant social category.

Individual differences are also the cornerstone for determining and developing one’s identity. According to Manuel Castells, identity is “*the process by which a social actor recognises himself and constructs meanings primarily on the basis of given cultural attributes, to exclude a broader reference to other social structures*” (Castells, 2000:22). The composition of the population in Latvia is shown at Fig. 1.

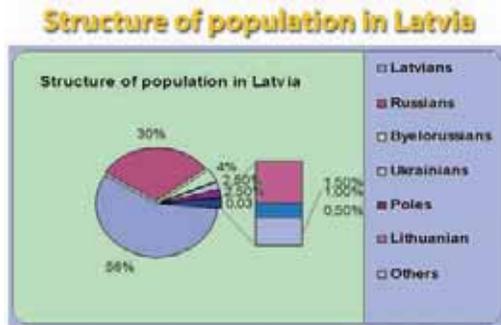


Figure1 Population in Latvia (<http://www.policy.lv/index.php?id=102631&lang=en>
Last visited 2007.05.12

The media are defined as “*social institutions that play an essential part in social, economic and cultural life and in consequence are variously respected, feared, controlled valued and criticised*” (McQuail, 2003:37) They play the primary role in establishing the content of the information environment and in the dissemination of that information, even though the role of individuals, groups and communities has expanded thanks to individualisation in public communications. This is because the media are professionally organised communicators, ones with their own communication policies aimed at ensuring sustainability. The media, furthermore, have always been focused on the audience as a means for establishing networks.

In Latvia this can be seen in a fairly broad spectrum, with three major directions:

First, the media are as *public enlighteners*. In this content the function of the media is to direct the public, to provide information about correct/incorrect behaviours, to explain, to convince and to instruct. This means that the media must be “smarter” than their consumers; they must undertake the role of foster parents by demonstrating the correct choices.

Second, the media are as *messengers*. The main function of the media is to offer information – facts and opinions – and the quality of this process is characterised by the diversity of information. The task for the media is to offer a neutral reflection of society in its diverse, albeit contradictory manifestations, allowing users themselves to make critical judgements as to what is important and what position one might take. This is how the news media usually position themselves.

Third, the media are as *an arena* for public debate and for the provision of opportunities in the public sector. Here, the functions relate to the provision of a diversity of information, to analysis and critique of that information, and to the creation of frameworks for public debate. This direction includes elements from the two previous ones and is the most rational option for our contemporary society in Latvia.

The media, for their part, argue that their role is to manage information i.e. collecting, selecting, arranging, transmitting or ensuring availability to information in accordance with the needs and interests of potential

users. The public, for its part, and people in education particularly, sees that the media pursue this role in different ways, depending on their goals - what kind of potential users to seek out and preserve, which expectations to satisfy and promote.

The Internet has caused fundamental changes in the existence and development of the media, but experience shows that this, all in all, has not destroyed traditional media industries, regular use of the Internet has not replaced the consumption of other media forms. One may say the Internet has led to radical changes in the perception of the media. If a newspaper was traditionally seen by the reader as a map then now it represents indexes and systems therein. The media in Latvia are losing their ability to express place, for instance, by placing the most important information on the front page, as in a shop window. Instead they are obtaining new and unlimited opportunities for expression in terms of time i.e. uninterrupted news flows, updating of information and space (virtually unlimited opportunities for the publication of information in terms of volume, depth and diversity, along with the ability for media texts to be packaged simultaneously for various audiences.

These innovations remain all but unused by Latvian publishers, radio and television outlets. They have mostly made use of the opportunities which the Internet affords in terms of interactivity and uninterrupted content, and it has only been recently that newspapers have, for instance, started to offer blogs. That is why Internet portals and information agencies which, thanks to the Internet, have become public channels for transmission are beginning to become risky competitors for the traditional media in Latvia – newspapers in particular.

The media have been affected significantly by the extended opportunities of individual freedom in the information environment, and this has to do with aforementioned manifestation of individualisation and interaction. Media owners and editors usually identify these phenomena at the level of results – there is a fragmentation and/or segmentation of the audience. In Latvia where the potential national market audience is comparatively small and is also divided up by language use, this process must be seen as risky for the mass media business. It is also true that the people of Latvia access media from Russia and other countries, mostly through satellite and cable television.

