National Country report for Project "Generation 0101" data research – Lithuania

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Generation 0101 – Intellectual Output n.1

INTRODUCTION

The research was run in April, 2015 by Generation 0101 partner association Langas į ateitį/LIA. LIA is a non-profit NGO which mission since 2002 is to participate in the development of the information society, increase the accessibility of the Internet and e-services in Lithuania by providing computer literacy and Internet training to Lithuanian citizens. The key activities are intended to digitally and geographically excluded inhabitants, especially living in rural regions, young people, socially vulnerable, aged or disabled people.

The information sources used for the research: web sources, consultations with experts, face-to-face meetings, e-mails and personal contacts.

20 stakeholders representing public, academic, private sector as well as NGO have been contacted and interviewed.125 youth surveys have been completed.

DIGITAL AGENDA STRATEGY

On 12 March 2014, the Government of the Republic of Lithuania approved the Programme for Information Society Development in Lithuania for 2014-2020 "Lithuania's Digital Agenda". The Programme fully complies with the objectives set by the Digital Agenda for Europe, and is prepared from the perspective of Lithuania's specific situation and needs in various areas of State's life related to the development and spread of ICT under the coordination of the Ministry of Transport and Communication (www.transp.lt) as well as participation of all the other ministries. The Information Society Development Committee under the Ministry of Transport and Communications (ISDC) has been participating in the process of shaping state policy in the development of information and communications technologies in Lithuania and coordinating its implementation. The mission of the Committee is to plan, organise and coordinate processes of the development of information society aimed at creating an open, educated and continuously learning society, members of which rely on knowledge and have an opportunity and capability to make effective use of modern ICT in all their fields of activity.

The major focus areas of the Programme "Lithuania's Digital Agenda" are as follows: (1) Skills and motivation of the Lithuanian citizens to use the ICT; (2) Development of electronic content; (3) the ICT infrastructure. The Programme is based on the assumption that only balanced development of all these areas can lead to sustainable and rapid development of the information society and result in implementation of the objectives envisaged in the Digital Agenda for Europe. There are 6 aims of the programme:

1. To reduce the digital divide of the residents of Lithuania and to encourage them to acquire knowledge and skills in order to enable them to fully and successfully use ICT;
2. To create new technologically advanced online public and administrative services and encouraging the residents to use them;
3. To use ICTs in the promotion of the Lithuanian culture and language;
4. To promote the use of ICT for business development;
5. To develop broadband electronic communication networks in underserved areas;
6. To ensure safe, reliable, interoperable ICT infrastructure.

MAJOR STAKEHOLDERS FOR ICT SKILLS AND YOUTH EMPLOYABILITY

20 main stakeholders responsible for ICT skills for youth in Lithuania have been named in the desk research. Of course, there are many more but the named ones make visible influence and have capacity to add more to the positive change of the situation regarding youth ICT skills and unemployment. The stakeholders represent different sectors:

1. public: Ministry of Transportation and Communication (www.transp.lt),Ministry of Education and Science (http://www.smm.lt/web/en/),-Ministry of Social Security and Labour (www.socmin.lt),-State Employment agency (www.ldb.lt), Youth job centers under State employment agency;
2. business associations (www.infobalt.lt , www.langasiateiti.lt);
3. formal educators (www.ktu.lt, www.vu.lt);
4. non-formal training providers;
5. National Digital Coalition (http://www.skaitmeninekoalicija.lt/en/);
6. e-skills for jobs campaign (http://e-igudziai.lt/).

Recently established National Digital Coalition encounters most active stakeholders for ICT skills. Through the Memorandum, signed on November 7, 2013 in Vilnius, institutions, companies and organizations coordinating the promotion of a knowledge-based society in Lithuania, promoting and developing digital skills of young people and the community at large as well as training ICT professionals agreed to form the National Digital Coalition for the Promotion of Digital Skills for Jobs in Lithuania (hereinafter referred to as "the National Coalition") and to cooperate in implementing information society development programme 2014–2020 Digital Agenda for Lithuania in order to increase employment and to achieve a more effective use of digital potential. The Partners of the National Coalition agree on the following objectives:

1. To substantially reduce the shortage of IT professionals, to improve the conditions for the private and public sector employees as well as all inhabitants to learn and continuously improve the necessary ICT skills for job, the establishment of IT business and development of the digital market.
2. To attract more young people to choose ICT and other science studies and professions, to ensure the acquisition of digital skills also when learning other professions.
3. To raise public awareness of the importance of digital skills and competences.

