

Project title:

Innovative vocational education and training in Eastern Wielkopolska in the context of energy transformation

The main goal of the project:

Preparation of local government units as the leading bodies of vocational education institutions and other stakeholders to take up the challenges related to the change of the economic structure as a result of the energy transformation in the region of Eastern Wielkopolska.

Project activities:

- 1) **Diagnosis of the needs of employers and vocational training institutions due to the necessity to introduce innovative directions of education.**
- 2) **Necessity to modify the vocational education offer in poviats subject to energy transformation.**

Research methodology:

1. Research methods:
 - diagnostic survey (quantitative method);
 - in-depth interview (qualitative method).
2. Research techniques:
 - Questionnaire;
 - Intelligence survey.
3. Research tools:
 - Two questionnaires "Identification of the needs for the development of sectoral education in institutions providing education in the occupations of sectoral education to the requirements of the labor market, in particular related to the energy transformation of Eastern Wielkopolska:
 - ✓ for representatives of the management of the school / educational institution (support for the teaching staff, career counselor);
 - ✓ employers' representatives.
 - An in-depth interview questionnaire with a wide range of stakeholders, including representatives of schools / institutions providing industry education, local government units, education boards, crafts, employers, associations and organizations associating employers, public employment services, universities, etc.

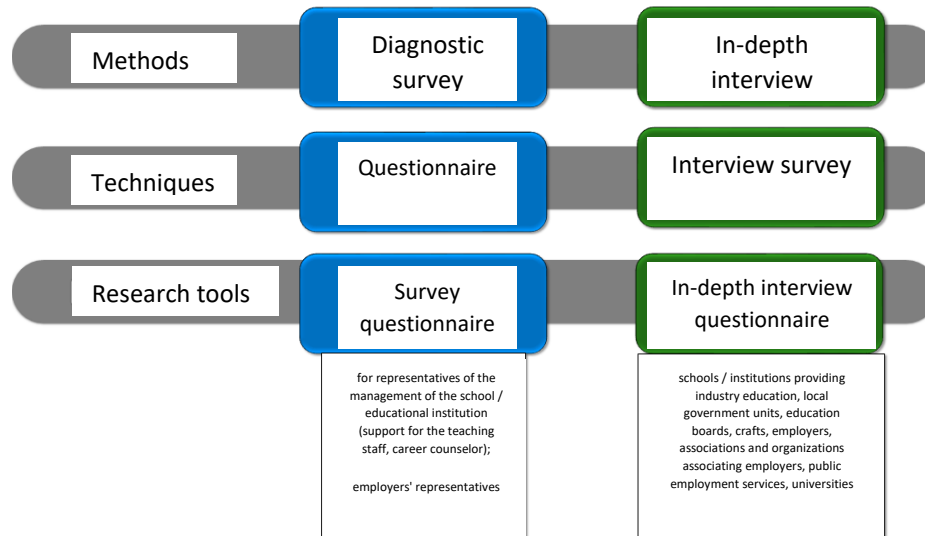


Fig. 1. Research methodology: methods, techniques and research tools

Research area:

Schools / institutions providing industry education and employers located in Eastern Wielkopolska, including:

- the city of Konin,
- the Konin powiat,
- the Terecki powiat,
- the Śtupecki powiat,
- the Kolski powiat.

Research procedure:

Stage 1: Conducting surveys in schools / institutions providing education in the occupations of sectoral education in the poviats covered by the project and the development of a quantitative report on the conducted research aimed at diagnosing the condition and the need to introduce changes in the educational offer of schools providing education in the occupations of sectoral education resulting from the energy transformation in region of Eastern Greater Poland:

1. Developing a draft questionnaire for a survey for representatives of the management of the school / educational institution related to industry education.
2. Agreeing the draft questionnaire for the survey for the management of schools of sectoral education with the project partners.
3. Introducing project partners' comments to the survey questionnaire for representatives of the management of the school / educational institution related to sector education.
4. Development of the contact database of respondents - representatives of the management of the school / educational institution related to industry education located in five poviats of Eastern Wielkopolska.

5. Conducting a pilot survey questionnaire for representatives of the management of a school / educational institution related to industry education with principals (or representatives of management indicated by them) from 2 schools - collecting comments and introducing them.
6. Conducting training for potential respondents on the energy transformation of Eastern Wielkopolska and on the research tool developed.
7. Conducting target surveys with the use of a questionnaire for representatives of the management of the school / educational institution related to industry education in the poviats covered by the project's activities.
8. Collecting and quantifying the results of research collected through a questionnaire for representatives of the management of a school / educational institution related to industry education and preparation of a research report.