If, from the perspective of media business, we can speak of the fairly successful work of the media industry, which is evidenced by stable increases in advertising income, then from the perspective of individual interests, the role of the media in the shaping of the information environment must be viewed more critically, because:

- a) Latvia has a small number of media outlets which are oriented on the provision of high-quality information that refers to the usefulness of content in analysing economic, political, cultural and social phenomena and in predicting their development as well as the depth of information, the security of sources, the objectivity of content and
- b) as media try to draw as close as possible to the consumerist expectations of the audience, their content has become far more commercialised.

In this context, the functions and roles of the new and public media, which are also international media, are quite important. The usage of the Internet resources, for instance, in comparison with European countries is shown at the Fig. 1. The countries were classified according to per cent of population that has access to the Internet.

Thus, as the information environment changes, one of the key existential issues with respect to the purpose of the media is still the extent to which the modern media meet the consumer and how the accountability and answerability of the media vis-à-vis consumers can be strengthened.

Opportunities afforded to individuals as the technological capacities are expanded more and more by other government institutions and private organisations, which collect, process, maintain and offer public access to information and data and/or ensure the communications environment.

Libraries are important institutions in shaping and influencing the information environment. In the spectrum of their roles in the Latvian information environment, there are two roles which are of key importance, even if they are fairly contradictory.

One of these roles is *to promote the equal ability of all residents* to use information resources. More than 2,000 libraries in Latvia are visited by 39% of the population to read books and periodicals, to access the Internet and to take part in events organised by the library (Zobena,

2005:70-71). Libraries also offer access to global full-text databases. Since 2004, the national agency which is called Cultural Information Systems has been working with the international eIFL.net Fund to conclude agreements on the use of the EBSCO, Cambridge Journals Online, Emerald, RUBRICON, Integrum Techno, OVID CAB Abstracts, ProQuest, and other databases of academic, scientific and public libraries. Local databases are also available through Latvia's libraries, as well as the databases of the LETA news agency.

The second function – *digitalisation of information resources* so as to establish the so-called digital libraries – is a key step in ensuring that the users in the information environment are independent of the factors of space and time. The focus in Latvia when it comes to digital libraries has been on the preservation of the country's cultural heritage, but not on the preservation in digital form of new texts. Digital libraries represent a significant investment in overcoming the localised nature of the Latvian information environment. The Latvian National Digital library "Lettonica", which had some 450,000 digitalised pages of information at the beginning of 2006 (newspapers, maps, posters, postcards, notes, drawings, etc.) also had an archive of digital publications. The diagram below shows statistics Internet users, per cent of population that has access to the Internet and dynamics of growth between 2000 and 2007.

	<u>EUROPE</u>	Population (2007)	Internet users, latest data	Population (Penetration) %	Users Europe %	Usage growth (2000-07)
1	<u>Norway</u>	4,627,926	4,074,100	88.0 %	1.2 %	85.2 %
2	<u>Netherlands</u>	16,570,613	14,544,400	87.8 %	4.2 %	272.9 %
3	<u>Iceland</u>	301,931	258,000	85.4 %	0.1 %	53.6 %
4	<u>Sweden</u>	9,031,088	6,981,200	77.3 %	2.0 %	72.5 %
5	<u>Portugal</u>	10,642,836	7,782,760	73.1 %	2.2 %	211.3 %
6	<u>Faroe Islands</u>	47,511	34,000	71.6 %	0.0 %	1,033.3 %
7	<u>Luxembourg</u>	480,222	339,000	70.6 %	0.1 %	239.0 %
8	<u>Switzerland</u>	7,554,661	5,230,351	69.2 %	1.5 %	145.1 %
9	<u>Denmark</u>	5,468,120	3,762,500	68.8 %	1.1 %	92.9 %
10	<u>United Kingdom</u>	60,776,238	40,362,842	66.4 %	11.6 %	162.1 %
11	<u>Germany</u>	82,400,996	53,240,128	64.6 %	15.3 %	121.8 %
12	<u>Liechtenstein</u>	34,247	22,000	64.2 %	0.0 %	144.4 %
13	<u>Finland</u>	5,238,460	3,286,000	62.7 %	0.9 %	70.5 %
14	<u>Slovenia</u>	2,009,245	1,250,600	62.2 %	0.4 %	316.9 %
15	<u>Monaco</u>	32,671	20,000	61.2 %	0.0 %	185.7 %
16	<u>Estonia</u>	1,315,912	760,000	57.8 %	0.2 %	107.3 %