More info on the tasks and activities here: http://www.skaitmeninekoalicija.lt/en/

COUNTRY FIGURES IN ICT SKILLS AND YOUTH EMPLOYABILITY

1. Unemployment rate of youth in Lithuania

Comparing the statistical data (State department of statistics) from 2013 beginning to the end of 2014 numbers indicate a growth of unemployment rate. In the 2013 the unemployment of youth was 24.6%. While in 2014 – 27.6%.

The graphic below shows the variation according to year quarters and unemployment rate.
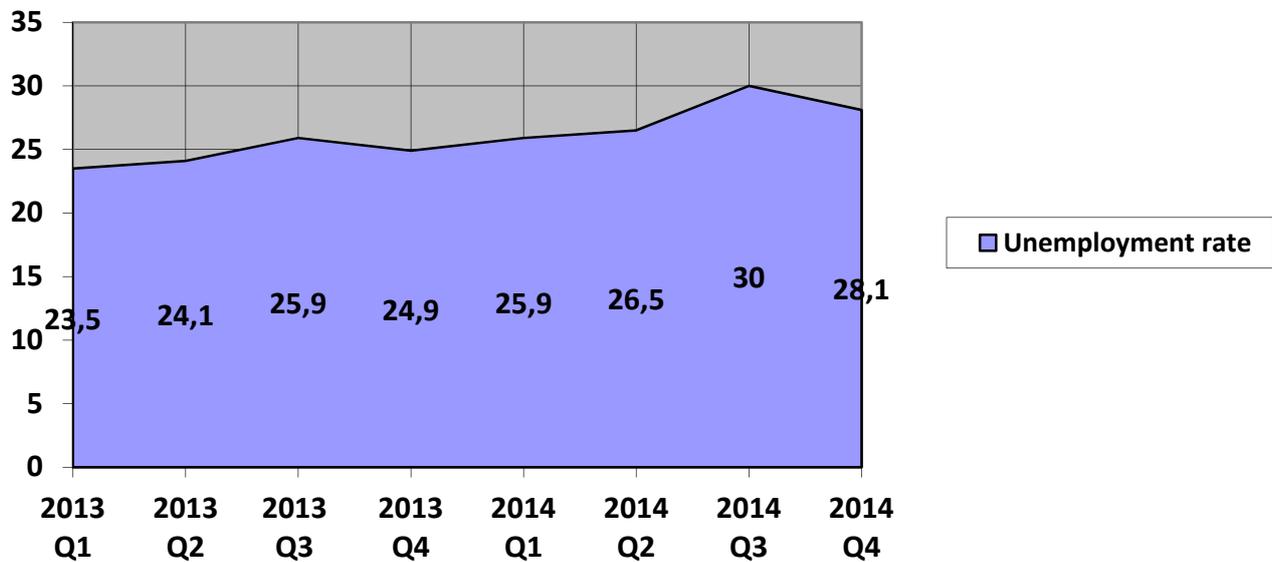
In comparison with general unemployment rate 11,8% in 2013, youth unemployment is significantly big. Every fourth 16-25 y.o. person (not student) is unemployed.

According to the experts from governmental, NGO and private business sectors, the big unemployment rate reflects the gap between ICT specialist demand and supply. Though majority of young people are ICT literate and active in social networks but even after graduating the university, they rarely have enough specific ICT skills for high quality tasks.

2. ICT skills in Lithuania

Internet penetration reach 70 % in 2015 in Lithuania. 95.5% of internet users identify themselves as regular users. Taking into count youth - 98.3% of them are regular, using computer every or almost every day. Although most of people use computers and internet on daily basis, only 41.9% of working age employed people perceives their ICT skills as sufficient for the labor market. 28.5 % of working people thinks that their ICT knowledge is insufficient.

