

# Career Guidance of Disabled People in Sustainable Education Content: Research Experience and Development Prospects

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**Keywords:** Sustainable Education, Career Choice, Applicant, Young Disabled Person, Inclusive Education, Career Guidance.

**Abstract:** Sustainable education is aimed at helping the countries' governments to find the most effective solutions and implement the changes that will make societies more stable and resilient. Inclusive education is designed not only to address educational inequalities, but also to provide citizenship education for people with disabilities. This feature includes willingness to take responsibility for the consequences of their decisions and choices, career choice included. The article considers the results of the study of career choice and the assessment of vocational guidance of 259 young disabled people of 17-20 years old who are at the stage of choosing a route for vocational education. The aim of the study is to assess the vocational guidance of young disabled people in educational sustainable development content. The results presented in the article show that young people with disabilities have serious vocational guidance deficiencies. The ideas about their career prospects and arguments for choosing a career prove immaturity in terms of taking responsibility for their professional choice and awareness of their career prospects. Passive position, lack of initiative characterize young disabled people in terms of choosing their career, their vocational self-determination. The analysis of individual career profiles showed pronounced difficulties in understanding by young people with disabilities their resources, capabilities, limitations and qualities that are significant for choosing a career. The obtained results prove that young people with disabilities need special assistance in vocational guidance and career choice. Such assistance, implemented in the aspect and methodology of ideas for educational sustainable development content, is designed to form special competencies of young people with disabilities. These competencies are designed to ensure the formation of predictive models of their career prospects, the acceptance of responsibility for career choice and the desire for independent life.


## 1 INTRODUCTION


Education for Sustainable Development (ESD) or sustainable education has been proclaimed by the UN and UNESCO as a global strategy for achieving sustainable development of society. Sustainable education is designed to help governments find the most effective solutions and bring about change that makes societies more resilient. In this aspect, one of the main tasks is the education for global citizenship, which ensures that citizens have social attitudes, responsibility for the decisions made and their consequences. Elimination of inequality and ensuring the quality of education without discrimination on


any grounds are effective tools of citizenship formation (Aichi-Nagoya Declaration, 2014).

The issue of eliminating inequalities in education is considered mainly in educational inclusion content, designed to provide people with disabilities equal rights to affordable and quality education, which is the key to independent life and integration into society.

One of the most significant problem areas of inclusive education is vocational education for disabled people, as a basic condition for their independent life. (Alekhina, Samsonova Yudina T.A., 2018; Iljina, Zarin and Kantor, 2020). Sheila Riddell, Elisabet Weedon emphasize that for young people with disabilities, a university is an important

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environment for the formation of responsibility and adult identity, as well as in obtaining qualifications of a higher level. (Sheila Riddell, Elisabet Weedon, 2014).

We believe that the attention should be focused on the intersection of career guidance, inclusive education and the employment of people with disabilities, as it allows highlighting new perspectives and aspects for discussing the problems of sustainable inclusive education.

The issues of career guidance and employment of people with disabilities are considered by researchers from different countries. Miles Rinaldi, Rachel Perkins note that it's necessary to take into account the factual data when deciding on the employment of people with disabilities and making recommendations for a practical solution to this issue (Miles Rinaldi, Rachel Perkins, 2007). The authors believe that too often advice and recommendations on the employment and career guidance of people with disabilities do not correspond to the available scientific data and in fact do not help people with disabilities to get and keep a job. Veronika Calikova, Evgeny Egorov, Elena Razumovskaya state that employment can in practice ensure life independence for people with disabilities, and regional programs are a tool to achieve the goals of inclusive employment (Veronika Calikova, Evgeny Egorov, Elena Razumovskaya, 2014). Sheila Riddell, Elisabet Weedon indicate as a problem the conflicting discourses about disability, as well as a significant increase in negative identity at the stage of the transition of disabled people from university to employment (Sheila Riddell, Elisabet Weedon, 2014). W.Ingamells, S.Rouse, P.Worsfold W.Ingamells, S.Rouse, P.Worsfold point to discrimination against the disabled when seeking employment, which, according to the authors, may be due to employers' lack of understanding of people with disabilities (W.Ingamells, S.Rouse, P.Worsfold, 1991). Angus Duff, John Ferguson, Karen Gilmore emphasize that often, when dealing with employment issues, employers take the position of compliance with legal rights of the disabled, rather than delving into the real needs and opportunities of applicants (Angus Duff, John Ferguson, Karen Gilmore, 2007). O.A. Denisova, O.L. Lekhanova note that at present there is an increase in the quantity of the disabled who receive vocational education and are focused on working in their profession. The authors emphasize that the employer is not always ready to consider people with disabilities as job seekers, which is largely due to the low awareness in business sphere about the real opportunities and competitive work of