17	<u>Italy</u>	58,147,733	33,143,152	57.0 %	9.5 %	151.1 %
18	<u>Austria</u>	8,199,783	4,650,000	56.7 %	1.3 %	121.4 %
19	<u>Spain</u>	40,448,191	22,843,915	56.5 %	6.6 %	324.0 %
20	<u>Belarus</u>	9,724,723	5,477,500	56.3 %	1.6 %	2,943.1 %
21	<u>Guernsey& Alderney</u>	65,573	36,000	54.9 %	0.0 %	80.0 %
22	<u>France</u>	63,718,187	34,851,835	54.7 %	10.0 %	310.0 %
23	<u>Belgium</u>	10,392,226	5,490,000	52.8 %	1.6 %	174.5 %
24	<u>San Marino</u>	29,615	15,400	52.0 %	0.0 %	516.0 %
25	<u>Ireland</u>	4,109,086	2,060,000	50.1 %	0.6 %	162.8 %
26	<u>Czech Republic</u>	10,228,744	5,100,000	49.9 %	1.5 %	410.0 %
27	<u>Latvia</u>	2,259,810	1,070,800	47.4 %	0.3 %	613.9 %
28	<u>Cyprus</u>	788,457	356,600	45.2 %	0.1 %	197.2 %
29	<u>Slovakia</u>	5,447,502	2,255,600	41.4 %	0.6 %	247.0 %
30	<u>Montenegro</u>	684,736	266,000	38.8 %	0.1 %	n/a
31	<u>Croatia</u>	4,493,312	1,684,600	37.5 %	0.5 %	742.3 %
32	<u>Poland</u>	38,518,241	14,084,600	36.6 %	4.0 %	403.0 %
33	<u>Greece</u>	10,706,290	3,800,000	35.5 %	1.1 %	280.0 %
34	<u>Hungary</u>	9,956,108	3,500,000	35.2 %	1.0 %	389.5 %
35	<u>Lithuania</u>	3,575,439	1,221,700	34.2 %	0.4 %	443.0 %
36	<u>Andorra</u>	71,822	23,200	32.3 %	0.0 %	364.0 %
37	<u>Malta</u>	401,880	127,200	31.7 %	0.0 %	218.0 %
38	<u>Romania</u>	22,276,056	7,000,000	31.4 %	2.0 %	775.0 %
39	<u>Bulgaria</u>	7,322,858	2,200,000	30.0 %	0.6 %	411.6 %
40	<u>Jersey</u>	91,321	27,000	29.6 %	0.0 %	237.5 %
41	<u>Turkey</u>	71,158,647	16,000,000	22.5 %	4.6 %	700.0 %
42	<u>Bosnia- Herzegovina</u>	4,552,198	950,000	20.9 %	0.3 %	13,471.4 %
43	<u>Russia</u>	141,377,752	29,400,000	20.8 %	8.4 %	848.4 %
44	<u>Macedonia</u>	2,055,915	392,671	19.1 %	0.1 %	1,208.9 %
45	<u>Moldova</u>	4,328,816	727,700	16.8 %	0.2 %	2,810.8 %
46	<u>Serbia</u>	10,150,265	1,400,000	13.8 %	0.4 %	250.0 %
47	<u>Albania</u>	3,600,523	471,200	13.1 %	0.1 %	18,748.0 %
48	<u>Vatican City State</u>	767	93	12.1 %	0.0 %	0.0 %
49	<u>Ukraine</u>	46,299,862	5,545,000	12.0 %	1.6 %	2,672.5 %
50	<u>Man, Isle of</u>	75,831	--	--	--	0.0 %
51	<u>Svalbard&Jan Mayen</u>	2,274	--	--	--	0.0 %
	TOTAL Europe	801,821,187	348,125,847	43.4 %	100.0 %	231.2 %

Figure 2 Internet usage in Europe (www.internetworldstats.com)

Rapidly developing digital resources are still hard to find in Latvia's information environment, because they are not conveniently and easily accessible from well-known and highly recognised portals. Users must rely on their own experience, or on Google, which promises to make global – including Latvian – information available to everyone.

As the Internet develops, new and far broader importance in the information environment is being gained by news agencies for which,

unlike other media outlets, the Internet offered far more of an opportunity as a threat (Boyd-Barrett, 2000, 1:91). That is because *“established players are best positioned to take advantage of the Internet. They already have the news-gathering infrastructure of networks with primary sources, the know-how of writing, editing, illustrating and packaging, and the hard-earned credibility that can attract the customers who want to read what is provided”* (ibid.)

Information from news agencies is the basic element of the news segments of Internet portals. Editors largely select news and prepare a news agenda that is related to the relevant portal’s thinking. This phenomenon has proven to be a factor of influence in terms of the importance of newspapers, as well as radio and television as the sources educators and students in the emergence of individuals’ information environment.

