

ГЛАВА IX

ЗНАЧЕНИЕ ИНФОРМАЦИОННО - КОММУНИКАЦИОННЫХ ТЕХНОЛОГИЙ В ОБРАЗОВАНИИ ГРАЖДАН СТАРШЕГО ВОЗРАСТА

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ZNACZENIE TECHNOLOGII INFORMACYJNYCH W EDUKACJI SENIORÓW

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IMPORTANCE OF INFORMATION TECHNOLOGIES
IN THE EDUCATION OF SENIOR CITIZENS

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Подготовка молодых людей к жизни в информационном обществе является главной целью современного общества. Тем не менее, происходящие сегодня изменения цивилизационные, экономические и политически - экономические влияют на то, что проблематика старости и старения на данный момент является очень важным вопросом, так как одним из достижений современной цивилизации является продление человеческой жизни. Таким образом, важным аспектом является значение информационно - коммуникационных технологий в жизни пожилых людей, а также связь этих технологий с деятельностью, осуществляемой ими, необходимой для их функционирования в современном обществе. Поддержка в сфере владения компьютером и пользования Интернетом необходима в наше время для пожилых людей. Особенно важным считается создание соответствующих условий для этого вида деятельности в пределах определенного учреждения. Это дает старейшим возможность постоянно развиваться, приобрести новый опыт, а также заводить разнообразные знакомства и социальные коммуникации.

Ключевые слова: информационно - коммуникационные технологии, информационное общество, образование, старость, старение, старейшина.

Preparing the young generation for living their lives in the Information Society is the key objective of contemporary societies. Today's civilizational, political and economic changes make the old age and aging a very important issue since one of the achievements of today's civilisation is a longer lifespan. Bearing that in mind, one shall note the importance of Information Technologies in the life of the old-age citizens as well as how the Information Technologies are related to their activity indispensable for the operation in today's society.

The support given to senior citizens to enhance their computer operation and Internet using skills is becoming most essential today. Similarly, it is of special importance to create adequate conditions for that type of activity provided by specific institutions, thus allowing the senior citizens for a continuous development, acquiring new experience as well as making new friends and establishing various social relations.

Key words: Information Technologies, information society, education, the old age, aging, the senior citizen.

Przygotowanie młodego pokolenia do życia w społeczeństwie informacyjnym jest głównym celem współczesnych społeczeństw. Jednakże dokonujące się współcześnie zmiany cywilizacyjne, gospodarcze i polityczno-ekonomiczne wpływają na to, że problematyka starości i starzenia się w chwili obecnej stanowi bardzo istotne zagadnienie, gdyż jednym z osiągnięć współczesnej cywilizacji jest wydłużenie ludzkiego życia. W związku z tym ważny aspekt stanowi również znaczenie technologii informacyjnych w życiu osób starszych, a także jej związek z podejmowaną przez nich aktywnością, niezbędną dla ich funkcjonowania we współczesnym społeczeństwie.

Wsparcie w zakresie obsługi komputera i umiejętności korzystania z Internetu staje się w obecnych czasach nieodzowne dla osób starszych. Za szczególnie istotne uznaje się również

tworzenie odpowiednich warunków dla tego typu aktywności w obrębie określonych instytucji. Umożliwia to seniorom ciągły rozwój, zdobywanie nowych doświadczeń, a także nawiązywanie różnorodnych znajomości i stosunków społecznych.

Słowa kluczowe: technologie informacyjne, społeczeństwo informacyjne, edukacja, starość, starzenie się, senior.

Today's civilisational, economic and political-and-economic changes make one read and write more and more about the post-industrial society, information society, knowledge society or the knowledge-based economy. The knowledge-based economy and the IT society require:

- A global approach to the industry, market, environmental protection;
- Transformations of the industrial society into the IT society;
- Awareness of the inapplicability of technology which does not factor in information management and the customer needs;
- Relying on the creativity of own staff;
- Emergence of the business communication standards processing network.[1]

With the above in mind the contemporary education systems must meet the growing requirements of the knowledge society. They must also consider the fact that school no longer has a monopoly over knowledge sharing and must compete with information media as well as the market sector, as part of which, the companies are becoming more and more often manufacturers and mediators of knowledge.[2]