people with disabilities. (O.A. Denisova, O.L. Lekhanova, 2020). Mukta Kulkarni, ReimaraValk describe paradoxical situations at the employment of people with disabilities, when disabled employees are embarrassed to ask for help, and the employer does not offer help because of the unwillingness to belittle the dignity of the disabled employee (Mukta Kulkarni, ReimaraValk, 2010). A number of works indicate a decrease in social responsibility as well as consumer sentiment of the disabled. Laufey Lövea, Rannveig Traustadóttira, James Gordon Riceb note that the services availability for the disabled limits their autonomy and negatively affects the desire for independent life and work (Laufey Lövea, Rannveig Traustadóttira, James Gordon Riceb, 2018).

Employment problems are often caused by those deficits that are formed at the stage of vocational guidance for disabled people. Alois Gherguta, Alexandru Ioan Cuza, Toma Cozma, studying the influence of parents and teachers on the choice of a career by schoolchildren with disabilities, observed a significant impact of social environment on the vocational interests of students with disabilities (Alois Gherguta, Alexandru Ioan Cuza, Toma Cozma, 2014). According to the authors, teachers and parents should seek to better understand the special needs of such children in order to positively influence their vocational interests and career choices. Some authors assert that young people with disabilities do not have a holistic understanding of their personal qualities and their place in the world, their career and social prospects. So Kantor V.Z., Antropov A.P., Gdalina T.G. believe that high school students with disabilities need targeted vocational guidance, the emphasis of which should be on clarifying the essence of the career, informing about the content and nature of work in this profession (Kantor V.Z., Antropov A.P., Gdalina T.G., 2018). Some researchers indicate that senior students with disabilities have a vague idea of their career prospects. Sarah Richard и Sophie Hennekam, analyzing the awareness of their limitations and resources of the disabled, highlight the conditions for the formation of a positive work identity of a disabled person (Sarah Richard, Sophie Hennekam, 2021).

In general, the available information allows stating that the correct career choice by a young disabled person is the matter of intersection of the interests of the individual and the state in terms of ensuring conditions for society sustainable development and global citizenship. The correct career choice is associated with the ability to adequately and critically assess their abilities, opportunities, demands and trends in the labor market and education resources. The issue of choosing a

career for people with disabilities is especially acute and requires a comprehensive assessment and analysis. One of the aspects of the issue is the problem of vocational guidance of disabled people in educational sustainable development, which requires its experimental study and comprehension.

## 2 RESEARCH METHODOLOGY

The aim of the study is to assess the vocational guidance of young disabled people in educational sustainable development content.

The study consisted of two stages. At the first stage, a survey was conducted, during which information about the health condition and the age of the respondents was collected. We also collected data on the career prospects of the respondents, the place of getting vocational education, and the leading sources of information for career guidance. The collection of information took place by filling out an online standardized survey [form](https://инклюзивноеобразование.рф) at <https://инклюзивноеобразование.рф>.