Meanwhile, almost one third (27.6%) of working age unemployed people also perceives their ICT skills as sufficient enough for labor market. And 32.5% of them as insufficient.

96.7% of 16-24 y.o. youth obtained ICT skills through formal education institutions in LT. That means all young people are provided with basic digital skills at school.

Unfortunately, this big ICT literacy number does not mean property for an ICT profession job. According to the experts young people have digital skills – internet search, social media, but rarely ones needed for the job but they overestimate their knowledge. Young people lack the competence of data processing, analysis, tasks planning and monitoring, concrete programming skills, etc.

Optimistically seems high number of science and technology graduates in Lithuania - 23 per 1000 inhabitants. Meanwhile in EU, only - 18.1. Of course, considering the demand of this kind of specialist this number should be much higher. According to Lithuanian Digital Champion opinion, Lithuanian education system does not keep up with the demand of specialists and the non-formal ICT education should be encouraged, which is more flexible to the need.

YOUTH SURVEY DATA ANALYSIS

1. Demographics and education of respondents

126 young people participated in youth survey in Lithuania. The majority of the respondents in the – 76% – are 19-24 y.o. people. 17% – 16-18 y.o. and 7% – 25-30 y.o. respondents. Most of them are girls – even 64%.

Respondents provided surprisingly high their English language skills knowledge – 71% of them evaluated the skills of English as advanced level. Only 5% indicated their knowledge as beginner's level.