Thus, the news agencies, together with the Internet portals, have created a powerful and all-encompassing network for the dissemination of news. On the one hand, it reduces the phenomenon of fragmentation in the information environment, but on the other hand, it makes that environment more homogeneous and simple, because this stratum of information is largely related to the stating of phenomena and noticing of changes therein, without much of analysis.

Over the last few years, there has been a particularly rapid development of portals which could be defined as spaces for virtual communications. For instance, www.draugiem.lv, which was established in 2004, defined itself as a portal for various activities and mutual communications, one that is meant for a wide segment of society and received an average of 226,000 hits each day in the spring of 2006 – an increase of 2.3 times over since the spring of 2005. Other similar portals include www.inbox.lv (253,000 daily hits) and www.one.lv (163,000) (see <http://www.tns.lv>).

These portals offer vivid manifestation of the processes of individualisation and interaction, and there has been insufficient research and evaluation of their importance in terms of changes in Latvia’s information environment. The point is that they have had a significant effect in changing the communications capacities of individuals and groups. They are also becoming an important source of information. Specialists of the speciality public relations, for example, often use www.draugiem.lv to find subjects and heroes for their materials. These portals establish intensive and extensive personal

communications network, which means that of greater importance in the individual's information environment is private information sources.

Among businesses, those which are most active in influencing the information environment directly or indirectly and those which use the Internet – information services, Internet banks, Internet shops, information and communication technologies companies and Internet service providers. This is also true of those which publish public relations or corporate magazines that are used to improve subject of knowledge. These marketing channels are also used offer clients information about the latest events in various sectors. In this sense, businesses have a similar function in the information environment as media companies do.

Interest groups play an insignificant role in the Latvian information environment at this time, and their information resources and communications channels are mostly used to enhance the level of recognition of the groups. Several of Latvia's political parties also have internet sites which seek to become virtual communities, but because most parties have few members, this can be seen as more of simulation of communications networks.

The content of the information environment

The main role in shaping the content of Latvia's information environment is still performed by television, radio, newspaper and magazine producers. The traditional media cause a confluence in the content of the information environment by quoting one another, by maintaining and continuing events, and narratives, jointly and by being separated in terms of orientation toward the language readers – Latvian and Russian. The content of the information environment in Latvia has a clear lack of narrative and originality.

A critical approach to the media is also enhanced by their nature as “gatekeepers” and setters of agenda. On the one hand, the audience expects the media to produce a “social map”, but on the other hand, it criticises the media to obviously failing to reflect the full spectrum of views and facts. Sometimes audiences perceive the media even as representing the interests only of specific groups.

The infrastructure of the information environment

Jan van Dijk (2006: 25-27), describes the infrastructure of the network society as a set of social, technical and media networks. Social networks emerge with the support of technical and media networks and they can be divided up among four levels:

1. individual relationships, which cover the private relationships of individuals with friends, neighbours, relatives and colleagues;
2. group and organisation relations, which are manifested through virtual teams and projects, for instance;
3. social relations, which shape the political, economic, civic, and institutional networks of societies; and
4. global relations, which bring together countries and international organisations at the global level

Changes in communications, as linked primarily to the new opportunities which technologies provide to communications participants can be reviewed from various perspectives, but there are four approaches which are most visible: (1) the technocratic approach; (2) the social structure approach; (3) the information structure and exclusion approach, and (4) the modernisation and capitalism approach (Sassi, 2005, 7(5): 686-689).

The technocratic approach focuses on the Internet, which changes everyday life, ensures greater work opportunities, facilitates education and strengthens communities. The most important factors in ensuring these opportunities include accessibility, content and the competence of users. In Latvia, this approach is often most visible, and it is strongly supported if there are economic interests in facilitating the market for information and communication technology market, in ensuring and dividing up government procurement for information and communication technologies.

Despite the fairly visible superiority of this approach, however, there are indicators to suggest that a digital divide has emerged – computers and the Internet are used more extensively in urban than in rural areas. In other words computers and Internet use are affected by income, age, etc. It means that the availability of the digital information environment is very different for various residents of Latvia – i.e. there are no equal opportunities. In overcoming these problems, of key importance in

recent years have been achievement in the computerisation of Latvia's regional libraries – 86% of them are computerised and 77% have an Internet connection (Brikse, 2006: 389).