The progress in Information Technology and telecommunications implies many different changes in the world we are living in. Thanks to mobile telephony we can contact others, irrespective of where each of us is. Fast data transfer networks allow for transferring the numerical data, images, sound or video recordings. We are living in the era in which information has become the springboard for an efficient operation of not only various companies and firms but also administration of all the levels as well as respective units. Information, on the other hand, undergoes processing to the most convenient form and range as well as supplying in the time most convenient for him or her. It is becoming almost common to use Information Technology. Using state-of-the-art appliances for sharing information and for communication between people has become indispensable and sometimes even in a way 'coercion' for everyone. Information Technologies are being applied more and more in all the fields of life, thus facilitating the contacts in a form most convenient and user-friendly. [3]

It is a fact, beyond any doubt, that the primary aim of contemporary societies is to prepare the young generation to life in the information society, which is one of the jobs of today's school, seen from the general responsibilities of the school in the primary education reform document 'Core curriculum', which is the document defining the educational standard, namely the responsibilities of the school and for each field of education (course of

study) the teaching objectives, responsibilities of school, teaching contents and students' achievements. The job of the teachers is to provide the students with conditions to acquire the skills of searching for, ordering and using the information from various sources and using IT for it.

Information Technology, as a field dealing with all the aspects of information, is closely connected with the media, especially the multimedia, namely the traditional media enriched with the IT means and tools, including the CD player, TV, DVD, and mostly computers. Until recently the media had been treated mostly as the means of providing information, the media communications, to their users, as the receivers of information. Only the appearance of computers created a new quality and new opportunities, mostly thanks to the interactive multimedia potential. The learner does not only receive information with the computer but can also affect, via the computer, the kind and the nature of information. Additionally, the learner can also transform and to create new information using the media equipped with computers. Computers and IT, therefore, change the nature of the media in education.[4]

At present, beyond any doubt, the computer is crucial for facilitating the education process. It allows for a direct dialogue between the learner and the computer. The main potential of the computer used for teaching purposes includes:

- Dialoguing potential,
- Creating colourful animated images on the screen,
- Making calculations,
- Processing and printing the graphics and the text,
- Music composing and processing.[5]

The computer-aided education process also covers such forms as computer-aided exercises, simulations with situational models, individual and group teaching games.

An important aspect of computer-aided teaching is the individualization of learning due to the analysis of the achievements of the learner. Computer networks skilfully used in the teaching process can provide a natural computer environment of conscious learning as a 'window' to the world, providing new information indispensable to get to know all the aspects of the problems investigated. Such a form of working with the computer develops the learner's cognitive skills, triggers interest as well as stimulates unrestricted process of asking questions and searching for answers. Besides, it also develops the skill of selecting the point of view and recognising the contexts it comes from. As such, the computer stimulates to independent work to develop the knowledge to be further acquired.[6]

The computer is also used as a communication tool thanks to abundant multimedia potential, communication with the user, especially thanks to various very useful methods of programme-based image and sound development. The computer together with TV and DVD create a new medium

interactive in nature, facilitating an interactive form of learning, which involves the communication with the system using the keyboard or other input devices allowing for changes in the information sequence, repetitions, additional and corrective information presentations. The interactive systems, integrating various media, create, in fact, the multimedia systems. For that reason the computer also allows for, apart from the usual transfer of the text with illustrations or films, the organization of the multimedia communication.[7]

In the era of the information society, the Internet has become an indispensable tool in the search for information. The fast and easy access to information has become necessary since knowledge has become the most valuable commodity and new information is continuously produced. An increase in the impact of the Internet on the social reality leads to changes in the social structures of the contemporary world since the process of computerization leads to essential changes of all of its layers.[8]

With the above in mind, the contemporary reality is, to very much extent, affected by the media since most information derived from it is circulated among a specific community. The mass media are one of the key elements organizing today's world which is saturated with the effects of their activity. In fact one can assume that, at the moment, there is no essential field of human activity which is not, in one way or another, dependent on the media, or at least, to some extent, connected with the media.[9]

Bearing that in mind, what is the role played by the media and IT in the life of senior citizens? Is it also essential whether they are related to the activity taken up by senior citizens, is it indispensable for their functioning?

