MANUAL FOR FORESIGHT IN YOUTH INFORMATION

Youth.Info: Future Youth Information Toolbox

Erasmus+
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LEARNING TO FORESEE – GETTING READY FOR THE FUTURE

Living in the ever-changing world, where not only youngsters are overloaded with information, decreases our ability to see what comes next. Even though we have more evidence and research, we feel less certain about what coming day will bring us. Youth information work has proved to create added value in these changing times with its flexibility and that is given through the holistic approach. That is our strength and unique selling point for the society and policy-makers. However, it is not enough only to have your strategic or at least an action plan for the next couple of years.

We study history, but we do not learn how to look into the future. Hence we need to develop methods, how to generate insights on middle to long-term developments. By that, we mean 10 to 50 years from now. Seems impossible? Then ask yourself, who defines the future?

From the science point of view, the future is not predetermined. Therefore each stakeholder contributes to the shape of it. That is why any process of foresight should be participative and involve the broad range of stakeholders. This enriches not only the result but provides all participants with a unique learning and conflict prevention opportunity.

Youth information is one of the first services to feel the changes in the situation of young people: in 60s in the case of sudden rise in substance consumption and need for legal counselling, in 90s – migration and mobility after the fall of the Iron wall, in 2000s – internet and information literacy issues, in 2010s – youth unemployment and war refugees. Youth information services have been on the frontiers of providing young people with information and support in these crisis situations. However, we could do better in
observing societal trends and developments and prepare ourselves and our services to react in even more professional manner.

In 2015 I have interviewed youth (information) workers, NGOs, young people, policy-makers and city politicians on the youth information in the city of Vilnius for the next 15 years. Out of that three scenarios came out of how future youth information could look like. This was the very first pilot in the “soft-policy” field as youth information is, using foresight methodology that normally is being used for issues like national security, economics or climate change. It gave valuable insights because it always includes an aspect of mobilizing for concrete actions, how to reach or shape the future that awaits us.

Foresight in youth information work can help in planning and developing services: it can indicate relevant topics, work methods, formats and channels that the technology will enable and youngsters will require in the future. By bringing all relevant actors in the discussion, you offer the possibility to create a shared vision, since long-term envisioning unites people for common action. It stimulates the awareness building of the added value of your work and herewith lobbies for more support from decision-makers.

Foresight finds itself between fields of future studies, strategic planning and policy analysis. In order to make this rather new approach more accessible, comprehensible and easily adaptable to the work environment, supporting material is needed. Project consortium “Youth.info: Future Youth Information Toolbox” has created this manual to break down the concept of foresight, give concrete practical tips on how to conduct it yourself and has piloted it using three different methods to show examples. It is created not only for the use of youth information workers, but primarily for those who plan, execute and make decisions in this field as also to inspire anyone working as a youth (information) worker, expert, decision-maker etc.

We hope that this manual and foresight approach will open a new window to the future insights for your work, and this time you will be able to meet them with more readiness.

On behalf of the project team,
Evaldas Rupkus
Foresight is an overall term for different methods and approaches to take uncertainty, complexity and ambiguity into account when exploring possible futures and planning for transformative actions. The objective of foresight rests upon the assumption that the future is in the process of forming and there can be scopes to speculate plausible changes and prepare accordingly. According to A practical guide to regional foresight 2001, is a systematic approach in gathering future intelligence to make decision in the present and mobilise joint actions (Gavigan, J.P. ed., 2001) Foresight is much used in administration and governance to construct contingency plans for undesirable but possible and probable scenarios, while creating policies that capitalize the transformational possibilities of preferred futures, moving from foresight and insight to strategy and action. At the same time, practical application of foresight in strategic planning and policy development can also be empowering for service recipient. Participatory and inclusive foresight methods create spaces for dialogue and negotiations between a broad spectrum of stakeholders, perspectives and futures and capturing the distributed, and often tacit knowledge among different actors.

Foresight is useful especially in areas where technologies, applications and processes are quickly changing. Youth information is such an area while young people generally are agile users of modern technology. The changing information landscape put also challenges on digital skills, equality and engagement, and there are several possible scenarios for future youth information work. Youth information work must also be planned on different levels in society; local, regional, national, and international. Policy making at different levels is of a great importance and foresight is a valuable technique in those efforts when predicting the information landscape of the future.

Foresight is not easy. We have a tendency to deny change and cast reality into familiar categories. Foresight activities need extensive
preparation, illustrations of futures thinking, selection of methods and identification of strategies that ensures equal participation.

GENERALLY ABOUT FORESIGHT PROCESSES
First of all, it is important to remember that foresight is not prophecy nor forecasting. It is comprised of anticipation, appropriation, and action. According to FORLEARN (2007) in the Foresight Online Guide there are four foresight principles which are action orientation, an openness to alternative futures, the use of participatory methods, and a multidisciplinary research orientation. The entire endeavor of foresight is a combination of multiple data collection procedures which all converges to designing a roadmap to execute the subsequent phases to create new and often encoded knowledge.

PARTICIPATORY APPROACH
Assuming foresight studies often take place in societies where democratic ideals prevail, and legitimacy is normally gained through participatory processes, it is important that the foresighting not just rely on evidence and expertise but also creativity and interaction. Foresight studies rely on a wide variety of methods which can be again applied in different ways (i.e. they have variants). Choosing and applying the right method for a specific exercise is a crucial step in any Foresight method. Choosing and applying the proper technique for a particular exercise could be a crucial step in any Foresight method. It’s necessary to emphasise that no one technique could be a panacea. Every technique is best suited to certain specific objectives, context, resources, culture and also the mindset of the team and participants, and can prove inadequate if these conditions are not met.

NATURE OF FORESIGHT METHODS
Methods is characterised as qualitative, quantitative or semi-quantitative. Qualitative methods typically provide meaning to events and perceptions. Such interpretations tend to be supported subjectivity or creativity that’s typically difficult to corroborate, for example opinions, judgements, beliefs, attitudes, etc. Quantitative ways typically live variables and apply statistical analyses, exploitation or generating, at least in theory, reliable and valid knowledge, akin to socio-economic indicators. Semi-quantitative ways are primarily those that apply mathematical principles to quantify subjectivity, rational
judgements and viewpoints of experts and commentators, i.e. coefficient opinions and chances.

**FURTHER READING**
For-learn Online Foresight Guide: 
[Link](#)

**CAPABILITIES OF METHODS**
The capabilities of methods is the ability to gather or process information based on evidence, expertise, interaction or creativity. Creativity refers to the mixture of original and imaginative thinking and is often provided by artists or technology “gurus”, for example. Expertise refers to the skills and knowledge of individuals in a particular area or subject and is frequently used to support top-down decisions, provide advice and make recommendations. Interaction recognizes that expertise often gains considerably from being brought together and challenged to articulate with other expertise (and indeed with the views of non-expert stakeholders). Evidence explains that it is important to attempt to forecast a particular phenomenon with the support of reliable documentation and means of analysis of, for example, statistics and various types of measurement indicators.

**CHARACTERISTICS OF METHODS**
Important concepts that can be used to characterize methods include:

› The level of participation (large involvement of citizen versus reduced number of experts)

› The degree of reliance on expertise

› The degree of interactivity

These qualities can be consolidated inside a technique in different courses thus, for instance, a scenario planning can vigorously depend on expertise and utilize this in a creative and interactive way. On the other hand, a Delphi survey could involve thousands of people without being interactive.
Qualitative (15)
Semi-Quantitative (6)
Quantitative (3)
Other methods

Source: Adapted from Popper (2008)
Aside from the very aspiration of the foresight study, some reasonable elements impact the nature and the technique of a foresight. The pre-foresight or scoping stage is the phase where strategic and early process choices are made. The vital choices need to do with components identified with the general objective of an activity (rationales, general and specific objectives, work plan, expected outcomes, etc.) while the early procedure choices identify the five components that are potential elements impacting the choice of techniques.

**FORESIGHT PROCESS IN GENERAL**

Foresight has been increasingly understood as a systematic process with five interconnected and complementary phases (Miles, 2002; Popper, 2008). A foresight study includes decisions on where to conduct the study, what area of knowledge to gather, who should be the target group, how do we preserve the knowledge obtained, and finally how to update the insights in the future. The entire process of foresight is hence largely divided in five phases.

1. pre-foresight
2. recruitment
3. generation
4. action
5. renewal

In the pre-foresight phase, apart from the aspiration of the foresight study, some practical factors influence the nature and the method of a foresight. The pre-foresight or scoping phase is where strategic and early process decisions are made. This is the phase where the rationales of the study, the general and specific objectives of the study, detailed work plan to conduct the study, and expected outcomes are discussed and finalized. There are five factors that determine these decisions which are:

- **Geo-R&D context** – A factor used to cluster countries into world regions taking into account the gross expenditure on research and development (GERD) as percentage of GDP. In this project of Youth Information Toolbox, eighteen countries of Europe were considered as the information service premise. The countries share an extent of parity in terms of investment in R&D as a percentage of their GDP.

- **Domain coverage** – Refers to the sector, industry or research area covered by the study. In the project, the information service sector was the primary domain that have been studied. The participants of the study commented on the future possible changes that will affect the service design and execution.
Territorial scale – Refers to the geographical scope of a study, which can be sub-national (regional), national and supra-national (international). In the project of Youth Information Toolbox, the study included eighteen countries of Europe where the outcomes of the foresight might be implemented.

