

STUDY ON ROMANIAN TRAINING REQUIREMENTS NEEDED TO DEVELOP AN OCCUPATIONAL SAFETY AND HEALTH CONSULTANT CAREER IN THE EUROPEAN UNION

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Abstract: Controlling occupational injuries and illnesses and related costs is a top priority in most companies. Selecting a qualified professional to participate in the workplace safety and health activities can be a vital step in this process, allowing the development of professional careers in this field. The present paper aims at identifying the requirements and skills that Romanian education and training system should develop for Occupational Safety and Health consultants, in order to formulate a training methodology draft as a basis for the establishment of a unique occupational standard, which will facilitate access to an European OSH professional career. Our goal is to launch a meaningful debate and reflection, to involve all the stakeholders in integrating the occupational health and safety topic in the university curricula and practice.

Key words: Occupational Safety and Health (OSH), training, consultant, career path

Introduction

The central objective, established in Lisbon in 2000, to turn the European Union into the most competitive and dynamic knowledge-based economy, with more jobs and better and higher social inclusion, is one of the major challenges that prompted Member States to engage in more extensive reform processes in order to achieve these objectives. In conditions of globalization, labour market in Romania has to answer the need for companies to adapt permanently to increase competitiveness. For this reason the employment policies must contain the results of constant collaboration with business, workers and representatives of professional associations, for the effective regulation of labour relations [9].

In Romania, on October 1, 2006, entered into force law No 319/2006-Health and Safety Law fully transposing the European Union framework directive 89/391/EEC. It lays down the General principles and the rights and obligations of employers and workers in order to ensure the health and safety conditions in the workplace as well as the measures to be taken by employers for this purpose. An essential component of sustainable development based on the integrated approach of the concepts of flexibility and security on the labour market is to promote investment in human resources.

Career development issues are aimed at initiating measures designed to change the culture of employers, for the purposes of orientation towards investment in human resources, in order to ensure business sustainability and adaptation to the

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new challenges of competition. Modernization and improvement of education and vocational training will ensure initial and ongoing general prerequisites for providing the skills required on the labour market [8].

Increasing the capacity of technical and vocational education of adapting to labour market requirements, will require intensified efforts to redefine goals and learning content so that graduates have the skills required by employers. Higher education is a key element in the development of the knowledge-based society, while universities are leading providers of high-skilled work force. In efforts to restructure and modernise higher education, recent advances have been made in terms of institutional framework and methodological support for the development of the National Framework of Qualifications in higher education and quality assurance. Development of the system of in-service teacher education is carried out on the principle of social partnerships by supporting the establishment and operation of sectoral committees. The social partners are involved in the definition and validation of qualifications, as well as in the process of approval of providers of adult training and assessment skills. As an example of good practice in this area, there are relevant documents at european level relating to workers involved in OSH (*qualified consultants*), such as CEN CWA 16275/March 2011 as well as the tools, techniques and new methods of training in the field (ENETOSH, aimed at providing on European level specialized training for each person, via e-learning, as well as the approaches of iNTegRisk - FP7 programme concerning new and emerging risk management) [3].

In this context it becomes mandatory to identify the requirements and the necessary skills for OSH professionals, while formulating a draft methodology for their training based on CEN CWA 16275 [3].

The ultimate goal of this study would be to establish an occupational standard for a unique competence "*qualified consultant*" (recognised at EU level) and who should replace the existing qualifications in the Romanian Classification of Occupations; it would be substantiate such a modern training methodology allowing the use of online resources until the passage of the entire educational process of OSH in on-line mode and developing a specialised body of Competent Authority (i.e. the Labour Inspectorate) for granting uniform occupational qualification certificates of "*qualified consultant*", with European recognition.

Identification of skill requirements needed in OSH career

Submission of evidence and information on how OSH aspects can be integrated in the general management of companies, constitutes a necessary competency of employees involved in OSH, which leads to safer work environments, as improving overall organizational performance. [4].

At a minimum, workplace safety and health involves management support, employee involvement, worksite analysis, hazard prevention and control, occupational health care management (including screening and surveillance for disease and injury), and training and education. OSH professionals prevent harm to

people, property and the environment by applying principles from engineering, education, psychology, physiology, enforcement, hygiene, health, physics and management. The OSH professional uses appropriate methods and techniques of loss prevention and control and works in all industries worldwide [5], [12].