Stage 2: Conducting a survey among entrepreneurs and developing a research report - diagnosis of the state and identification of the need to introduce changes in the educational offer of schools providing education in the occupations of industry education resulting from the energy transformation in the region of Eastern Wielkopolska

1. Development of a draft questionnaire for a survey for representatives of enterprises.
2. Agreeing the draft questionnaire for enterprise representatives with the project partners.
3. Introduction of comments collected from project partners to the questionnaire for company representatives.
4. Conducting a pilot study of the content of the questionnaire for company representatives with representatives from 2 companies - collecting comments and introducing them.
5. Development of an online version of the questionnaire for company representatives.
6. Testing the online tool as part of the partnership, collected comments and after their introduction, approval of the questionnaire for company representatives.
7. Development of the contact database of respondents - representatives of enterprises operating in five counties of Eastern Wielkopolska.
8. Conducting target surveys in the poviats covered by the project's activities using a questionnaire for company representatives in paper and online versions.
9. Collection and quantification of research results using a questionnaire for company representatives - preparation of a research report.

Stage 3: Conducting qualitative research in the form of in-depth group interviews - identification of the needs for new occupations in industry education related to the energy transformation in the region of Eastern Wielkopolska:

1. Analysis of conclusions and recommendations from the conducted survey research and development of a draft of questions included in the in-depth interview questionnaire.
2. Agreeing on the draft of the in-depth interview questionnaire with the project partners.
3. Preparation of presentations from surveys conducted in schools / institutions providing industry education and in enterprises.

4. Organization of meetings, presentation of the results of (quantitative) surveys in schools / establishments providing industry education and in enterprises, on their basis, conducting in-depth group interviews using a questionnaire.
5. Collection and qualitative processing of research results with the use of an interview questionnaire - preparation of the final research report.

Research tools:

1. *Survey questionnaire for the management of schools in sectoral education*

Purpose of research:

- Diagnosis of the state of education in occupations of sectoral education in the poviats of Eastern Wielkopolska.
- Indication of proposed changes in the educational offer of schools educating in the occupations of industry education as a result of the energy transformation in the region of Eastern Wielkopolska.

Respondents:

- Directors of schools / institutions providing education in the occupations of sectoral education or their designated managers of practical classes or other school employees with knowledge of the issues included in the questionnaire.
- One representative from each school / facility providing education in the occupations of sectoral education in the poviats of Eastern Wielkopolska.

Thematic issues:

Thematic block I. Information about the school / facility providing industry education and development directions

- 1) General data about the school / institution providing industry-specific education.
- 2) School type.
- 3) Quantitative data on the teaching staff.
- 4) Quantitative data on students / learners.
- 5) Current educational offer - education professions and their connection with the processes of energy transformation of Eastern Wielkopolska, closed competitions.
- 6) Possibility for students to use (currently and planned in the years 2023-2030, their connection with the energy transformation processes of Eastern Wielkopolska):
 - preparing to acquire additional professional qualifications in the field of selected professions,
 - additional professional skills ,

- market qualifications (KR) functioning in the Integrated Qualifications System,
 - qualifying vocational courses (KKZ).
- 7) Needs to update curricula for professional education professions.
 - 8) The need to expand the vocational education offer with new professions in the sectoral education, in particular as a result of changes in the labor market, including those caused by the energy transformation of Eastern Wielkopolska.
 - 9) Barriers limiting the development of the vocational education offer with new occupations in industry education, including those related to the energy transformation processes of Eastern Wielkopolska.
 - 10) The frequency of conducting reviews of the offer in terms of the need to update it.
 - 11) Removal of professional education professions from the educational offer.
 - 12) Aspects taken into account when starting education in new occupations of industry education.
 - 13) Interested in obtaining support from aid funds for improving students' qualifications, equipping schools, improving teachers' competences, and developing career counseling.

Thematic block II. Cooperation of schools providing education in the occupations of sectoral education with employers

- 1) Number of employers with whom schools cooperate.
- 2) Forms of cooperation between the school and employers, including an indication of the school's preferred ones.
- 3) Organization of practical vocational training and apprenticeships.
- 4) Opportunities to take advantage of practical classes in the enterprise organized on the basis of dual education.
- 5) Cooperation of schools with employers in the area of creating patronage classes by employers.
- 6) Interest in the cooperation of employers with the school / institution.
- 7) Barriers to the development of cooperation between schools and employers.
- 8) Factor taken into account by schools when choosing the enterprise in which the practical vocational training is to be carried out.
- 9) Assessment of the adjustment of the core curricula of vocational education to the needs of the local labor market.
- 10) Organization of meetings by schools with employers.
- 11) Reasons for the employer's failure to cooperate with the school.
- 12) Preparing school / institution graduates for professional work.
- 13) Examples of good practices implemented by schools and aimed at developing cooperation with employers.