Time horizon – Refers to the selected time scale of a study. This foresight attempted to see the possible changes in the information landscape of 2030. The study of the foresight in this project was initiated on the 19th of January 2018 and was closed on the 28th of February, 2018. The respective report generation was then initiated and communicated.

Sponsorship – Refers to the type of actor(s) funding and supporting a study. Common sponsors of foresight include the govern-

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**Foresight process (Popper, R., 2008)**
ment, non-state actors (including IGOs and NGOs), research actors (particularly research funding agencies) and the business sector. In this project ERYICA (The European Youth Information and Counselling Agency) and its member organizations were the main actors in conducting this foresight pilots.

The recruitment phase is about enrolling key individuals and stakeholders who can contribute with their knowledge and expertise on particular issues and promote the research process within their own networks. For practical reasons it is presented as the second phase of the process but the engagement of and interaction between stakeholders is needed through the life of a study.

Two fundamental elements of this phase are:

- Target groups, meaning the type of stakeholders (users/audiences/contributors) that have been involved in the study. This may include government and private advisors, researchers, individuals in governing bodies, and so forth. The project of Youth Information Toolbox involved, youth information workers, policy makers, youth workers, and users to speculate the future changes

- Participation scale, meaning the level of openness of a study. This refers to the inclusive strategy in conducting the study so the study could take every necessary sphere of a phenomenon into account. In this project, it was ensured that not only the experts but also the youth could participate so they could share their views about the future too.

The generation phase is the heart of a foresight process, where prospective knowledge and shared visions are generated. In this phase measures are determined to obtain tacit knowledge from participants and fused, analyzed and synthesized with knowledge obtained and preserved earlier on a particular domain. This fusion of newly obtained insights are merged with previously obtained and preserved knowledge to produce new knowledge. In this occasion as shared visions and images of the future. This phase involves three interdependent activities:

- exploration – using methods like literature review, scanning or brainstorming to identify and understand important issues, trends and drivers; the Youth Information Toolbox foresight included researchers who studied and brainstormed the processes that could be used to obtain insights from the participants. Relevant literatures were studied to determine the methods and their execution.
analysis – using methods like expert panels, extrapolation or SWOT to understand how the context and main issues, trends and drivers influence one another. In the project for example, scenario planning was used to engage with youth workers to absorb knowledge from their experience and their opinion about the future.

anticipation – using methods like scenarios or Delphi to anticipate possible futures or suggest desirable ones. A Delphi survey was also conducted in this foresight to discuss main changes and challenges that youth experts and policy makers anticipate to be critical in the future.

Finally the codified outputs are drafted and evaluated. This phase includes, recommendation for policies, identifying contemporary trends and drivers, need of further research, and future need for logistics and infrastructure roadmaps.

The action and renewal phases are influenced by the type, quantity, quality, relevance, usability and timely production of codified (and process-related) outputs. This usually refers to the reports that were planned to be published after the foresight process.

Action is about reaching communicating the key players who are responsible for the implementation of the policies and decisions produced in the generation phase. At this phase, the foresight process should link with traditional strategic planning processes with the key policy makers in order to define realistic action plans. This bridge between foresight and planning is sometimes achieved with methods like road-mapping and morphological analysis, for example.

Renewal is a mixture of intelligence and wisdom. It is about gaining knowledge and understanding of the opportunities and threats identified in the codified outputs and the process itself. This phase includes the evaluative approaches like interviews, literature review and opinion surveys to identify any possible constraints in any of the activities. This approach helps acquire new knowledge and insight about both the output and the process which improves future researches on the same area.

In the following phase, we will discuss the different methods of foresights that were primarily selected for the foresight study of the project “Youth.Info: Future Youth Information Toolbox”1. The methods are broadly divided into two categories - Institutional Foresight and Engaged Foresight.

1 Funded by the European Union Erasmus+ programme.
DIFFERENT FORESIGHT METHODS
Foresight methods can roughly be divided into institutional and engaged foresight methods.

› Institutional Foresight
   › Environmental or Horizon Scanning
   › Text mining
   › Scenario planning
   › Futures wheel
   › Relevance tree

› Engaged Foresight
   › Delphi Method
   › Expertpanel
   › Road mapping

ENVIRONMENTAL OR HORIZON SCANNING
This approach systematically explore the external environment to (1) better understand the nature and pace of change in that environment, and (2) identify potential opportunities, challenges, and likely future developments relevant to your organization. For governments, scanning helps ensure that policies are resilient to different future environments. The increasing availability of large amounts of open data, including from massive online surveys and consultations, social networking platforms or crowdsourcing tools, is also changing the way traditional environmental scanning or ground-sensing can be conducted.

STEEP analysis is a useful framework to apply in scanning work that considers the Social, Technological, Economic, Ecological/Environmental, and Political domains. Other domains to consider include Legal, Ethics and Demographic (STEEPLED) or Regulatory factors (STEER).

FURTHER READING
For-learn Online Foresigh Guide: Link
OECD, Schooling of Tomorrow Knowledge Base. Overview of Methodologies: Link

TEXT MINING
Text mining recognizes examples and breakthrough occurrences in large amounts of raw data and data accumulated from internal or external sources. The objective is to find previously unknown information to the analyst. Text mining include text categorization, text clustering, concept/entity extraction, production of granular taxonomies, sentiment analysis, document summaries, and
entity relation modelling (i.e., learning relations between named entities). Text-mining requires the use of specialized software.

**FURTHER READING**

GCPSE Foresight: [Link](#)

**SCENARIO PLANNING**

Scenario planning is one of the most well-known and most cited technique for thinking about the future. Scenarios are stories (or narratives) set in the future that explore how the world would change if certain trends were to strengthen or diminish, or various events were to occur. The scenario planning is effective because it helps to shape the infinite number of possible futures to a manageable size of three to four ‘futures possibilities’ on a specific phenomenon (Gavigan, J.P. ed., 2001). Scenario planning aims for the intervention of strategy and the testing of related organisational characteristics against multiple representations of the future of business environment. Scenario planning does not attempt to predict what will happen, but through a formal process identifies a limited set of examples of possible futures that provide a valuable point of reference when evaluating current strategies or formulating new ones. This method questions assumptions about the future and creates confidence to act in a world of uncertainty.

**FURTHER READING**

A practical guide to regional foresight: [Link](#)


**FUTURES WHEEL**

A futures wheel is a graphical representation of direct and indirect future results of a change or advancement. Futures Wheels can likewise be utilized in basic leadership and decision making (to choose between options) and in change management (to distinguish the outcomes of progress). The tool is particularly valuable amid the conceptualizing phase of Impact Analysis. Impact analysis examines the cause, nature, potential impact, likelihood and speed of arrival of an emerging issue of change.

**FURTHER READING**

GCPSE Foresight: [Link](#)
RELEVANCE TREE
A “relevance tree” is a technique to subdivide broad topics. The output is often pictorial with a hierarchical structure that displays how a given topic can be split into finer levels of detail.

FURTHER READING
GCPSE Foresight: Link

DELPHI METHOD
The Delphi Method is a technique to structure group communication processes to deal with complex issues and obtain informed opinion and the evidence that underlies expert judgements (Gavigan, J.P. ed., 2001). It involves expert survey responses in a series of iterative learning rounds. Delphi first establishes the group’s initial view, presents instant feedback on differing opinions, and goal seeks an agreed position in the final round. Contributors to the group analysis do not have to meet in person and can see the results as they, and their colleagues, add their views in real time. At the beginning, the organizer(s) formulate questions about the future and present these to contributors. Contributors respond by adding their rankings and comments. The organizers then modify the anonymous comments received to formulate better questions. The process is run again, in a series of rounds, until a consensus answer is arrived at.

FURTHER READING
For-learn Online Foresight Guide: Link


EXPERT PANEL
The “expert panel” is of the most frequently used methods in foresight. This method employs a predetermined group of experts and professionals outside the organization (sometimes anonymously) to give feedback on issues. Most of the activities in engaged foresight exercises are carried out by expert panels. The idea of expert panel is to obtain expert knowledge. The panels are typically groups of 12-20 individuals who are given 3-18 months to deliberate upon the future of a given topic area, whether it be a technology (e.g. nanotechnology), an application area (e.g. health), or an economic sector (e.g. pharmaceuticals).

The idea of expert panel is to obtain expert knowledge.
FURTHER READING
For-learn Online Foresight Guide: Link

ROAD MAPPING
Road mapping is an important tool for collaborative planning and coordination for corporations as well as for entire industries. It is a specific technique for technology planning, which fits within a more general set of planning activities. A roadmap is the document that is generated by the process. It identifies (for a set of product needs) the critical system requirements, the product and process performance targets, and the technology alternatives and milestones for meeting those targets. In effect, a technology roadmap identifies alternate technology “roads” for meeting certain performance objectives.

FURTHER READING
For-learn Online Foresight Guide: Link

FORESIGHT PILOTS IN THE PROJECT YOUTH. INFO – FUTURE YOUTH INFORMATION TOOLBOX
After studying and testing the different methods of foresight in connection to the nature of the project of “Youth.Info – Future Youth Information Toolbox” three methods were selected for pilot and explained more in detail.

