

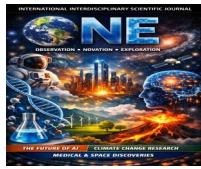
The integration of industry and labor into education today means the creation of close partnerships between educational institutions and business.

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Abstract

The integration of industry and labor into education today means the creation of close partnerships between educational institutions and business, the development of dual education and the training of personnel in accordance with the needs of the labor market. This is a key mechanism for the recovery of the Ukrainian economy and its integration into the European educational space.



Main areas of integration

Dual education Combining education in an educational institution with practical work in an enterprise. This allows students to gain real skills and adapt more quickly to the requirements of the labor market.

Dual education is a form of education in which theoretical training in an educational institution is harmoniously combined with practical work in a real enterprise or company. This approach allows students to adapt much faster to their future profession and gain valuable experience.

How it works in practice

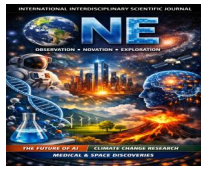
Time distribution: Students master theory in classrooms, and practical tasks and work are performed directly in the workplace (from 25% to 60% of the total educational program).

Official registration: Obtaining education in a dual form involves concluding a tripartite agreement between the institution, employer and student.[1]

Remuneration: While working at the enterprise, the student is officially employed, performs job duties and receives a salary.

Main advantages

- Rapid integration: Graduates have real work experience even before completing their studies.
- Guaranteed employment: Companies train specialists "for themselves", which makes it easier to find their first job.
- Flexibility: Dual education in universities and colleges allows you to individualize your study schedule.
- Potential risks
- High workload: Combining full-time work and study requires good time management and can lead to fatigue.
- Early choice: There is a possibility of disappointment in the chosen specialty



during the first months in the workplace.

- Education and business partnerships Joint development of programs, creation of training and practical centers, involvement of employers in the formation of standards and qualifications.[2]

- Effective partnerships between educational institutions and business are the key to rebuilding the economy. They involve joint development of programs, creation of modern training and practical centers and direct involvement of employers in the formation of professional standards and qualifications through the National Qualifications Agency and the Qualifications Register.

- Forms of interaction between business and education.

- Joint training and practical centers: Integration of business into the infrastructure of educational institutions (for example, equipping workshops with modern tools and technologies).

- Adaptation of educational programs: Alignment of curricula with the real needs of the labor market through the signing of memorandums and dual education.

- Participation in the development of standards: Involvement of company experts in [Ministry of Education and Science of Ukraine](mon.gov.ua, in particular regarding the assignment of qualifications.

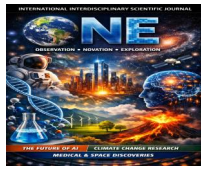
- Funding and Skill Partnerships: Grant opportunities under which companies can attract from 50,000 to 200,000 euros for training personnel together with educational institutions.[3]

- Practical tools

- Detailed algorithms for interaction with employers are collected in the manual developed within the framework of the InConnect 2 project, which is available on the website

- Microqualifications Short training programs that allow you to quickly acquire narrow professional competencies required for specific industries.

- Microqualifications are short-term modular training programs (for example, PMI Microqualifications) that allow you to quickly acquire narrow professional skills and obtain a supporting document (digital badge or certificate). They have become a global



trend in continuing education.

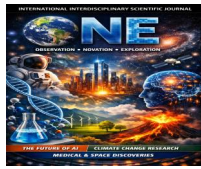
Main features

- **Flexibility:** Consist of several interconnected courses (usually 3-4), focusing exclusively on practical competencies.[4]
- **Speed:** The training lasts much less than a full-fledged university program or obtaining a new specialty.
- **Relevance:** Help to quickly adapt to the demands of the labor market and learn directly while performing professional duties.
- **Official recognition:** The result of the training is recorded in a document that confirms the results achieved and can be accumulated for further career or academic development.

How it works in Ukraine

The implementation of micro-qualifications is based on the recommendations of the Qualifications Agency and the European Commission.