The problem of old age and aging at the moment is a very important problem since one of the achievements of the contemporary civilization is a longer life span. It is connected with a clear increase in the number of senior citizens in the society, especially in the highly-civilized countries, which, in turn, means that at the moment the problem of getting adapted to the old age has become an especially important aspect in the life of each person. The skill of independent functioning in today's constantly and dynamically changing reality requires the senior citizens taking up the activity which has become the indispensable condition for getting adapted to the everyday existence.

For many theoreticians and practitioners, the theory of the activity is the springboard for the search for the methods of getting the senior citizens active since to maintain the general well-being and good health, it is not enough to satisfy the basic needs; food, sleep and security. With that in mind, it is of paramount importance not to get withdrawn from the active life, and having retired, to continue or to develop new forms of activity.[10] For senior citizens the educational activity is extremely important where the primary objective of their education is the independence and self-reliance as well as competency in solving own problems.

Education allows the senior citizens to achieve independence and so it is

to help in maintaining or recovering self-reliance as well as to oppose the stereotypes and ignorance of the problems of senior citizens.

Analyzing the aspect of the use of the media and Information Technologies in the context of the educational activity taken up by the senior citizens, one should consider the process of self-study and self-education by the individual. Education is related to the human development. The adult can consciously and responsibly manage his or her own development, and to make the development full and complete, auto-formation, namely self-study and self-education, are required. The first process includes the intellectual sphere, while the second one – volitional-and-emotional sphere, especially the development of the attitudes of the individual. In the process of self-study, the development takes place by acquiring new knowledge and skills of using it and by exercising intellectual functions. The process of self-education, on the other hand, aims at reaching greater and greater freedom, maturity of feelings and developing attitudes of social nature.[11]

Learning understood as the activity of self-study is expressed not only by the intellectual activity, but also artistic, technical, social, moral, political, philosophical, physical or social activities, not only to acquire knowledge and practical skills but also to acquire the skill of evaluation, selection or the development of own personality. It goes beyond the typical school education. The adult can get educated in various ways, independently and at various institutions.[12]

In general, self-study is considered to be the acquisition of knowledge. However, research shows that it is an independent and complete process in which the entire personality of the individual gets developed and even though self-study applies various methods, still the skill of using various sources of information and knowledge is essential, including:

- Ideas and moral models operating in the society,
- Printed materials (literature and other papers),
- Mass media,
- Life and work environment ,
- Working positions,
- Modern language in various human contacts,
- Culture and art, etc.[13]

One of the key sources used for self-study of the individual are indeed the mass media which are closely related with the contemporary Information Technologies. Contemporary studies of the interests and activity of senior citizens point to the fact that the media are essential in their life. The research showed that so far the receptive activity which involves watching TV, listening to the radio, reading newspapers, most often at home and the integration activity expressed mostly in meeting friends are most popular.[14]

The above trends are confirmed by the study performed in 2006 applying

the interview questionnaire on 'My retirement', performed by pedagogy students of the Higher-Education School of the Humanities and Economics in Włocławek under the general supervision of Prof. Zygmunt Wiatrowski. The research covered 1268 persons; the senior citizens of various professional and vocational groups and at various age as well as pre-retirement persons, up to two years before retirement. The table below shows the methods of spending free time by senior citizens.[15]

Table 1. Ways of spending free time by senior citizens; analytical breakdown

Item	WAY OF SPENDING FREE TIME	WOMEN N=810		MEN N=458		TOTAL N=1268	
		Selection mean	Selection rank	Selection mean	Selection rank	Selection mean	Selection rank
1	I read a lot.	3.25	II	2.76	VI	3.08	III
2	I watch various TV programs.	3.21	III	3.34	I	3.26	II
3	I tidy up my house (flat).	3.12	IV	2.84	V	3.02	IV
4	I follow my hobbies.	2.29	VI	3.30	II	2.65	VI
5	I spend much time with my family.	3.44	I	3.19	III	3.35	I
6	I take care of my health condition.	2.98	V	2.94	IV	2.97	V
7	I get involved in the social, local government and local life.	1.58	VII	1.82	VII	1.67	VII
8	I still have a job.	1.46	VIII	1.58	VIII	1.50	VIII
9	I travel abroad.	1.39	IX	1.43	IX	1.40	IX
10	I often take part in the activities of 'senior's club' ('third-age').	1.32	X	1.20	XII	1.28	XI,XII
11	I perform creative works.	1.31	XI	1.26	X	1.29	X
12	Others	1.30	XII	1.25	XI	1.28	XI,XII
	SELECTION MEANS	2.22	-	2.24	-	2.23	-