› Future Youth Information Camps
› Scenario Planning Webinar
› Delphi study

The foresight study aimed to elicit expert knowledge to develop long-term strategies (Gavigan, J.P. ed., 2001) in the future information service arena. Under such prerequisites, the aforementioned methods were selected.

FUTURE YOUTH INFORMATION CAMPS
This pilot task is based on the Future Camp method developed by Finland Futures Research Centre, University of Turku. The aim of the futures workshops is to generate intuitive and innovative futures knowledge and presents alternative paths to the future. Futures workshops are particularly appropriate for the analysis of operational environments as well as for organisations searching for new directions and product development processes. The participants were asked to think about How will it be to be young (16-20 yrs) in 2030?

Three future youth information camps were conducted, 1 in Latvia and 2 in Lithuania.
The organizers were asked to describe the experience from both theirs’ and the participants’ perspectives. The objective was to understand operational details such as ease of participation, feasibility of the number of statements used, ease of comprehension, and time duration feasibility. The Latvian study involved 18 participants while the Lithuanian had 10+6. The camps were arranged on the 13th and 27th of February 2018 respectively. From Latvia it was Latvijas Jaunatnes padome and from Lithuania it was Labdaros ir paramos fondas “Jauniems” who arranged the camps, inviting the participants and moderating the events. The average age of the participants were 16 to 19. The camps took around 1.5-2 hours to complete.

The instructions for conducting the Future Youth Information Camps and the full report are found as appendices to this manual.

SCENARIO PLANNING WEBINAR

Scenario analysis is a process of analyzing possible future events by considering alternative possible outcomes. Thus, scenario analysis, which is one of the main forms of projection, does not try to show one exact picture of the future but projects multiple possibilities of the future so sufficient preparations can be initiated. The scenario planning webinar was done as a group exercise. For the pilot, we aimed at 5-8 participants to be able to manage the steps in a maximum of 3-hour session. Generally, scenario planning can be done with the group ranging anywhere from 9 or 10 up to perhaps 30 participants. One facilitator can handle a group of about a dozen. It is prescribed that the participants/experts are open, intelligent, motivated, imaginative, and strategic thinkers. They also need to be good communicators – able to formulate ideas and to explain them clearly to the others. Last, the people chosen to participate in a scenario planning exercise should be individuals who are well respected and in positions to provide constructive opinions and foresights.

The Scenario Planning generally involves the following steps:

Prior to the workshop

1. Framing the challenge. The most general and wide-ranging application for scenario planning is simply to reveal insights into future opportunities (and threats) that would affect an organization’s overarching mission. In our case, it can be “Providing superior information service to the target group”.

The Scenario Planning generally involves the following steps:
2. Gathering information. A coherent future scenario cannot be created without understanding the current key trends and driving forces. The best way is through personal interviews. Interviewees bring subjective opinion and subtle judgment into the equation.

During the workshop

3. Identifying driving forces. The classic tool for helping generate a list of driving forces is the “PEST” model. A scenario planning group will be asked to think of relevant forces at work in their area of expertise: Political, Economic, Social, Technological

4. Defining the future’s critical “either/or” uncertainties. The knowledge experts provide their opinions on the future in relation to the above-mentioned driving forces. The questions must be articulated in a manner so it reveals the plausible either-or uncertainties and discusses the major contrasts between alternative futures.

5. Generating the scenarios. The result is a scenario cross, a matrix in which the four quadrants represent four different scenarios. At this phase, we create the list of plausible future scenarios concluded by the knowledge experts in the interview or seminar.

6. Fleshing them out and creating storyline. The ideal result is a description of the future end state, a detailed picture of what the information world may look like along with a story explaining how it came into being (i.e., the developments taking place over the next 10 years that lead to that end state).

After the workshop

7. Validating the scenarios and identifying further research needed

8. Assessing their implications and defining possible responses

9. Identifying signposts

10. Monitoring and updating the scenarios as time goes on

Resources required:

› Knowledge experts/ Service providers
› Structured interview questionnaire
› Recording of the session/seminar/webinar

A full report of the conducted scenario planning webinar is found as an appendix to this manual.

DELPHI SURVEY

The Delphi method is a widely used and accepted method for gathering data from
respondents within their domain of expertise. In short it is an iteration process until consensus about the topic is reached. A series of questionnaires are sent to the experts and between each round the researchers collect the answers, find similarities, and address different views of the participants in order to finally find a consensus. The rounds can be as many as needed, but usually 2-4 rounds are enough. Three rounds were enough in this pilot study.

**Survey process and schedule for the pilot:**
The first round begins with an open-ended questionnaire. An online survey tool is recommended (in this project Survey Monkey was used). The experts were asked to think into the year 2030.

1. What will be the main challenges in providing youth information 2030?
2. What will be the main changes in youth information and counselling 2030?
3. How will information behavior of young people change until 2030?

The second round was a structured questionnaire and the respondents are asked to review the items summarized from the first round. It can be to rank or in other ways review the statements or items. Areas of agreement and disagreement are identified.

In the third round, the experts received a questionnaire that included the items and ratings summarized from previous round and are asked to revise his/her judgement or specify reasons for remaining outside the consensus.

**Resources required:**
› Questionnaire
› Online survey tool in case of geographically dispersed participants
› Invitation letter

A full report of the conducted delphi study is found as an appendix to this manual.

**RECOMMENDATIONS**
Foresight methods are useful in youth information work when developing strategies, policies or just planning ahead. The following recommendations are based on the three pilots that were conducted in the Future Youth Information Toolbox project.

› The participatory approach is important while it is important to involve several target groups; different youth age groups, experts on youth information, policy makers, and other actors in the area of youth work.
Foresight doesn’t need much resources in terms of material, but it needs engagement, motivation and enough time throughout the process.

Foresight is not easy. The preparatory phase is very important, to invest enough on learning the background about youth information work. Then it is easier to find specific focus areas to foresight as well as develop an understanding of possible futures. It is easier to work with several scenarios than only one.

Depending on the aim with the foresight several methods are recommended while each and every method has its limitations. Collecting data from 2-3 foresight methods gives a more robust understanding of possible futures.

It is important to contextualize the analysis. In the process you find patterns and categories based on responses and discussions. These must then be analysed in the context of the region, country etc. that you are studying. Expertise on youth information work is important when analysing foresight data. Involve different kinds of experts in the work to include different perspectives of youth information work in the analysis.

Define the future! How many years ahead do you want to foresight?

Discussion: Future scopes for foresight

Future use of ICT among young people

In the future the information landscape will be increasingly complex, most of the information will be found online, and we will live in a constant information overload. Communication will mainly take place in social media, but also traditional media (newspapers, magazines) will co-exist. Fake news and manipulation will clearly be an increasing problem in parallel with lack of critical thinking. Youth will face challenges in handling information privacy, security and safety. The education system will change (online education), therefore Internet will be required for conducting studies in the future. All this means young people will need good skills in finding information, evaluating reliability, and validating where the information comes from. Areas of growing information needs are health and well-being, mobility and immigration, human rights, democracy, and data protection. Information needs on AI and big data is growing, especially on how to use these tools and data. There are some concerns about information avoidance but at the same time young people have a growing responsibility in engaging.
Future use of social media among young people and Digital divide

Young people will be more diverse than expected in 2030. This diversity will have many reasons and consequences, which means this aspect is one of the biggest challenges in future youth information work. A growing digital divide is not only because of access to technology, but lies in different levels of digital competencies, attitudes, interest, differences in socio-economic backgrounds, and declining reading skills. The consequences lies in growing isolation (social media bubbles), and too little attention on disadvantaged groups and groups with special needs. Youth information work will need an inclusive strategy.

Future skills of youth information workers

One of the most important aims with future youth information counselling is to give guidance to navigate the complex information landscape, that is educating young people in increasing their information and media literacy. Youth information services will have a bigger role in translating information to young people, making sense of difficult information. Youth information workers will need more training and education in this area. Peer to peer services will grow, but it is important to be aware of the risk of passing on misleading information. There will be a growing competition between different kinds of information providers and therefore youth information will need increasing collaboration and more marketing initiatives. Youth information workers must be digitally competent and be good in networking across services and platforms. They must know and be able to engage the youth, focusing a participatory and interactive approach. Collaborative skills will also be important. Cooperation between youth information services and other stakeholders and actors are needed (e.g. schools, business organisations). Mobility will grow and youth information workers will need more of an international perspective. They will also need skills in having quick reactions to change.

Future information and media literacy / digital literacy needed among young people

Although there is lots of debate in the perception toward future information and media literacy. There are contradicting views whether the information and media literacy among young people will decline in the future. On one hand young people are taught more information and media literacy skills than before, and they should get guidance about literacy skills in many context. The information environment will however
change and there will be a constant need for new information and media literacy skills. Youth information workers must be empowered to do so. Young people will increasingly also learn about information and media literacy by peers.