79% of respondents are secondary, high school or university students. 27 respondents indicated that they have interrupted their studies. The main reasons of that – indecisiveness what to study, the second place - preference to work instead of studies and the need to work prevent studies.
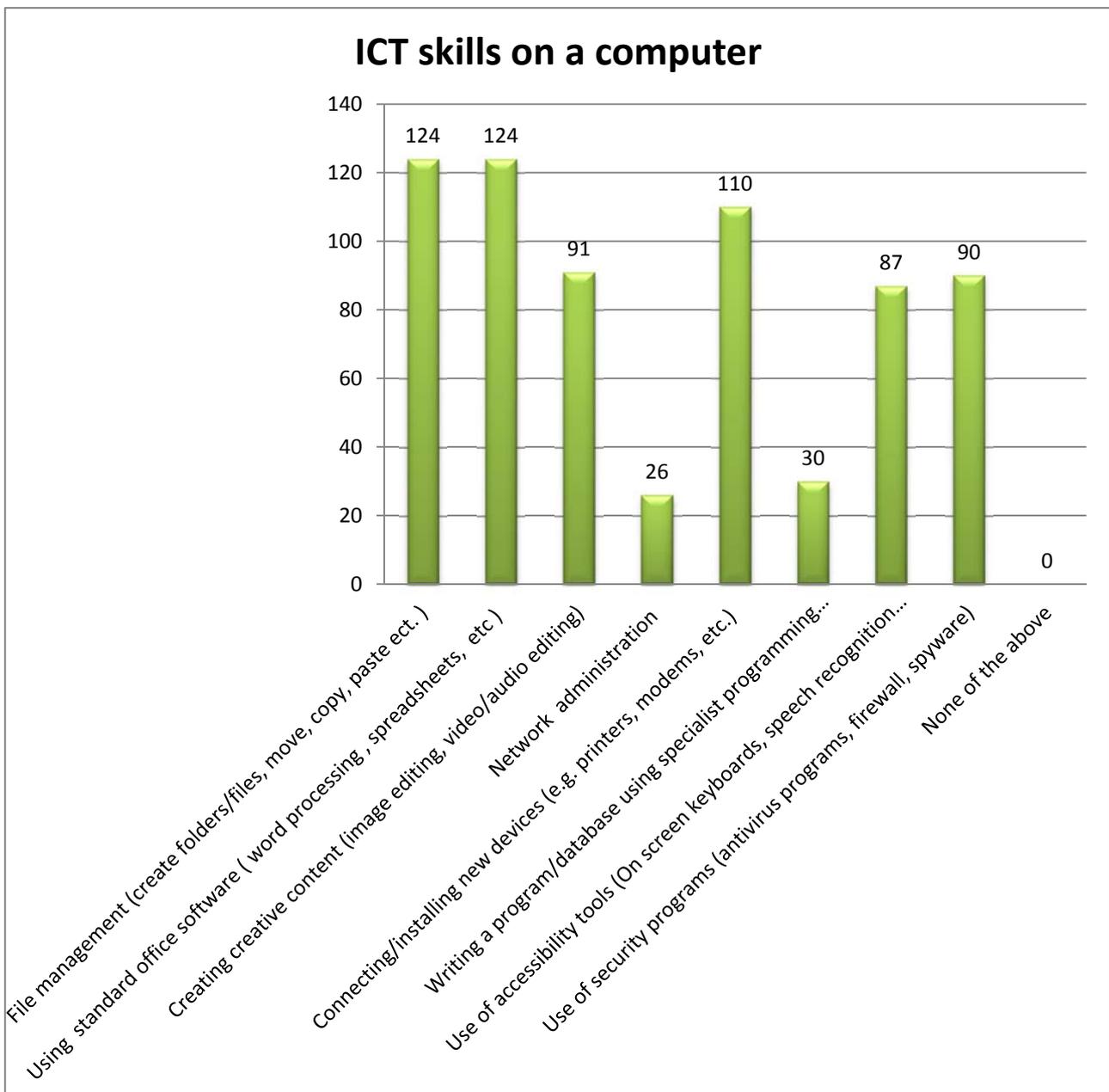