The results of the studies given in the tables show that, in general, senior citizens spend most of their free time with the family – total mean – score 3.35, followed by watching various TV programs – total mean – score 3.36 and read a lot – the 3rd highest score, with the total mean – score 3.08. All those means are expressed by an unsure positive response, 'Yes, I guess'. Therefore, senior citizens attributed the second highest score to watching TV programs, which is confirmed by the above theoretical considerations based on the analysis of literature and the results of the recent studies, which is related to what has been determined earlier already; the mass media create a springboard for the communication system in today's reality and highly determine its nature. Beyond any doubt, however, the media affect the human development and actions no matter what age, including senior citizens.

All that is also confirmed by the results of studies, being part of general studies of educational, professional and vocational activity, by senior citizens in Poland, as part of my habilitation dissertation in progress, with the interview questionnaire on 'Professional/ vocational and educational activity of senior citizens'. The studies were performed in 2008 and at the beginning of 2009 by pedagogy students of the Kazimierz Wielki University in Bydgoszcz as well as the Higher Education School of the Humanities and Economics in Włocławek and include the opinions of 460 respondents; senior citizens of various professional/vocational groups and at various age as well as pre-retirement people, up to five years prior to retirement. The respondent selection criterion was defined by the place of residence of the students and, as such, the studies are limited to the Kujawy and Pomorze Province. For the results, see Table 2.[16]

Table 2. Ways of spending free time by senior citizens; analytical breakdown

Item	WAY OF SPENDING FREE TIME	WOMEN N=304		MEN N=156		TOTAL N=460	
		Selectio n mean	Selectio n rank	Selectio n mean	Selectio n rank	Selecti on mean	Selecti on rank
1.	I have been still working – I continue with the job I have performed so far.	2.02	VIII	1.88	XI	2.37	VI
2.	I have been still working, however, I do the job I have not done so far.	2.26	VII	2.03	VII	2.18	VIII

3.	I follow my interests.	2.32	V	2.11	V	2.25	VII
4.	I follow my amateur passions, being, at the same time, the source of additional income.	1.79	XVI	1.69	XVI	1.76	XVI
5.	I get involved in social-and-cultural activity.	1.85	XV	1.83	XII	1.84	XIV
6.	I spend my time mostly with my family.	3.26	I	2.58	I, II	3.03	I
7.	I read a lot.	2.82	II	2.10	VI	2.57	II
8.	I listen to the radio, watch TV programs.	1.91	XII	2.47	III	2.53	III
9.	I participate in lectures, papers delivered in clubs, community centre or third-age universities.	1.97	XI	1.68	XV	1.87	XII
10	I have taken up education to complete my education.	1.89	XII, XIV	1.82	XIII	1.86	XIII
11	I have started education for my own pleasure.	1.89	XII, XIV	1.90	X	1.89	XI
12	I practise sport.	2.00	IX	1.91	IX	1.97	X
13	I do sightseeing and tourism.	2.65	III	2.26	IV	2.39	V
14	I perform creative, artistic activity.	1.98	X	1.45	XVI	1.80	XV
15	I take up club and entertainment activity.	2.31	VI	1.95	VIII	2.06	IX
16	I take care of my health condition.	2.43	IV	2.58	I, II	2.48	IV

17	Others	1.39	XVII	1.15	XVII	1.31	XVII
	SELECTION MEANS	2.16	-	1.96	-	2.13	-

Others: women: working in the allotment garden; men: working in the allotment garden, fishing.

The above results given in the table show that senior citizens spend most of their free time with their family – total mean – score 3.03, followed by reading – total mean – score 2.57 and listen to the radio and watch various TV programs – the 3rd highest score, with the total mean – score 2.53. All the means express an unsure positive response: ‘Yes, I guess’.