Thematic block III. Needs in the field of equipping / retrofitting schools and education system institutions providing education in the occupations of sectoral education with modern equipment and materials, enabling the implementation of the core curriculum for vocational education in conditions similar to the actual working environment

- 1) Equipment for classrooms, school workshops - current state and needs, including those related to the energy transformation processes of Eastern Wielkopolska.
- 2) Teaching resources posted on the Integrated Educational Platform .

Thematic block IV. Personnel needs and improving the competences of teachers of vocational education, instructors of practical vocational training

- 1) Diagnosis of staffing needs for individual groups of vocational education teachers (now and in the future).
- 2) Forms of training - the need to improve the competences of teachers of practical vocational training and theoretical vocational education, including those related to the energy transformation processes of Eastern Wielkopolska.
- 3) Training topics.
- 4) Personal and social competences - improvement of teaching staff.

block V. Needs in the field of educational and vocational counseling for young people, including the provision of necessary equipment for schools and educational system institutions providing vocational training with the necessary equipment enabling counseling, improving the competences of persons providing counseling in this field

- 1) Functioning and components of the Intra-School System of Vocational Counseling (WSDZ).
- 2) The composition of the WSDZ development team.
- 3) Indication of the subjects on which vocational counseling is carried out in industry schools.
- 4) Professional qualifications of teachers in the field of career counseling, resulting from the framework curriculum.
- 5) Indications to whom the vocational counseling classes conducted in a school / institution providing vocational education under WSDZ are directed.
- 6) Indication of institutions with which the school / facility providing vocational training cooperates in the implementation of WSDZ.
- 7) The measurable effect of work developed by the student during career counseling classes.
- 8) Evaluation of career counseling classes.
- 9) Forms of conducting vocational counseling classes in a school / institution providing vocational education.
- 10) Interested in taking actions to improve career counseling, including those related to changes related to the energy transformation processes of Eastern Wielkopolska.
- 11) Professional training of staff in the field of educational and vocational counseling.
- 12) Retrofitting the career counseling studio.
- 13) Additional classes in educational and vocational counseling carried out as part of the projects.

2. Survey questionnaire for representatives of enterprises

Thematic block 1. Company profile

- 1) Data on the location of the seat, employment level, PKD, year of commencement of operations, legal form,

Thematic block 2. Impact of the energy transformation of Eastern Wielkopolska on the company's operations

- 1) The impact of the energy transformation of Eastern Wielkopolska for the functioning of the enterprise in the time perspective until 2030.

- 2) Staffing needs in connection with the energy transformation program of Eastern Wielkopolska - now and in the perspective of 5 years and until 2030.

Thematic block 3. Cooperation of employers with schools providing education in the occupations of sectoral education

- 1) Cooperation of the company with schools / vocational training institutions and institutions from the industry education environment.
- 2) The frequency of the company's cooperation with schools / vocational training institutions
- 3) The range of cooperation between the company and schools / vocational training institutions.

Thematic block 4. Forms of cooperation between employers and schools providing education in the occupations of sectoral education

- 1) Practical apprenticeship for apprentices on the company's premises.
- 2) Practical classes for students on the company's premises.
- 3) Organization of patronage classes.
- 4) Forms of cooperation between the enterprise and schools / institutions providing vocational training.

Thematic block 5. Barriers in the cooperation of employers with schools providing education in the occupations of sectoral education

- 1) The main barriers hindering the development of cooperation between employers and schools / institutions providing vocational training.
- 2) The party initiating cooperation between the company and school / institution providing vocational training.
- 3) The level of preparation of the enterprise for cooperation with schools / institutions providing vocational training.
- 4) Participation of the enterprise in meetings with schools / institutions providing vocational training.
- 5) Benefits for enterprises from cooperation with schools / institutions involved in vocational education.
- 6) Assessment of the preparation of graduates for professional work from the employer's point of view.

Thematic block 6. International cooperation

- 1) Areas of international cooperation that have a positive impact on the development of the quality of practical education in the enterprise.