- **Universities:** Leading higher education institutions are actively building their own ecosystems of short programs. For example, UCU and Lviv Polytechnic offer the acquisition of additional competencies, and KPI has separate provisions for their implementation.
- **Adult education:** Due to demographic challenges and reforms, the Ministry of Education and Science of Ukraine considers micro-qualifications as a strategic tool for the development of adult education.
- **Recognition of self-education:** Any legal entity can create a qualification center to assign partial professional qualifications based on the applicant's knowledge and skills.



Micro-qualifications implementation details

- View Erasmus+ Ukraine's clarification on conceptual development issues.
- Check out Cred4Teach's detailed guide on European workplace learning standards.

Digitalization of Education Using platforms, data analytics, and artificial intelligence to personalize learning and monitor outcomes.[5]

- Digitalization of education is a comprehensive development of an ecosystem of digital solutions. It combines learning management systems (LMS), data analytics, and artificial intelligence to create individual educational trajectories, adapt the complexity of the material, and automate the monitoring of success.

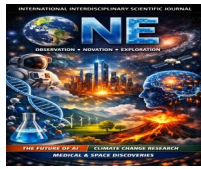
- Key components of the ecosystem
- Digital platforms (LMS): Centralized environments (such as Moodle or Google Classroom) for storing content, automating communication, and interactive interaction.

- Educational data mining: Full cycle: collecting activity metrics → predicting knowledge gaps → generating personalized recommendations for the student.

- Artificial intelligence (AI): Intelligent assistants and adaptive courses that adjust the pace of material delivery to the real success of the student in real time.

Examples of successful practices

- EcoDriving – training in economical and ecological driving. EcoDriving (ecological and economical driving) is a modern style of driving that combines theoretical knowledge and practical exercises. It helps drivers to use resources efficiently, reduce fuel consumption and maintenance costs, and minimize harmful emissions into the atmosphere.[6]



Basic principles of eco-driving

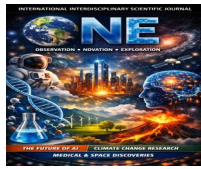
- Smooth driving: Avoid sudden acceleration and braking, and anticipate the road situation.
- Optimal revs: Shift gears early, keeping the engine revs low.
- Tire pressure monitoring: Check your tire pressure regularly, as under-inflated tires increase rolling resistance and fuel consumption.[7]
- Lighten the load: Remove excess cargo from the trunk and remove unused roof racks to improve aerodynamics.
- Engine shutdown: Turn off the engine during long stops instead of idling.

ReStart – retraining of personnel for new professions.

• The REstart project is a national initiative of the ReStart platform – a platform for restoring human capital, aimed at free training, retraining and mastering of in-demand professions. The program helps participants start a new professional path and contributes to the economic sustainability of the country. Registration for the course “REstart: people who restore the country” is now open.

- For whom
- The training is aimed at people who need support and seek to change their profile of activity. Registration for the course “REstart: people who restore the country” is now open:
- War veterans and active military personnel
- Family members of defenders, as well as families of the deceased.

Advanced training for veterans, veterans ...

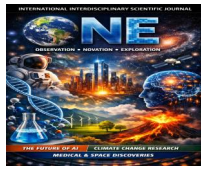


- Internally displaced persons (IDPs) and youth. Registration for the course “REstart: people who restore the country” is now open.
- People with disabilities Registration for the course "REstart: people who restore the country" begins.

Conclusions

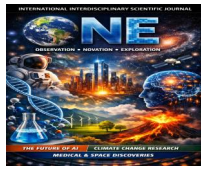
Directions and opportunities.

- Professional training: Obtaining a new specialty from scratch or improving existing qualifications Advanced training for veterans, veterans
- Specialized courses: For example, initiatives like "Solar ReStart" teach the design and installation of solar power plants[8]
- Support: Participants receive practical skills, certificates, psychological support and assistance in further employment Solar ReStart: how the training program works.



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