The above findings confirm that the media are, in fact, a huge global idea of global communication. One shall add that the mass media have such a great power of impact due to the result of the co-occurrence of three factors:

- getting access to the new generation highly-advanced technologies and technical media, with a practically unlimited reach, which guarantees the media communication with a minimum delay as compared with the real time of events;

- communication means have become commonly accessible and the technology of media impact on the society has been, in fact, perfect;

- there has occurred a continuous and increasing interest of the society both in the use of the mass media and the reception of various media communications, which can be sometimes considered a kind of pathological addiction.[17]

What is more controversial is the use of the computer and the Internet in taking up the educational activity by senior citizens. However, importantly, more and more people that age use those tools, treating them as ‘a window to the world’. Senior citizens frequently use the computer as a tool for virtual meetings with friends as well as establishing new contacts; with a very good solution being offered by all kinds of chat forums and topic forums where communication mostly involves writing text messages. Unlike commonly believed, typing on the keyboard is not a problem for senior citizens. Neither is it hard to use the key programs allowing text editing or entering them directly on the forum.[18]

As for senior citizens, the computer is commonly treated as a verbal and non-verbal communication tool, for contacting other people as well as for entertainment. However, using the computer by those people allows them for a kind of ‘intellectual gymnastics’, which can considerably contribute to maintaining mental acuity for a longer time. It is known that senior citizens learn differently than young people and to keep mental acuity until old age, learning at that age is not just possible but necessary.

At the beginning of this paper one of the benefits of working with the

computer has been pointed to; the individualization of the learning process. As for the self-study actions taken up by senior citizens, the following can be observed: maintaining and even a further development of cognitive skills, execution and further stimulation of interests as well as maintaining the capacity and skills of choosing the point of view as well as recognising their size and contexts. With that in mind, that form of work with the computer allows for stimulation, release and encouraging the senior citizens to own work to develop their knowledge further.

Interestingly, such institutions as Senior Clubs, or the Third Age Universities make it possible for senior citizens to learn how to operate the computer and how to use the Internet.

The development of the Third-Age Universities is, in many countries, an expression of a great demand for the participation of senior citizens in educational events, finding education not only as providing intellectual and cultural entertainment but also considering it to be intellectual training, and thus the way to independence, emancipation and continuous development.[19] With that in mind, more and more frequently one stresses the importance of every single activity which facilitates and stimulates an intensified intellectual effort of senior citizens. Similarly, it is considered especially important to create adequate conditions for this type of activity within specific institutions (e.g. Third-Age Universities) which aim at the development of senior citizens, mostly by popularising continuous education as well as providing them with a possibility of getting adapted to the changing reality, especially an active participation in the social life.[20]

Today the institutional support also in terms of computer operation and the skills of using the Internet is becoming indispensable for senior citizens, threatened with 'getting digitally excluded' and facing numerous obstacles connected with a lack of computer operation skills.

To recapitulate, the computer and the Internet are excellent tools to facilitate some kind of communication of the senior citizens with the world around; with the family, friends, especially among those who, for various reasons, have limited possibilities of active participation in social and cultural life (e.g. because of illness or disability). A rich spectrum of solutions offered by the Internet makes it possible for the senior citizens' continuous development, educational activity, new experiences, the acquisition of interesting information as well as establishing new, and various, contacts with people.

PRIMECZANIA (REFERENCES)

1. Aleksander T. (ed.), *Edukacja dorosłych jako czynnik rozwoju społecznego* (Proceedings of the 1st Polish Andragogy Congress – Kraków, June 23-24, 2009), volume 2, Radom 2010.

2. Bielecki J., Jacewicz A. (ed.), *Edukacja z perspektywy przemian kulturowo-*

społecznych – wczoraj-dziś-jutro, Białystok 2010

3. Fabiś A. (ed.), Aktywność społeczna, kulturalna i oświatowa seniorów, Bielsko-Biała 2008.
4. Kajdasz-Aouil M., Michalski A., Podoska-Filipowicz E., Edukacja techniczna i informatyczna: Kreowanie nowoczesnego modelu kształcenia, Bydgoszcz 2005.
5. L. Manovich, Język nowych mediów, Warszawa 2006.
6. Synak B. (ed.), Polska starość, Gdańsk 2002
7. Szatur-Jaworska B., Błędowski P., Dzięgielewska M., Podstawy gerontologii społecznej, Warszawa 2006.
8. Szewczyk A. (ed.), Dylematy cywilizacji informatycznej, Warszawa 2004.
9. Zarządzanie wiedzą w społeczeństwie uczącym się, Ministry of Economy 2000.