Funding youth information work in the future

There are different views on whether there will be less resources and funding in youth information work and whether the government realize that youth information services need more resources while there are conflicting priorities, but at the same time getting information is a human right. This is perhaps because resources are dealt with in different ways in different states, and it depends also on which level of resources you think of. On the one hand it is not so much lack of financial resources that develop youth information services more towards an online context, but the place where young people look for information. Putting information online is not a straightforward way to cheaper counselling. Information online needs a lot of expensive promotion also. Innovative ways of financing youth information in 2030 (more towards e.g. fundraising, several funding bodies) shall be imperative.
REFERENCES:

Foresight Manual. Global Centre for Public Service Excellence, United Nations Development Programme: Link

For-Learn, Online Foresight Guide. European Commission: Link


CASE STUDY EXAMPLE #1: FUTURE YOUTH INFORMATION CAMP: YOUTH INFORMATION IN 2030 (YOUTH PANELS)
Report 8.3.2018

This is a summary report based on reports from four future youth information camps in Latvia and Lithuania. Full reports are available on the FYIT consortium google drive.

Muhaimin Karim and Gunilla Widén
Åbo Akademi University, Finland

FUTURE CAMP: YOUTH INFORMATION IN 2030
This pilot task is based on the Future Camp method developed by Finland Futures Research Centre, University of Turku (Link). The aim of the futures workshops is to generate intuitive and innovative futures knowledge and presents alternative paths to the future. Futures workshops are particularly appropriate for the analysis of operational environments as well as for organisations searching for new directions and product development processes. The participants were asked to think about How will it be to be young (16-20 yrs) in 2030?

Four future youth information camps were conducted, 1 in Latvia and 2 in Lithuania. The organizers were asked to describe the experience from both theirs’ and the participants’ perspectives. The objective was to understand operational details such as ease of participation, feasibility of the number of statements used, ease of comprehension, and time duration feasibility. The Latvian study involved 18 participants while the Lith-
uanian had 10+6. The camps were arranged on the 13th and 27th of February 2018 respectively. From Latvia it was Latvijas Jaunatnes padome and from Lithuania it was Labdaros ir paramos fondas “Jauniems” who arranged the camps, inviting the participants and moderating the events. The average age of the participants were 16 to 19. The camps took around 1.5-2 hours to complete.

TASK #1: FUTURE INFORMATION LITERACY

The workshop started with this task in which all participants participated at the same time. It was kind of poll based on a number of statements about information and media literacy skills among young people 2030. Values and challenges are measured through 25 statements (see statements in Appendix 1).

In the Latvian experience, majority of the participants took part spontaneously. However, most of the participant found the list of statements slightly long after crossing the seventeenth one. This was observed by the drop, in concentration and escalation in confusion. The seventh and the eighth statements triggered a discussion where majority of the participants stressed that it is already not possible for them to complete homework without internet access. This was observed in the Lithuanian group as well. Additionally, they underlined several future challenges that might surface as the internet advances. The group mentioned phenomena such as internet limitations in different parts of the globe. They addressed the importance of counseling on privacy, security, and safety. They also insisted on including information and media literacy in the education curricula.

The respondents said most of their communications take place over the social media. The discussion on future technologies captivated the participants and stirred a discussion as well. They suggested, given the exponential progress of technology, people have also become health conscious and living healthy life will be a common practice. In a couple of occasions the statement required further explanations from the coordinators such as the thirteenth and fifteenth. The coordinators had to remind the group from time to time that the scenario are to be pictured in 2030 which is another important intervention that must be administered by the coordinators when conducting such studies. Apart from that, most of the respondents confirmed the statements were mostly easy to understand and the task was completed in thirty minutes. A possibil-
ity would have been to circulate the state-
ments in advance to be able to discuss those
statements that trigger most disagreement.

TASK #2: FUTURE AND MEDIA
The workshop continued with tasks #2 and
#3 so that the participants chose which one
of the two tasks they want to do first. There
was no need for specific guidance or super-
vision, but the facilitator could help with
practical questions. The idea was to give the
participants free hands to be as creative as
they like. Duration: 15-20 minutes. The main
question was: What kinds of media will we
use for communicating in the future?

This was supposed to be a creative task and
the participants could use different materi-
als and techniques to vision what the media
landscape will look like in 2030. Or at least
draw/write about the future media land-
scape. More concrete questions to help the
participants in the task:

› What kinds of communication technolo-
gies will we have in the future (2030)?
› What will a mobile/computer phone look
like in 2030?
› If there is social media (e.g. Facebook, Ins-
tagram, Whatsup) in 2030, what will the
future social media look like? What kinds
of functions will be important (picture,
voice, text, video, multilingual, ..)

REPORTS ON TASK#2
The second task was on future media and
its illustration by the participants. The main
question was what type of media will be used
for communication in the future. Subsequent
questions about the new technologies, their
appearance, and social medias’ role were
asked to guide the participants.

To ensure more room for each participant,
in the Latvian study, the organizers divided
the group into two. To give adequate time
to think, the main question was given first
and the guiding questions later. It was seen
that a short discussion with the group about
the topic of choice helps the participants
think properly. Both the groups highlighted
the persistence of advancement in mobile
and computer technologies. Mobile phones
and computers, as pictured by the youth,
will have multiple features. Their shape and
size will become slimmer and lighter and
hologram might replace the use of screens.
Along with mobile, and computers, televi-
sions will offer equally intriguing features
of using social media and producing holo-
graphic images instead of 2D images.
In the Lithuanian experience the participants mentioned a few more concerns such as, limitations for commercial on the internet. The group also speculated social media having more organizational and educational implications. The group pictured the future as more responsible towards people with disability and information access will be designed incorporating their special needs. They added, media will be more human like and existing social media might need to give way to newer platforms. They also showed concern about social exclusion due to self-promoting activities on social media. Additionally, the youth also believed that some of the traditional sources of information such as newspaper and magazines will still exist. The face to face communication will still prevail with its charm and language diversity will be preserved since information will be available in multiple language and in multiple forms. The youth also believes Facebook will continue to shape the social media landscape and present many new features in 2030.

**TASK #3: FUTURE AND YOUTH INFORMATION SERVICES / COUNSELLING**

The instructions for this task were similar as in task #2. The main question for this task was: *What will the ideal youth information service/counselling center look like in 2030?*

The participants could mainly use post it notes to get several quick ideas on the paper in the process to vision the ideal youth information center in 2030. Or write (draw) about the ideal future youth information center. More concrete questions to think of:

- What would be the best ways to inform young people in the future?
- What would be the best channels/technologies to inform young people in 2030?
- What would be the most important topics for young people in 2030?

**REPORTS ON TASK#3**

In the Latvian case, the youth, divided into two different groups, proposed two different scenarios where one pictured the youth information service predominantly via mobile application. In the application there will be provision to create profile, select one’s areas of interest. While the latest information in the selected areas will be provided by the information center, it will also be possible to ask questions and set appointment for a face to face counseling. The other group stressed that a physical facility to provide information service is also necessary. They imagined the information centers with sound internet connection and free Wi-Fi.
The Lithuanian group added, the information center must also have arrangements to accommodate disabled customers. They also suggested interconnected efforts such as youth information center arranging seminar for business organizations; cooperation as such would enhance the contribution of the service and thus publicize it. They insisted it must closely work with the schools and thus become a practice. The young people visiting the center must have a comfortable environment with new technologies and proper access.

Pictures from the Latvian workshop, future technology and ideal youth information services.

The coordinators confirmed the creative tasks were considered easy for the participants and less guidance was required.
SUMMARY

The future camp concept seemed to work quite well, it doesn’t require any extensive preparations and not very much of different materials and props. However, task #1 had probably too many statements and it is difficult to keep up the concentration for almost 30 minutes. This task could also have been circulated in advance and based on replies the panel could have focused statements where there were most disagreement and to have time to discuss and motivate different scenarios. The creative tasks were considered easier and more fun. The panels produced quite concrete scenarios although the youth had difficulties in looking almost 15 years ahead.

The outcomes from the future camps can be summarized as follows:

› The education system will change and it will not be possible to study without internet in the future.
› Social media will still have an important role as communication channel in 2030, new platforms will be developed and Facebook will continue to shape the social media landscape. Social media will have implications also for education.
› There will naturally be a lot of advancement generally in mobile and computer technology.
› Information and media literacy was highlighted and especially the importance of counseling on privacy, security and safety. Information and media literacy was recommended to be included in the school curricula.
› Also challenges were underlined such as social exclusion due to self-promoting activities on social media.
› Information services will predominantly be given through mobile applications. However, the physical facilities were considered necessary, giving a comfortable environment with new technologies and proper access. Information centers must also have arrangements to accommodate disabled customers.
APPENDIX 1: STATEMENTS (TASK #1)

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<thead>
<tr>
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CASE STUDY EXAMPLE #2: SCENARIO PLANNING

Report on the scenario planning webinar 12.2.2018

In the scenario planning webinar we had 7 participants from Spain (2), Austria (2), Lithuania (2), Badgecraft.eu (1). The webinar lasted for 2,5 hours.