42% of respondents have a job and the rest – 58 % are unemployed youth. Analyzing why they are unemployed it comes to a daylight that the main reasons for that are ongoing studies and parents financial support (see the chart below).
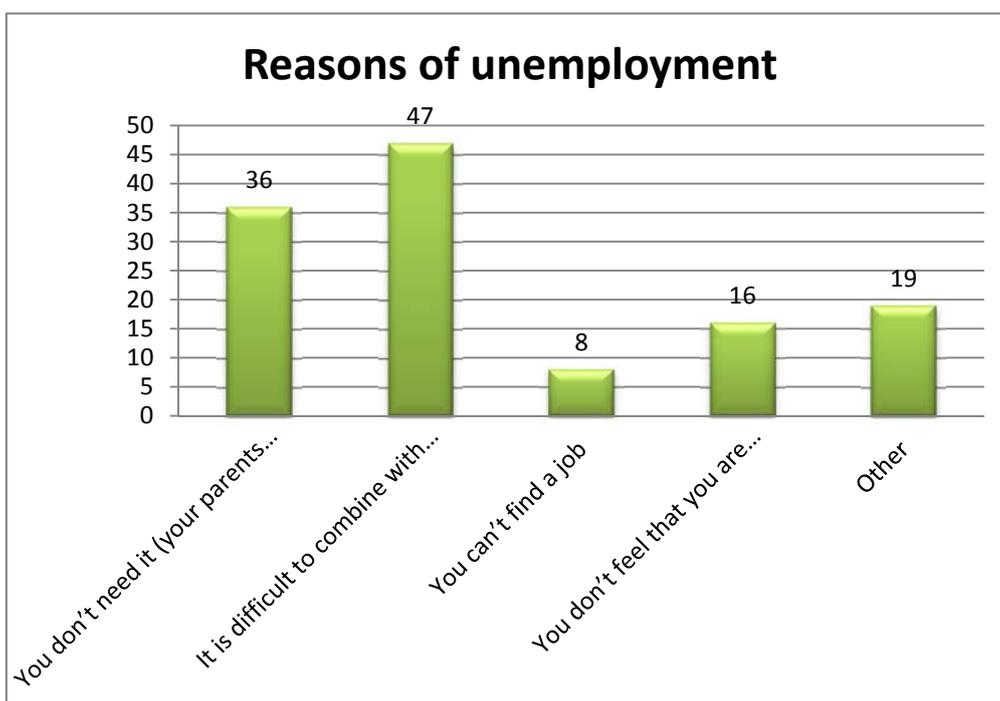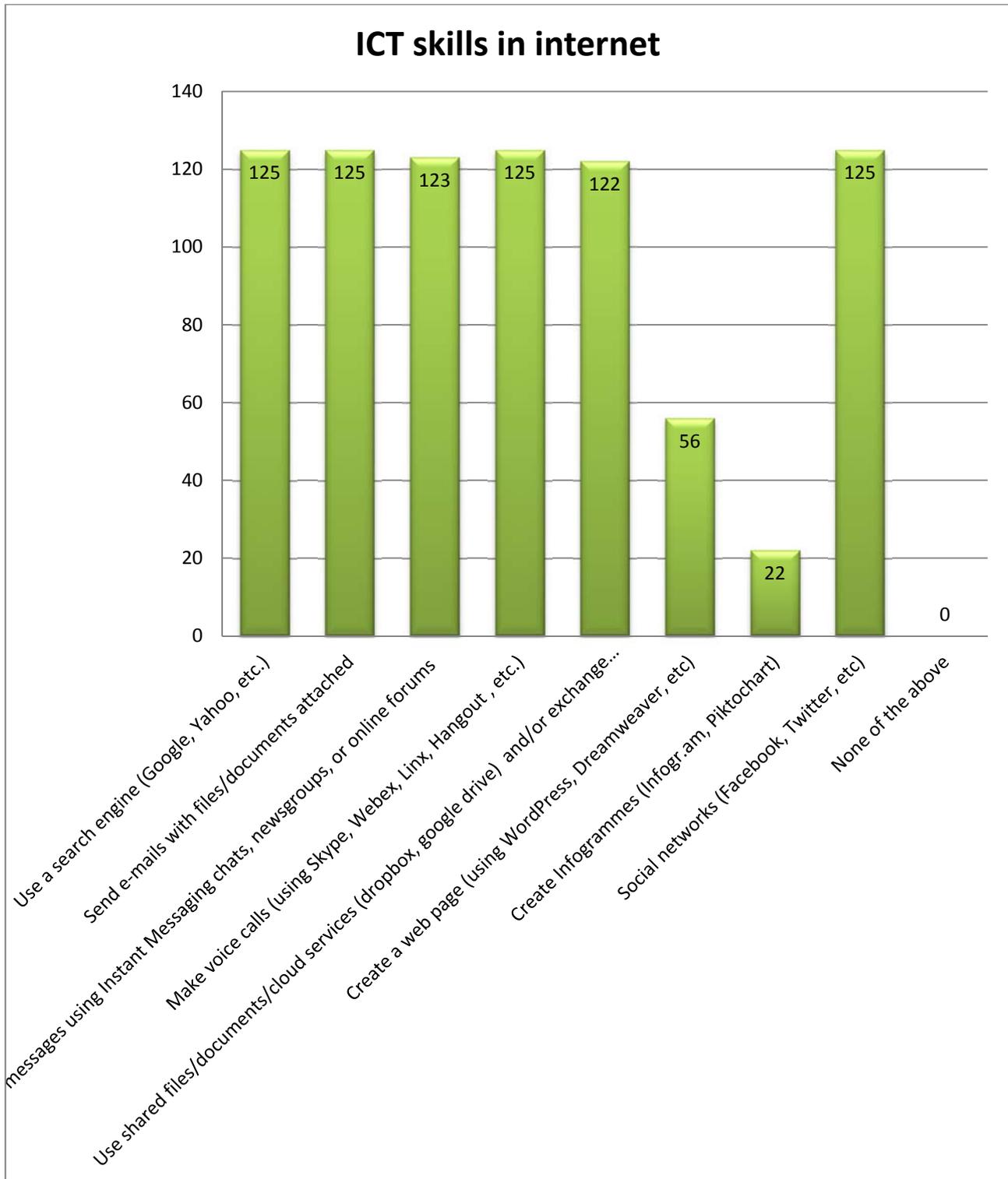
2. ICT and internet usage habits