In the social structure approach, the focus is on the Internet dialogue and search functions which enhance opportunities for civic participation and for influencing decisions. This approach has not attracted much attention in Latvia, and in those cases where there has been attention, it has pretty much been a formality. Governance in Latvia is not oriented toward an active exchange of information with local residents.

In the information structure and exclusion approach, the key problems are seen in the unequal opportunities and relations between the centre and the periphery. In any description of Latvia's information environment, one can see very visible differences between capital city Riga and other cities, to say nothing of rural regions. The traditional sources of information are concentrated in Riga, and that means that the capital city and life therein are reflected far more than anywhere else. Riga is also the place where library resources, cultural and education institutions are concentrated, and this has the automatic side-effect of meaning that the school children and students there have better the Internet access.

The modernisation and capitalism approach seeks out causes for the increasing influence of information technologies. Castells has described this as "*information capitalism*" wherein education and the ability of individuals to enhance their education are of key importance (Castells, (2000). In this respect, desires are more in place in Latvia than realities in terms of issues such as the number of university study slots in which tuition is covered by the state.

Various studies have shown that youth have better computer and the Internet usage skills. One reason for this was the Latvian Educational System Informatisation (LISS) project, which took the complex approach of providing computers and software to educational institutions, training teachers, ensuring internet connections, and designing and using electronic educational materials and was launched in 1997.

The level of modernisation and information skills remains middle in Latvia as it was seen at the Fig.1 above, and this problem is starting to resemble a closed cycle. In some territories of Latvia, 70% of employees have non-existent or insufficient computer skills, 60% of employers, meanwhile, think that this is something which employees

themselves must organise <http://www.likta.lv/documents/aktivitates/petijums>, 2007).

Conclusions

The development of the information environment is a successive process starting when someone begins a systematic collection and storage of knowledge, which can then be transferred to others. These processes are implemented by participants i.e. individuals, groups, institutions, who use the technologies of their age. The basic elements in the information environment include individuals, content and the relevant infrastructure. These elements have been used in all times and in all societies and differences relate to the conditions created by societies or individuals.

The content of Latvia's information environment reflects a general phenomenon which is seen in other societies as well – *“traditional media emerged within the ethos of mid-modernity and its focus on the nation-state and national identity. ... Alternatively, new media emerged in late modernity with an emphasis on individualisation and choice within a culture of freedom which resists strong institutional structures in order to encourage communication initiatives at the local, national and supranational levels.”* (Castells, 2001:23-27)

Latvia's information and communications infrastructure, taken as a whole, still does not ensure individuals with a convenient and stable accessibility of the information environment at a socially accessible price in any populated area in Latvia. This reduces both motivation abilities to learn the necessary skills. The lack of skills, in turn, keeps people from using the Internet and its resources.

REFERENCES

- Beck, Ulrich (2003) *Institutionalised Individualism and its Social and Political Consequences*. London, Thousand Oaks; New Delhi: SAGE Publications
- Brikse Inta, (2006) *Informācijas vide Latvijā: 21. Gadsimta Sakums/Latvian/Zinatne Publishers, Riga*
- Boyd-Barrett, Oliver (2000, 1:91). European National News Agencies The end of an era or a beginning? *Journalism*
- Braman, Sandra (1993) *Harmonisation of systems: The third stage of the information society. Journal of Communications* 1993, 43:133-140

Castells, Manuel (2000) *The Rise of the Network Society*. Oxford Blackwell

van Dijk, Jan (2006) *The Network Society: Social Aspects of New Media*. 2nd edition, London Thousand Oaks; New Dehli: SAGE Publications

Krug, Gary (2005) *Communication Technology and Cultural Change* London, Thousand Oaks; New Dehli: SAGE Publications p192-193

Kumar, Krishan (1995) *From Post-Industrial to Postmodern Society*. Oxford Blackwell Publishers

Masuda, Yoneji (1990) *Managing the Information Society: Releasing Synergy Japanese Style*. Cambridge Basil Blackwell Inc.

McLuhan, Marshal (1964) *Understanding Media: The Extention of Man*. London, New York: Routledge,

McQuail, Denis (2003) *Media Accountability and Freedom of Publication* Oxford: Oxford University Press

Sassi, Sinikka (2005, 7(5). Cultural differentiation or social segregation? Four approaches to the digital divide. *New Media & Society*

Rantanen, Terhi (2005) *The Media and Globalisation*. London; Thousands Oaks; New Delhi SAGE Publicatiojns

Zobena, A. (ed.) (2005:70-71) Latvia: Report on Human development 2004/2005: Capacity in Regions, Riga, UNDP, LU SPPI