DURING THE WORKSHOP WE AIMED AT DEVELOPING FOUR SCENARIOS IN THE AREA OF FUTURE YOUTH INFORMATION AND COUNSELLING SERVICES IN 2030:

› how will young people’s information behaviour change in the future (2030)
› aims and impact of future youth information and counselling services
› skills needed by a youth information worker in 2030
› changes in society affecting youth information and counselling services

REPORT ON THE SCENARIO PLANNING WEBINAR 12.2.2018

1. How will young people's information behaviour change in the future (2030)?
2. Aims and impact of future youth information and counselling services
3. Skills needed by a youth information worker in 2030?
4. Changes in society affecting future youth information and counselling services
5. Summary and recommendations
   › 5.1. Summary
   › 5.2. Recommendations
1. HOW WILL YOUNG PEOPLE’S INFORMATION BEHAVIOUR CHANGE IN THE FUTURE (2030)?

The first task was to vote (agree/disagree) on the following statements. These statements are the same used in another foresight pilot, Future youth information camps, where young people have voted on the same statements. It will be interesting to see if there is any difference between the vision of young people and youth information workers. During the webinar two participants were together, meaning they had one vote, and one participant joined later and didn’t take part in task #1. Therefore there are 5 votes in this first task.

This task could have been done in another way, so that the participants would have filled in the statements in advance, as a preparation for the scenario planning webinar, and then we could have focused on statements where the participants have different views.

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**SCENARIO 1: YOUNG PEOPLE’S INFORMATION BEHAVIOUR IN 2030**

The participants were totally agreeing on 6 statements. Young people will need more counselling on privacy, security and safety in 2030. The participants also agreed on that information will be available in multiple languages and that information management will be increasingly paperless. Video calls will be more popular for counselling in 2030. The participants were also of the opinion that young people will **not** be more aware of their information needs about work in 2030 and that they will **not** find all information they need on the internet in 2030.

The participants almost agreed (4/5) on 7 statements. Young people will not be able to study without internet access, most social interaction takes place in online environments, and information and media literacy will be integrated with school education in 2030. Young people will still want face to face counselling in 2030. The difference between fake and real news will **not** be easier to judge in the future, but it will **not** be more difficult for young people to identify the information sources they need. Information counselling will **not** be 100% online in 2030.

The rest of the statements got even numbers of agreeing and disagreeing, meaning we did not come to a consensus on those statements. This would have been possible to achieve if we had circulated the statements in advance and been able to focus on those statements where it is more difficult to find a consensus. Statements where the participants had differing views were about what the
future information and technology landscape will look like and the awareness of security and safety issues among young people.

**AIMS AND IMPACT OF FUTURE YOUTH INFORMATION AND COUNSELLING SERVICES**

In the second task we went through the present aims of youth information and counselling and discussed which of these will remain in 2030, what will be most important, less important, new aims in 2030?

Youth information services aims to: (Compendium on National Youth and Counselling Structures, ERYICA 2014, p. 9)

- Provide **reliable, accurate** and **understandable** information
- Give **access** to different sources and channels of information
- Give an overview of the **options** and **possibilities** available on all relevant topics,
- Help young people sift through the **information overload** they face today
- Ensure that young people are aware of all the **rights** and **services** available to them and that they know how to access them
- Provide **support in evaluating the information** obtained and in identifying quality information
- Guide young people in reaching their **own decisions** and in finding the **best options** open to them
- Offer **different channels of communication** and dialogue in order to directly support young people in their search for information and knowledge
- Contribute to the **information literacy** of young people
SCENARIO 2: AIMS AND IMPACT OF YOUTH INFORMATION AND COUNSELLING SERVICES IN 2030

It was thought that using already identified aims for youth information services would make it easier for the participants to focus on future aims. But there is a risk that the participants think too much in terms of what makes the challenges today and less on what might be new challenges in 2030. Still, the participants were able to identify new aims for youth information counselling in 2030.

STILL IMPORTANT AIDS AND AREAS

Information and media literacy

One of the most important aims in the future will still be to provide reliable, accurate and understandable information. This is connected to information overload and the need to support young people in evaluating and identifying qualitative information. Developing the level of information literacy is important. Learning young people to know where information comes from and give tools to young people to manage information. Youth information workers need to raise the awareness on security.

Access

Giving access to information was not considered to be so important in the future, but to highlight the awareness of different forms of information and different information sources. In 2030 everything will be available and there will be so many apps giving information. The services must focus on how these are put together. Everything will be more in the online direction, but important that there will be a person listening and helping, meaning that the emotional part of counselling will still be highly relevant. Some participants felt this aim is a little contradictory – there is also a possibility that AI is more present, we need not to be so judgemental. Information counselling needs to be less afraid of letting machines take care of some parts of it.

New aims

› There might be new professionals in this area; social agent outside education; someone who can show alternative paths in life. For example youth counsellors will be crucial when young people are looking for a job.

› There will be an increasing role of algorithms. Difficult to distinguish who is taking decisions (is it a machine?), suggest
searches by algorithms. Information services needs to take this into account.

› The international dimension. Youngsters will be more mobile and counselling must be about good connections, strong knowledge on European/international level and about integration; European networks

› To help young people to **look into the future!**

**SKILLS NEEDED BY A YOUTH INFORMATION WORKER IN 2030?**

In the third task we discussed the present list of skills needed by a youth information workers and asked the participants to vision which of these skills are still needed in 2030. Also, they discussed what kinds of new skills that could be relevant in 2030. We aimed at listing the 4-5 most important skills in 2030.

Compendium on National Youth Information and Counselling Structures, ERYICA 2014, appendix

**Individual skills**

› Communication in the mothertongue, Communication in foreign languages

› Mathematical competence and basic competences in science and technology

› Digital competence

› Learning to learn

› Social and civic competences

**Skills to develop services**

› Analysing, planning, implementing and evaluating youth information work

› Guaranteeing access to all young people

› Personalised approach

› Use of innovative methods, tools and strategies in providing youth information

› Attractive provision of services

› Promotion and marketing of the services

› Offering information in a complete, up to date, practical and user friendly way

› Ensuring obejctivity of information

**Skills in knowing and working with young people**

› Respecting privacy and anonymity

› Identifying information needs of young people

› Reaching different groups of young people with different needs

› Involving young people in different stages of youth information work

› Help young people to access information and develop their skill in using new technologies
Collaborative skills
› Cooperation and networking with other youth services
› Sense of initiative and entrepreneurship
› Cultural awareness and expression

SCENARIO 3: SKILLS NEEDED OR NEW SKILLS OF YOUTH INFORMATION WORKERS IN 2030

Individual skills
› Digital competence, ability to create technology (5)
› Learning to learn (4)
› Social and civic competencies, human dimensions (empathy) as complement to AI and robots (3)
› Communication in foreign languages (1) – will be machine translated in 2030

Skills to develop services
› All skills listed are important!
› Offering information in a complete, up to date, practical and user friendly way, presenting objective information will be part of the core services (3)
› How to use technology, not all have the ability or means. The risk for a growing digital divide (2)
› Marketing of the services will be an important skill and emphasizing the uniqueness of youth information services; use of innovative methods in providing information (2)
› NEW: evaluate the information work that is done, overcoming negative beliefs about technology, critical to ourselves, being curious of what technology can bring, acknowledge and use technological change

Skills in knowing and working with young people
› Privacy and anonymity, embedded in technology (2)
› Help using technology, more education in this area
› Participation! Knowing young people, making them participate (5)
› Help with access to information, identifying their needs
› Curiosity about young people and technology
› Being ahead! 😊

Collaborative skills
› Cooperation and networking with other youth services (5)
Across platforms and apps  
Ability to understand users of different platforms  
Also find uniqueness through collaboration  
Networking will be the future way of working  
Cultural awareness; international perspective; diversity

<table>
<thead>
<tr>
<th>4-5 most important skills among future youth information workers in 2030:</th>
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<tbody>
<tr>
<td>Digital competence</td>
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<tr>
<td>Information and media literacy guidance</td>
</tr>
<tr>
<td>Participatory and interactive approach</td>
</tr>
<tr>
<td>Collaboration across networks and platforms (and technologies)</td>
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### CHANGES IN SOCIETY AFFECTING FUTURE YOUTH INFORMATION AND CONSULTING SERVICES

We discussed the following topics, what are possible changes and challenges in the area of:

<table>
<thead>
<tr>
<th>&gt; Merging of online and offline lives</th>
<th>&gt; Participation</th>
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<tbody>
<tr>
<td>Information overload</td>
<td>Changes in job market due to automation</td>
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<tr>
<td>Quality of information, information literacy skills</td>
<td>Modes of savings/investment/Entrepreneurial changes</td>
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<tr>
<td>Outreach and peer-to-peer</td>
<td>Mode of recreation and leisure change</td>
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<tr>
<td>Security and safety in the digital environment</td>
<td>Education</td>
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<td>Diversity</td>
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<td>Mobility (Creating information needs about assimilation and naturalization/Immigration)</td>
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SCENARIO 4: MAIN CHALLENGES IN SOCIETY AFFECTING YOUTH INFORMATION AND COUNSELLING IN 2030

During the previous tasks we discussed many things about future societal challenges, making this last task a little overlapping with the previous ones. We discussed the challenges in society on a relatively general level and this could have been more focused. It would have needed better guiding questions from the facilitators and could have been based more on research and evidence, helping the participants to focus. Despite some shortcomings in the webinar design the participants were able to agree on some overall challenges in the society affecting youth information work in 2030.

› The **education system will change**. Providing education will surpass the boundary of class rooms. Many courses and degrees will be available online, moreover, virtual classrooms will emerge. The conventional method of providing education will change, as well as how young people will look for courses, degrees, and seek information regarding education.