Analyzing the ICT habits of the respondents it is seen that the numbers greatly matches with general entire country statistics. 94% of respondents use mobile devices and the internet every day. 4% – 3-5 times a week and there is not any of respondents who have never used the internet and mobile devices or use it only occasionally. The technology is a regular tool for daily basis activities.

Both – skills of computer and internet use were evaluated very high. See the chart below.

ICT skills on a computer

Category	Value
File management (create folders/files, move, copy, paste ect.)	124
Using standard office software (word processing , spreadsheets, etc)	124
Creating creative content (image editing, video/audio editing)	91
Network administration	26
Connecting/installing new devices (e.g. printers, modems, etc.)	110
Writing a program/database using specialist programming…	30
Use of accessibility tools (On screen keyboards, speech recognition…	87
Use of security programs (antivirus programs, firewall, spyware)	90
None of the above	0

ICT skills in internet

| Category	Value
Use a search engine (Google, Yahoo, etc.)	125
Send e-mails with files/documents attached	125
messages using Instant Messaging chats, newsgroups, or online forums	123
Make voice calls (using Skype, Webex, Linx, Hangout , etc.)	125
Use shared files/documents/cloud services (dropbox, google drive) and/or exchange...	122
Create a web page (using WordPress, Dreamweaver, etc)	56
Create Infogrammes (Infogr.am, Piktochart)	22
Social networks (Facebook, Twitter, etc)	125
None of the above	0

This data can be accepted in two ways: either respondents indeed have great ICT skills or they overestimate their knowledge. This evaluation comes to the mind after interview with Skaidra Vaicekauskienė, the director of IT learning center in Lithuania. She tells about the often practice when young people think they can programme the website if they know how to upload the image into the web or have heard about SEO.

From the chart data it is also can be seen that particularly skills needed for job such as web programming, creating inforgrahpics, data base knowledge are percepted weeker than the other tasks.

3. *Obtaining knowledge of new technologies*

Ways of learning new technologies
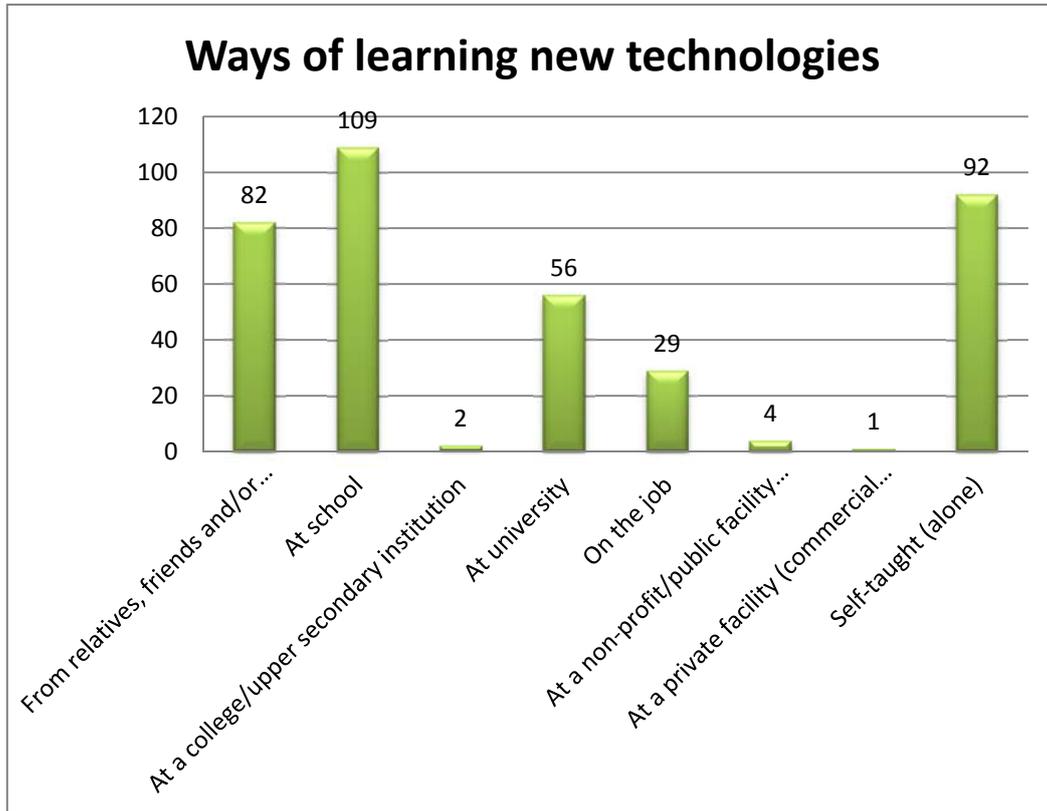
Important role plays formal education – school, university. One third of digital skills needed respondents obtained at work.