The content of the survey was developed and approved by the experts from the Federal Network of Resource Educational and Methodological Centers for the Education of Disabled People, established on the basis of Russian universities.

At the second stage of the study, the young disabled people's career guidance was assessed. Vocational guidance diagnostics was carried out by taking the "Perspective-PRO" test by the respondents. Subsequently, the results of the study were subjected to cluster and factor analysis. Cluster analysis of the respondents for different levels of education was carried out using 3 hierarchical clustering methods: Ward's method, the method of intergroup connections; the nearest neighbor method), the k-means method as an optimization method of cluster analysis.

259 people took part at different stages of the study. At the first stage - 171 applicants with disabilities. The second stage of the study involved 88 young people with disabilities. The age of the respondents ranged from 17 to 20 years old. All the respondents had disabilities in vision (15%), hearing (15%), movement (36%) and general diseases (34%). At the time of the study, the participants in the experiment were at the stage of choosing a route for their vocational education. All respondents lived in the Northwestern Federal District of the Russian Federation.

## 3 RESULTS OF THE STUDY

Let us present the results of the first stage of the study, focusing on such information as ideas about their career prospects and arguments when choosing a career.

Getting the answers to the question about their career prospects from the respondents, we obtained the data indicating that about two-thirds of the respondents are uncertain about their career prospects (Table 1).

Table 1: Young disabled people's ideas about their career prospects

Possible answer	Percentage of the respondents who chose the answer option (%)
Confident of their career prospects	34
Doubtful about their career prospects	39
Having a vague idea of their career prospects	15
Having no idea about their career prospects	12

Let us present the data on the arguments for career choice that are significant for young disabled people. In most cases, the key argument when choosing a career is the income it brings, the conformity of the profession to hobbies, career prospects and the profession prestige. None of the respondents named the state of health, demand in the labor market as an argument for choosing a profession (Table 2).

Table 2: Arguments of young disabled people when choosing a career

Possible answer	Percentage of the respondents who chose the answer option (%)
Prestige of the profession	30
Income	54
Ease of learning by profession	12
Family traditions of choosing a career	11
Compliance with the profession and hobbies	51
Career prospects	28
Arguments are not given	46

Most of the respondents noted that when choosing a profession they rely on the opinion of parents and teachers, information on the websites of educational institutions. It is extremely rare that the career choice

is made on vocational guidance testing, materials from Internet platforms on career guidance and employment, reference data (Table 3).

Table 3: Reasons for choosing a career by young people with disabilities.

Source of information for career choice	Percentage of the respondents who chose the answer option (%)
Parents	68
Teachers	29
Friends	19
Employers	11
University websites	43
Reference sites	14
Career guidance and employment websites	11
Social networks	24

It should be noted that, despite the obvious problems of career self-determination, only 15% of the respondents indicated the necessity of assistance in choosing a career.

At the second stage of the study, individual vocational guidance testing was carried out using the "Perspective-PRO" methodology. The analysis of the results assumed an assessment of the individual profiles of the respondents, their clustering and typology.

Let us consider the results of factor analysis, implemented using the method of principal components (MPC), in order to form generalized characteristics based on the levels of development of the identified 10 spheres of human activity, which determine the main directions of professional development of the respondents:

- Factor 1. Focus on high-tech areas. The factor weight is 2.538. The explained variance is 25.38%. Variables (spheres of activity) that make up the factor: economic sphere (variable weight -0.773); IT sphere (variable weight 0.626); production and technological sphere (variable weight 0.824); pedagogical sphere (variable weight -0.769).
- Factor 2. Focus on environmental and medical fields. The factor weight is 2.342. The explained variance is 23.42%. Variables (areas of activity) that make up the factor: environmental area (variable weight 0.676); scientific sphere (variable weight -0.866); medical and sports and recreational sphere (variable weight 0.818); social services sector (variable weight 0.421).
- Factor 3. Focus on artistic and social spheres. The factor weight is 2.027. The explained

variance is 20.27%. Variables (areas of activity) that make up the factor: artistic area (variable weight 0.861); IT sphere (variable weight -0.41); social services (variable weight 0.684); managerial sphere (variable weight -0.81).