› **Information overload** will be a societal challenge even in the future. In this situation peer to peer services will be most important to develop

› One of the biggest challenges is to **react to changes** and reach/aim at the “right” changes. Youth information workers must react **very** quickly.

› **Automated information** will make a difference in future youth information services. In relation to this we discussed already earlier that it demands changes in attitudes also among youth information workers.

› **Online/offline lives** will continue to exist in parallel, but **isolation will grow**, meaning so called social media bubbles will be a growing challenge among young people.

› **Digital divide** will continue to be a challenge and might also change in character
  a. The ability to adopt to new changes will be a key skill among young people
  b. Those who are not adaptive will need more help and counselling

General discussion on futures:

› What is going on on different levels? What will be successful, how can we predict consequences, dealing with fears, becom-
Youth are likely to face challenges in information handling and would need assistance in information privacy, security, and safety. Too much dependency on internet can impair abilities to understand information need and validate them. The youth workers also viewed the future as the triumph of internet and from education to social interaction, it will all take place on this platform. However, there were opposite views as well where some youth workers stressed that youth are less likely to find all information on the internet and face to face counseling will remain as relevant as it is now.

During the discussion on how the aims of the youth information service should look like in the future, the youth workers emphasized on information and media literacy, access, and professional role. They underlined the necessity of the ability to source reliable and accurate information as and when required and validate them. The internet will be a major source of information and the online information landscape is turning more complex every day. Therefore, by 2030, allowing access separately might not be necessary but counseling will remain to address the emotional needs of human beings if not replaced by artificial intelligence (AI) as suspected by some youth workers. The participants also highlighted that to provide an integrated and inclusive service, the organization must ensure strong knowledge and integration of the fast and fluid youth.
In order to materialize the new aims of an organization, reshuffling the required competencies of the employees is essential. The youth workers in the webinar discussed individual, service, knowledge acquiring, and collaborative skills that will be necessary in 2030 to provide superior assistance to the youth. All the participants stressed that the digital competencies, participation and cooperation with other services will be imperative to sustain as a relevant service. They suggested that, the employees must enhance their digital competencies, their ability to learn and practice empathy and humility to complement the future changes. As an institution, beside providing information in a complete, and up to date manner, it must collaborate across networks to enhance participation and interaction.

Overall, the youth workers who participated in the webinar came to a consensus that 2030 is going to be the internet era breaking the boundaries of language and other barriers. However, this phenomenon will stir a great change in the information landscape and thus in the information behavior particularly among younger generations who have not experienced a life without the internet. To perform appropriately in the future, both individuals and institution must address the necessary competencies that will be demanded in the coming days. Equipping the youth with the ability to source and validate information is therefore as relevant as it is to reconstruct the institutional assumptions so it can adhere to the changes year 2030 will bring.

RECOMMENDATIONS
The scenario planning webinar worked well with seven participants. Being an online event the number of participants can’t be as many as in a face-to-face scenario planning event. The duration, 2.5 hours is quite a maximum, it is difficult to focus much longer. The participants were happy with the preparation documentation that they got a week in advance. This consisted of the statements in the first task, the current aims of youth information work, current skills needed by youth information workers and possible areas of challenges in society in 2030. This gave them the possibility to tune their thoughts towards the year 2030 in relation to the four scenario tasks we discussed during the webinar. It is not an easy task to predict into the future and some instructions on how foresighting is done could have been useful. Another approach could have been to try to draw 2-3 alternative scenarios of the future, having then a discussion on consequences
in relation to the different alternative future. A suggestion was also to have several webinars to be able to follow up and continue the visioning over a longer time period.

The first task, the statements about youth information behaviour in 2030, could have been circulated in advance and during the webinar we could have focused the statements where it was more difficult to find consensus. Also, the participants felt to some extent that the foresighting could have been supported by more research and evidence and not only based on individual experience and subjective feelings. On the other hand, the participants had an extensive experience, contributing with evidence from practice based work. However, research material could have been circulated prior to the webinar.

The facilitation was important and was also experienced as working well. The participants appreciated the possibility to meet people all over Europe, discussing and finding similarities in their views about future youth information work. The webinar gave the participants also new ideas and alternative views and opinions on the future. This kind of event helps youth information workers to plan for future strategies and practices.

Material shared by Nerijus Kriauciunas during the webinar:

› Why the Web 3.0 Matters and you should know about it [Link]
› Technology in the future [Link]
› On foresight methods [Link]
› Predicting the future [Link]
› Nerijus’ presentation on How youth work can set trends with digital tools [Link]
CASE STUDY EXAMPLE #3: DELPHI SURVEY PILOT
Foresighting Youth Information Services in 2030

Gunilla Widén and Muhaimin Karim
Åbo Akademi University, Finland
Åbo, 8.3.2018

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4. Aspects of youth information work where it was difficult to find a consensus among the experts
5. The three biggest changes in youth information work in 2030:
6. The three biggest challenges in youth information work in 2030
7. Discussion and conclusions
1. DESCRIPTION OF THE DELPHI METHOD PROCESS

Short description of the method:
The Delphi technique is a widely used method for collecting data from respondents within their domain of expertise. In short it is an iteration process until consensus about the topic is reached. The delphi process has been used in many different fields and is often connected to foresighting activities. A series of questionnaires are sent to the experts and between each round the researchers collect the answers, find similarities, and address different views of the participants in order to finally find a consensus. The rounds can be as many as needed, but usually 2-4 rounds are enough (Hsu and Sandford 2007).

Participants:
The aim was to target experts on youth information and policy makers in Europe as well as researchers in the area of youth information. The recruitment of experts took place 8-18.1.2018 and generated 14 participants. The participants dropped to some extent during the rounds, having 14 participating in round 1, 12 participating in round 2, and 9 in round three. Survey Monkey was used a survey tool in all three rounds.

2. SURVEY PROCESS AND SCHEDULE FOR THE PILOT:
The first round of survey took place 19-26.1.2018. The first round begun with an open-ended questionnaire and the experts were asked to think into the year 2030.

1. What will be the main challenges in providing youth information 2030? This first questions generated 77 replies.
   a. Access to information
   b. Reliability of information
   c. Resources
   d. Young people’s interest, engagement
   e. Other challenges?

2. What will be the main changes in youth information and counselling 2030? The second questions generated 81 replies.
   a. Access to information / Online / face-to-face
   b. Growing/declining need of information services
   c. Resources
   a. Other changes?

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3. How will information behavior of young people change until 2030? The third question with subquestions generated 84 replies.

b. In what areas will the youth information needs grow?
c. In usage of online information and communication channels?
d. The level of information and media literacy?
e. Growing uncertainty of information needed
f. Engagement
g. Other changes?

The total number of replies in the first round was 242. These replies were then analysed and grouped into statements that were sent to the experts in the second round.

9-16.2.2018: The second round was a structured questionnaire and the respondents were asked to review the statements summarized from the first round on the scale whether they agree or disagree with the statements. A total of 69 statements were collected and grouped from the 1st round survey (242 replies). 12 experts replied to the second round of statements.

22-28.2.2018: In the third round the experts received the 27 statements where they had not yet reached consensus and were asked to indicate again whether they agree or disagree, and motivate why. In the end they were also asked to list the three most important changes and three most important challenges in youth information work in 2030. Nine experts replied to the third round of statements.

Round 1 generated 242 replies within three main topic areas. The main challenges in providing youth information in the future were seen to be in access to information, in resources for youth information work, and in the outreach to disadvantaged groups. The main changes in youth information work were considered to be on the balance between online and face-to-face services, different or new areas of youth information counselling as well as in methods to access information, resources, and diversity. On the question how youth information behaviour will change in the future the experts considered the level of information and media literacy, uncertainty among young people about their information needs, the engagement among youth, and interpretation of abstract and fragmented information.

In the second round the experts either agreed or disagreed to the statements in Appendix 1. We defined agreement when
over >80% of the experts agreed on a statement. This means that there is not always 100% agreement on a statement, but with a convincing majority, it could be interpreted as consensus. After the second round there was still 27 statements where the experts disagreed. These were taken to the third round and the experts were asked to indicate whether they agree or disagree, and also shortly motivate why. After three rounds we have a consensus about many changes and challenges in the area of youth information work in 2030. These will be presented in the following section. After that we will report on the statements or aspects where the experts didn’t find a common consensus.

3. THE EXPERTS’ VIEW ON CHANGES AND CHALLENGES IN YOUTH INFORMATION WORK IN 2030

3.1 Scenario of the information landscape

The importance of information and media literacy will be underlined also in the future. The difference between young people with good/poor information literacy skills will grow. Fake news and manipulation will be an increasing problem in youth information work in 2030. The respondents agreed that it will be difficult for young people to identify reliable sources (knowing who is providing information) and to evaluate the quality of information. Also, lack of critical thinking in social media will increasingly lead to the so-called social media bubble and the heterogeneity of information will be a challenge when maintaining access to information.

At the same time fact-check and fake news alert tools will be developed to help young people evaluate information. Young people will be even more creative in using different technologies, at the same time there is a need for media literacy to be a more prominent subject in the education system in the future. More access to harmful information for very young age will be increasingly problematic, not being able to understand, verify or make sense. Young people will not know what information they need, therefore youth information services must cover all aspects of life to help young people navigate the information landscape.