From the chart above it is seen that mostly learning to use IT is self-taught process – 73% of respondents indicated it as the main source. It can be considered that formal education does not provide up-to-date knowledge and content. On the other hand, online learning material has tremendous importance. Online videos, e-courses, tutorials are the most popular for youth learning process.

MAIN CONCLUSIONS AND RECOMMENDATIONS

ICT European statistics show that, according to the information society indicators Lithuania is a strong mediocre "in the context of the EU - LT occupies a middle position according to various criteria, reflecting the maturity of the processes of the information society in areas such as population, digital competences, e-government and business, ICT infrastructure development. Lithuania takes the 11th place in the European Commission published the EU digital economy and society index (according to the availability of internet Lithuania is the eighth of the EU countries, according to the use of digital technology skills is the seventeenth in the EU, according to business integration of digital technologies Lithuania is the ninth, and digital public services - sixteenth of the EU). Accordingly, the European Digital Agenda responds very well the specifics of Lithuania and is integrated into the main Lithuanian strategic documents.

National Digital Coalition encounters most active stakeholders for ICT skills. Through the Memorandum, signed on November 7, 2013 in Vilnius, institutions, companies and organizations coordinating the promotion of a knowledge-based society in Lithuania, promoting and developing digital skills of young people and the community at large as well as training ICT professionals agreed to form the National Digital Coalition for the Promotion of Digital Skills for Jobs in Lithuania (hereinafter referred to as "the National Coalition") and to cooperate in implementing information society development programme 2014–2020 Digital Agenda for Lithuania in order to increase employment and to achieve a more effective use of digital potential.

Major e-skills for job initiatives in Lithuania:

1. Get online week (coordinator in LT Association Langas į ateitį)
2. Virtual learning environment www.epilietis.eu (Association Langas į ateitį)
3. Fit4Jobs project (Association Langas į ateitį)
4. "Libraries for innovation" (National M. Mažvydas Library)
5. "Patinka" (Association Infobalt)
6. "MOKAT" (Association Infobalt)
7. "Infobalt IT academy"
8. "Startup Lithuania", " Appcamp" and Startup Highway " (Enterprise Lithuania)

Independent programming classes by private businesses, such as Adform academy, Ilja Laurs profesional learning initiative, Barclays academy, Visma practice, Samsung academy, Mirosoft Lietuva appcamp, etc.

Formal education is not capable to change as fast as required according to the market needs of today. According to Lithuanian Digital Champion, data processing, analysis and presentation of images, digital media recovery, operation planning and monitoring, data management and software protection, product customization are the topics to be included to school agenda. In this case informal education is most welcome and expected by youngsters.

In 2016 Lithuania will face a shortage of 7000 ICT professionals. It is clear that all above mentioned initiatives as well as new EU SF funded projects which are planned in the near future will help to cover the demand.

From the youth survey it is seen that search on the internet, social media, communication and files sharing are the skills youth perceive as having. From the chart data it is also can be seen that particularly skills needed for job such as web programming, creating inforgrahpics, data base knowledge are percepted weeker than the other tasks. The same observations have stakeholders participated in the interviews. According them – young people overestimate their

ICT skills – they know how to use social media but they don't have enough skills to fulfill the tasks at work.

Recommendations:

1. ICT skills - programming, robotics, etc. - should be given more attention to at school, upgrading, optimizing computer programs up to date. Students will be able to present an attractive area of ICT knowledge, involving awareness raising.
2. More society awareness raising campaigns about the importance of ICT skills for job.
3. More society awareness raising about the importance and perspectives in ICT career.
4. The content for youth should be designed in the attractive, user-friendly manner. The content should contain different medias (audio, video, etc.) also it should be reached by young people using their daily virtual environment.
5. All achievements while learning should be noticed and rewarded.

All 7 modules are useful to acquire new ICT skills for youth. However, Lithuania is mostly interested in Easy coding module, Mobile application development, and Web design module.