LITERATURA

- [1] E. Skrzypek, Wiedza i praktyka, in: Dylematy cywilizacji informatycznej, ed. A. Szewczyka, Warszawa 2004, p. 108
- [2] Zarządzanie wiedzą w społeczeństwie uczącym się, Ministry of Economy 2000, p.11
- [3] Compare Edukacja techniczna i informatyczna: Kreowanie nowoczesnego modelu kształcenia, ed. M. Kajdasz-Aouil, A. Michalski, E. Podoskiej-Filipowicz, Bydgoszcz 2005, p. 5
- [4] M.M. Sysło, Technologia informacyjna w edukacji, in: http://www.snti.pl/snti/files/ti_w_educacji.pdf, p.5 – access date:14.03.2012
- [5] E. Salata, Zastosowanie komputera w procesie nauczania-uczenia się, in: Edukacja techniczna i informatyczna: Kreowanie nowoczesnego modelu kształcenia, ...op. cit., p. 282
- [6] Ibidem, pp. 285-286
- [7] Ibidem, pp. 284-285
- [8] L. Manovich, Język nowych mediów, Warszawa 2006, p. 12
- [9] B. Golińska, M. Golińska-Konecko, Telewizja (nie) znana, czyli dwa oblicza mediów, in: Edukacja z perspektywy przemian kulturowo-społecznych – wczoraj – dziś - jutro, ed. J. Bielecki, A. Jacewicz, Białystok 2010, p. 239
- [10] Cit. after: M. Halicka, J. Halicki, Integracja społeczna i aktywność ludzi starszych, w: Polska starość, ed. B. Synaka, Gdańsk 2002, in: Podstawy gerontologii społecznej, ed. B. Szatur-Jaworska, P. Błędowski, M. Dzięgielewska, Warszawa 2006, pp.163-164
- [11] M. Świeca, Kierowanie własnym rozwojem przez ludzi dorosłych, in: Edukacja dorosłych jako czynnik rozwoju społecznego (Proceedings of the 1st Polish Andragogy Congress – Kraków, June 23-24, 2009), ed. T. Aleksandra, volume 2, Radom 2010, p. 225
- [12] Cit. after: A. Kamiński, Studia i szkice pedagogiczne, Warszawa 1978, in: Podstawy gerontologii społecznej, ... op.cit., p. 168
- [13] Z. Wiatrowski, Podstawy pedagogiki pracy, Bydgoszcz 2005, issue IV, p. 389
- [14] Cit. after: M. Halicka, J. Halicki, Integracja społeczna i aktywność ludzi starszych, in: B. Synak (ed.), Polska starość, Gdańsk 2002, in: B. Szatur-Jaworska, P. Błędowski, M. Dzięgielewska, Podstawy gerontologii społecznej, Warszawa 2006, p.165
- [15] Prior to the analysis of the material collected, its quantitative calculations were made. The senior respondents were to define their way of spending free time by scoring. The responses were adequately multiplied: 'YES' times 4, 'YES, I guess' times 3, 'No, I guess' times 2 and 'NO' times 1. The scores were divided by the number of

respondents and there was received the selection mean, for which the following scoring intervals were applied:

- Up to score 1.50: a definitely negative response – No;
- From score 1.51 to score 2.50: an unsure negative response – No, I guess;
- From score 2.51 to 3.50: an unsure positive response – Yes, I guess;
- Over score 3.50: a definitely positive response – Yes.

[16] Calculations made similarly as in Table 1.

[17] H. Kolka, Czym są współczesne media, in: <http://globeconomy.pl/content/view/360/38/> - access date: 12.05.2011

[18] <http://www.tda.pl/komputer-dla-starszych.html> - access date: 13.03.2012

[19] Compare: A. Fabiś, Edukacja seniorów – odpowiedź na wymagania współczesności, 'Edukacja Dorosłych' 2006, issues 1-2, p.34.

[20] Compare A. Fabiś, Aktywność kulturalno-oświatowa osób starszych, in: Aktywność społeczna, kulturalna i oświatowa seniorów, ed. A. Fabisia, Bielsko-Biała 2008, p. 91.