In the context of more complex societies, there will be a growing need for trustworthy and tailor-made information services, guidance to navigate the information landscape, and to evaluate the reliability of information. Research shows the need for personal guidance because of overload of information.
Also information services in relation to mental health questions is becoming a key political priority. In the future youth information workers need more skills in dealing with over-supply of information. Youth information services will have an increasingly important role in “translating” information to young people, making sense of difficult information.

When it comes to areas of information needs among young people in the future the experts agreed on a growing need of information about mental health and well-being, mobility and immigration, global issues, human rights, democracy, e-democracy and e-government, data protection, and overall information about life in increasingly uncertain times. There will also be a growing need for information about Artificial Intelligence, Big Data, but not only for access to information, it will also be important to consider useful implementation of such tools. Youth information should use these technologies as well and not leave the place only for commercial actors. Some experts were underlining that AI and Big Data is not so much for “common” people. Financial literacy among young people in 2030 will be more important than today. More and more young people will end up in debt traps. The educational system do not offer enough guidance in this area.

Methods and technologies that will be used in youth information work in 2030 are face-to-face counselling, new social media tools, speech recognition services, gaming, and new streaming formats. Web-pages and portals will also remain important but perhaps only used for digital assistance and not so much for reading. Young people will also be information providers to peers to a larger extent than today. This might however lead to a growing risk of passing on misleading information.

There will be more selective engagement and participation among young people in the future and fragmented information will be a risk for democratic societies. At the same time new forms of engagement among young people are evolving, like social entrepreneurship. Finally, big companies in the information landscape, such as Google, will be a growing problem for personal information management in the future.

3.2 Scenario of the digital divide and diversity

Youth information work will be more versatile in 2030. The group of young people will be more diverse than expected in 2030 and there will be a need to change the working culture of youth information work towards a more multidisciplinary approach to meet
changing needs. We need more research and international change will be needed to overcome challenges with the growing diversity. A growing digital divide will also be affected by differences in digital competencies, differences between rural and urban areas, and because of the divide between poor and rich. Also, our world is increasingly relying on reading skills, but readiness to practice these skills is going down. In 2030 there will be a group of people outside the society because of poor reading skills. Conflicts, subcultures, fanaticism on European level is growing, leading to bigger need of counselling. There must be more proactive services to help young people to connect different parts of their lives. With growing diversity, it will be even more important to raise awareness of information beyond each and everyone’s “information bubbles”. Compulsory and ongoing training for youth information professionals will be needed in 2030.

Figure 1: Experts agreeing on diversity questions
The group of young people will be more diverse than expected in 2030.

There will be a need to change the working culture of youth information work towards a more multidisciplinary approach to meet changing needs.

There will be a need to change the working culture of youth information work towards a more multidisciplinary approach to meet growing diversity.

There will be a need to change the working culture of youth information work towards a more multidisciplinary approach to meet growing number of refugees.

More research and international change will be needed to overcome challenges with growing diversity.

Youth information services are too white and middle class.

With growing diversity, it will be even more important to raise awareness of information beyond each and everyone’s “information bubbles”.

Our world is increasingly relying on reading skills, but readiness to practice these skills is going down. In 2030 there will be a group of people outside the society because of poor reading skills.

3.3 Scenario of the role of youth information services

Competition between different kinds of information providers will grow and non-experts in youth information work will increasingly influence the information production, meaning that marketing services will steer information usage of youth in 2030. There is a growing need for inclusive strategy in youth information work and even more collaboration is needed in 2030 among key stakeholders to improve the outreach to disadvantaged groups. Marketing the importance of youth information work, and to raise awareness of youth information work and information literacy will be even more important in the future. Despite the development of online services the face-to-face services will still be important also in the future. This is because young people will always need guidance, information and advice, but the information will need to be more catchy, engaging, concise and stimulating.

The experts agreed that immediate information service will be more important (anytime, any place, anywhere). Young people are more and more used to immediate information. Also the access needs to be immediate. Tools are developed such as bots to offer answers “on spot” to young people, combining online initial contact to human interaction as a sec-
ond step. Most of the time, this second step is needed as users expect personal guidance, beyond the general information provided online (Eurodesk Survey 2017\(^2\)).

4. ASPECTS OF YOUTH INFORMATION WORK WHERE IT WAS DIFFICULT TO FIND A CONSENSUS AMONG THE EXPERTS

Even after the third round there were statements where the experts didn’t reach consensus. Most of the statements were about resources. There were different views on whether there will be less resources and funding in youth information work and whether the governments realize that youth information services need more resources while there are conflicting priorities, but at the same time getting information is a human right. This is perhaps because resources are dealt with in different ways in different parts of Europe, and it depends also on which level of resources you think of. Also the statement “Less financial resources will force youth information services to be online” resulted in different views. On one hand it is not so much lack of financial resources that develop youth information services more towards an online context, but the place where young people look for information. Putting information online is not a straight forward way to cheaper counselling. Information online needs a lot of expensive promotion also. In the end the experts wished there will be new ways of financing youth information in 2030 (more towards e.g. fundraising, several funding bodies), but there were some disagreement if that actually would be the case.

Another group of statements where it was difficult to find consensus was statements about technological questions. It is not straight forward to say that inequality to information in the future is because of access to technologies. Technologies will probably be affordable for most people in the future. But the divide will be because of other reasons, not technology. Interest, background, not using internet for learning, are more critical reason for inequality to information. Artificial Intelligence and Bots will play an increasingly bigger role and take over parts of the information work. First examples can be found already today. However, robots can’t replace humans but they can help providing first information services. Humans will always need humans. Face to face is the extra value. Young people will need additional information literacy skills in order to be able to use them accordingly. At Eurodesk they are piloting the Eurodesk Mobility Advisor

\(^2\) Eurodesk Survey 2017 report about mobility and role of youth information:
BOT, called EMA. She can answer basic questions, direct young people and youth workers to relevant tools, but then for more specific questions, EMA sends the users to our human professionals. Humans need humans.

Although there is lots of agreement in the statements about future information and media literacy, this aspect also include statements where it was more difficult to reach agreement. There are contradicting views whether the information and media literacy among young people will decline in the future. On one hand young people are taught more information and media literacy skills than before, and they should get guidance about literacy skills in many contexts. The information environment will however change and there will be a constant need for new information and media literacy skills. Youth information workers must be empowered to do so. Young people will increasinlgy also learn about information and media literacy by peers.

Information behaviour or practices among young people are also difficult to predict. There is both a concern for a growing trend of information avoidance, but also a confidence in young people to be better on filtering information. The engagement of young people in society get also a mixed view, on one hand young people seem to be increasingly disappointed in society, but research shows that young people have a growing responsibility in engaging. The experts are also underlining that it is difficult to have a generalalized view on young people, they are diverse in many things, also in how the manage information, and therefore it is difficult to say whether they are more or less information literate as a group. How young people will consume mass media was also difficult to predict. It depends on how we understand mass media. If we look at mass media as it is today, the consumption will decline. But probably mass media will also change format and the content will be consumed also in 2030. Here we also have the challenge with “opinionbubbles” and fake news. It is also uncertain if key stakeholders in youth information are able to collaborate and coordinate their services better in the future. Technology might however be a way to support the coordination.

A slightly different statment was saying that youth information services are too white and middle class. Having a white and middle class team is considered contraproductive if you want to know how to reach vulnerable people. With the increasing number of non-white and non-middle class people in society the target
group will change as well. There is a need to reach out to other groups and convince them that, mobility for example, is also for them. This requires more human resources and a specific know-how in engaging young people. On the other hand the youth information services need to be able to serve all groups in society, both majority and minority groups.

5. THE THREE BIGGEST CHANGES IN YOUTH INFORMATION WORK IN 2030:

The experts were asked to list the three most important changes in youth information work in 2030. Here the experts were quite unanimous. **Technology** will be the most important area of change in terms of digitalization, digital media, virtual work, online services, and artificial intelligence. Young people will probably be unwilling to go to physical places for information and counselling. An increasing need of **guidance in information literacy** is another big change in youth information work in the future as well as more therapeutic services needed. The **youth information services** will also go through changes in terms of closer integration with other areas of youth work, multiple channels and fluidity of services, and better recognition of youth information work. Commercial services will probably also have a bigger role in the future.

6. THE THREE BIGGEST CHALLENGES IN YOUTH INFORMATION WORK IN 2030

The three biggest challenges in youth information work in 2030 follow naturally the biggest changes, but the experts listed also different challenges that are not seen as changes as such. Again, the **information and media literacy** is seen as a big concern and challenge. It has to do with finding reliable sources and having the necessary skills for the digital age. Also the changing **youth information services** are seen as a big challenge for the future. The services will require new ways of working (e.g. artificial intelligence), getting out there with your information, having a good website is not enough. Also, keeping up with the needs of young and attracting young people’s attention, in comparison to all other information providers and encouraging critical analysis of information available will be important. Youth information workers will have to be guides with a very broad knowledge. Youth information services should provide single access point to diverse types of information.