Thus, as a result of factorial analysis using MPC, it was possible to identify 3 factors (main components), describing 69% of the total variance. These factors determine the main directions towards which the majority of the surveyed respondents showed the greatest inclination.

Aiming at typologizing individual career profiles, a cluster analysis of the research results was carried out. With the help of cluster analysis, it was possible to identify 4 types of career guidance profiles of young disabled people:

- Cluster 1 "Selective" (38% of respondents). Dominating personality traits significant for carrier choice: the ability to choose the necessary information from a large volume, dominant visual memory, emotional restraint - 1st rank. Interest in new things, creativity, preference to perform monotonous activities for a short period of time - 2nd rank. Optimism, physical abilities, the ability to accurately present the memorized material after a long time, the ability to establish a connection between cause and effect, find a solution, work in a team and offer non-standard solutions - 3rd rank. The cluster includes people with disabilities in sight, hearing, movement, and general diseases.
- Cluster 2 "Creative" (28% of respondents). Dominating personality traits significant for carrier choice: purposefulness, desire to learn, creativity, the ability to choose the necessary information from a large volume, to offer and find non-standard solutions - 1 rank. The ability to search and analyze information, to accurately present the memorized material after a long time, to adapt to new conditions, the willingness to perform monotonous activities for a long period of time - 2nd rank. The cluster includes people with disabilities in vision and movement.
- Cluster 3 "Adaptive" (26% of respondents). Dominating personality traits significant for carrier choice: the ability to work in a team - 1st rank. Interest in new things, the ability to highlight the main thing, the ability to adapt to new conditions - 2nd rank. Responsibility, developed applied skills (manual labor), creativity, the ability to offer non-standard

solutions, quickly switch to another type of work, developed visual memory, preference to perform activities at a fast pace for a short period of time - 3rd rank. The cluster includes people with disabilities in vision, hearing (including speech), and general diseases.

- Cluster 4 "Analytical" (8% of respondents). Dominating personality traits significant for carrier choice: the ability to plan their activities - 1st rank. The cluster includes people with disabilities.

Individual testing of the vocational guidance of young people with disabilities showed that the leading factors of professional choice and dominant typological features of the vocational guidance profiles of young people with disabilities can be identified.

#### 4 DISCUSSION OF THE RESULTS

The results obtained in the study show that young people with disabilities have serious deficits in vocational guidance. Thus, ideas about their career prospects and arguments for choosing a career prove immaturity in terms of taking responsibility for their career choice and awareness of their career prospects. Dominant decision-making sources also demonstrate deficits in awareness and responsibility of disabled people for their career prospects and a lack of creative attitude to the career choice. Passive position, lack of initiative characterize the vocational guidance of young disabled people, their vocational self-determination. The analysis of individual career profiles showed pronounced difficulties in understanding by young disabled people their resources, capabilities, limitations and qualities that are significant for career choice.

Experimental results prove that the vocational self-determination of the disabled is a problem not only for them, but also for their relatives, teachers, and society. Special measures are needed to promote vocational self-determination of young disabled people, to ensure their awareness, correlation with health opportunities, the labor market and career requirements.

#### 5 CONCLUSION

The obtained results prove that young people with disabilities need special assistance in vocational guidance and career choice. Such assistance,

implemented in the content and methodology of educational sustainable development, is designed to form special competencies of young people with disabilities. These competencies are designed to ensure the formation of predictive models of career prospects, the acceptance of responsibility for career choice and the desire for independent life. The materials obtained in the study are the basis for a significant model for vocational guidance of young disabled people and the construction of differentiated routes to support vocational guidance, taking into account the individual vocational guidance profile and tasks of sustainable education.

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