In addition to the concerns that are related to the changes there are challenges in the area of **diversity, and disadvantaged groups**. The importance to reach out to dis-
advantaged target groups, such as young refugees, is underlined. The problems with unequal access to information is something that must be focused more in the future. Finally, **resources and funding** are challenges mentioned by almost all of the experts. Not only the importance of funding the services is highlighted but also enough resources in training of youth information workers.

### 7. DISCUSSION AND CONCLUSIONS

The delphi survey with experts worked well while the experts were really dedicated to the study, interested and engaged in the questions. The number of statements were perhaps too many from the beginning and with less statements we could have kept a bigger number of experts through all three rounds. The survey generated quite distinct scenarios about future youth information work; about the future information landscape, about diversity and disadvantaged groups and about the role of future youth information services. There were some areas where it was difficult to reach consensus, such as about resources for youth information work and how to use future technologies. But this is also an important finding and scenario.

**APPENDIX 1: STATEMENTS BASED ON 1ST ROUND REPLIES**

What will be the main challenges in providing youth information in 2030? (19 statements)

*Access to information is a challenge*

1. The heterogeneity of information will be a challenge when maintaining access to information
2. It will be difficult for young people to identify reliable sources (who is providing information)
3. It will be difficult for young people to evaluate the quality of information
4. Not all young people will have the means (technology) to access information on the internet in 2030
5. Fake news and manipulation will be an increasing problem in youth information work in 2030
6. Lack of critical thinking in social media will increasingly lead to the so called social media bubble
7. New systems to trace back information provision will be developed in 2030
8. Non-experts in youth information work will increasingly influence the information production, marketing services will steer information usage of youth in 2030
9. Competition between different kinds of information providers will grow
10. The growing need for personal privacy will lead to special and well-paid services

Resources
11. In 2030 the governments will realize that youth information services need more resources
12. There will be less resources and staff within youth information work in 2030
13. There will be less funding for preventive youth information work in 2030
14. Less financial resources will force youth information services to be online

Outreach to disadvantaged groups
15. There will be a growing digital divide (differences in digital competencies, differences between rural and urban areas, poor-rich)
16. There will be a lack of knowledge about information needs of disadvantaged groups, making it difficult to develop this part of youth information work
17. There is a growing need for inclusive strategy in youth information work
18. More collaboration is still needed in 2030 among key stakeholders to improve the outreach to disadvantaged groups
19. Computers available in schools and libraries will help to improve the outreach to disadvantaged groups

Main changes in youth information counselling in 2030 (28 statements)

Growing/declining need of information services in 2030
20. Youth information work will be more versatile in 2030
21. Immediate information service will be more important (anytime, any place, anywhere)
22. Online services will grow but face-to-face services will still be important in 2030
23. There will be a growing need for trustworthy and tailor-made information services
24. There will be a growing need for guidance. Help to browse the big amount of information, evaluate reliability
25. There will be a growing need for therapeutic consultation and help
26. There will be a growing need for proactive services, help young people to connect different parts of their lives
27. There will be a growing need of information about
   > democracy, e-democracy, e-government
› global issues
› human rights
› mental health and well-being
› mobility, immigration
› Artificial Intelligence, Big Data
› life in increasingly uncertain times

28. In the future youth information workers need more skills in dealing with oversupply of information
29. Digitalization and robotics will change youth information work
30. There is a growing need for marketing the importance of youth information work, raise awareness of youth information work and information literacy
31. Conflicts, subcultures, fanaticism on European level is growing, leading to bigger need of counselling
32. Finding balance in life, working life and lifelong education will be more focused in youth information work in 2030
33. Compulsory and ongoing training for youth information professionals will be needed in 2030
34. Data protection issues will grow
35. There will be a growing need for financial literacy among young people in 2030
36. Mass media consumption among young people will decline quickly

Resources in 2030
37. There will be new ways of financing youth information in 2030 (more towards e.g. fundraising, several funding bodies)
38. Youth information work will be more recognized as part of the non-formal education
39. Low threshold services will be funded more
40. Counselling by robots will be more attractive

Methods of accessing information in 2030
41. Methods and technologies that will be used in youth information work in 2030
› Face-to-face counselling
› Web-pages and portals
› Virtual realities
› New social media tools
› Gaming
› New streaming formats
› Smart watch
› Skype
› Youtuber, Instagrammer
› Speech recognition services

Diversity in 2030
42. The group of young people will be more diverse than expected in 2030
43. There will be a need to change the working culture of youth information work towards a more multidisciplinary approach to meet
› changing needs,
› growing diversity,
› growing number of refugees

44. More research and international change will be needed to overcome challenges with growing diversity

45. Youth information services are too white and middle class

46. With growing diversity, it will be even more important to raise awareness of information beyond each and everyone’s “information bubbles”

47. Our world is increasingly relying on reading skills, but readiness to practice these skills is going down. In 2030 there will be a group of people outside the society because of poor reading skills

Changing information behaviour of young people in 2030 (22 statements)

The level of information and media literacy

48. Media literacy will be a more prominent subject in the education system in the future

49. The information and media literacy among young people will decline, needing more professionals to guide them

50. The information and media literacy among young people will grow and they will be more aware of information literacy skills because youth information workers have guided them

51. The difference between young people with good/poor information literacy skills will grow

52. The importance of information and media literacy will grow

53. Young people will be even more creative in using different technologies

54. There will be a growing trend of information avoidance

Growing uncertainty of information needed

55. Young people will not know what information they need, therefore youth information services must cover all aspects of life to help young people navigate the information landscape

56. There is a growing need for more trustful information systems

57. Fact-check and fake news alert tools will be developed to help young people evaluate information

58. Big companies in the information landscape, such as Google, will be a growing problem for personal information management in the future
**Engagement**

59. New forms of engagement among young people are evolving, social entrepreneurship

60. There will be more selective engagement and participation among young people in the future

61. Young people will always need guidance, information and advice, but the information will need to be more catchy, engaging, concise and stimulating

62. Young people will be information providers to peers, leading to a growing risk of passing on misleading information

63. Young people will be less engaged in political, social and economic questions (youth information work will have a growing responsibility in engaging in these areas)

64. Young people will have difficulties in focusing deeply one topic at a time

**Interpretation of abstract and fragmented information**

65. It will be a challenge for young people to interpret information because of poor coordination of different services such as school, social service, youth center and social media

66. Interpretation of fragmented information will be increasingly difficult for young people when school education will not provide a wide range of knowledge, not being able to understand relations and connections in world

67. Youth information services will have an increasingly important role in “translating” information to young people, making sense of difficult information

68. Fragmented information will be a risk for democratic societies

69. More access to harmful information for very young age will be increasingly problematic, not being able to understand, verify or make sense
APPENDIX 2: STATEMENTS LEFT BASED ON THE SECOND SURVEY ROUND

What will be the main challenges in providing youth information in 2030?

**Access to information is a challenge**
1. Not all young people will have the means (technology) to access information on the internet in 2030
2. The growing need for personal privacy will lead to special and well-paid services

**Resources**
3. In 2030 the governments will realize that youth information services need more resources
4. There will be less resources and staff within youth information work in 2030
5. There will be less funding for preventive youth information work in 2030
6. Less financial resources will force youth information services to be online

**Outreach to disadvantaged groups**
7. There will be a lack of knowledge about information needs of disadvantaged groups, making it difficult to develop this part of youth information work
8. Computers available in schools and libraries will help to improve the outreach to disadvantaged groups

Main changes in youth information counselling in 2030

**Growing/declining need of information services in 2030**
9. Immediate information service will be more important (anytime, any place, anywhere)
10. There will be a growing need for therapeutic consultation and help
11. There will be a growing need for information about Artificial Intelligence, Big Data
12. Digitalization and robotics will change youth information work
13. There will be a growing need for financial literacy among young people in 2030
14. Mass media consumption among young people will decline quickly

**Resources in 2030**
15. There will be new ways of financing youth information in 2030 (more towards e.g. fundraising, several funding bodies)
16. Youth information work will be more recognized as part of the non-formal education
17. Counselling by robots will be more attractive
Methods of accessing information in 2030

18. Methods and technologies that will be used in youth information work in 2030
   a. Web-pages and portals
   b. Virtual realities
   c. Smart watch
   d. Skype
   e. Youtuber, Instagrammer

Diversity in 2030

6. There will be a need to change the working culture of youth information work towards a more multidisciplinary approach to meet growing number of refugees
7. Youth information services are too white and middle class

Changing information behaviour of young people in 2030

The level of information and media literacy

8. The information and media literacy among young people will decline, needing more professionals to guide them
9. The information and media literacy among young people will grow and they will be more aware of information literacy skills because youth information workers have guided them
10. There will be a growing trend of information avoidance

Engagement

11. Young people will be less engaged in political, social and economic questions (youth information work will have a growing responsibility in engaging in these areas)
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Interpretation of abstract and fragmented information

13. It will be a challenge for young people to interpret information because of poor coordination of different services such as school, social service, youth center and social media
14. Interpretation of fragmented information will be increasingly difficult for young people when school education will not provide a wide range of knowledge, not being able to understand relations and connections in world
OTHER APPENDICES:
Instructions to the Future Youth Information Camp
(attached separately)

Executive summary: Future Youth Information Toolbox
foresight activities looking into youth information
work 2030, 2018
Link»