The trend at European level is the unification of skills and certification at European level of OSH specialists so that a worker with duties in France to have exactly the same competences and skills with one of Portugal or Romania. So long as economic units' management considers OSH as a related domain, unimportant, imposed, it will not be possible to overcome the stage of formal training and involvement of OSH professionals [7]. **The possibilities of developing a career will be in such precarious conditions, occasional, and will not be sustainable.**

Figure 1 summarizes the links between governance, culture and OSH, illustrating that governance (corporate strategy) directly affects how the management is operating, which - in turn - exerts an impact on performance.

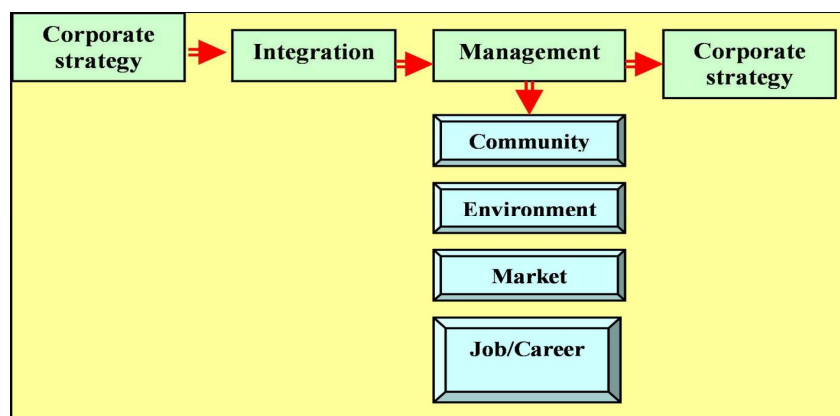


Figure 1. „Business in Community” Corporate Responsibility

Source: Author's elaboration based on: Sowden P, Sinha S. *Promoting health and safety as a key goal of the corporate social responsibility agenda*. RR339, Suffolk, HSE, 2005

In the studies regarding OSH integration into core business, Gort et al. [4] states that how "organizational learning" OSH is organized in companies is often the critical factor in achieving adequate performance, the impact of "learning", saw on this perspective, seems more important than the effect exerted by the "structure" and "culture". The cited authors concluded that at least three aspects (structure, culture and learning) should always be approached in a balanced and explicit manner. Figure 2 illustrates a model that merges ASET model with Gort's and his collaborators learning model. Within the model there are four feed-back loops ("learning" loops) on the OHS, allowing assessment of the degree to which learning was developed in an organization. Any organization can improve its safety performance trying to aim as high as possible following this model. The four loops of feed - back largely correspond to the four stages of maturity of the

organizational management of OSH (ad - hoc, systematic, systemic and proactive) set by Zwetsloot et al. [11].

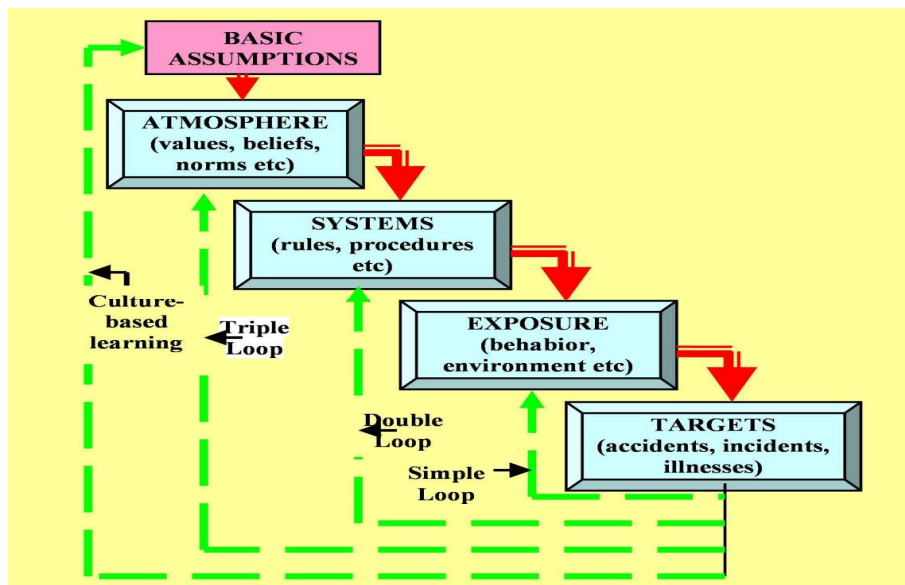


Figure 2. Learning loops for OSH improvement in ASET model

Source: Author's elaboration based on: Zwetsloot GIJM and van Scheppingen A. Towards a strategic business case for health management. In: Johansson U, Ahonen G and Roslander R. (eds) *Work Health and Management Control*. 2007, pp. 183-213

We are persuaded that, indeed, the triple loop, completed with cultural learning should become an integral part of any approach to OSH. management, in order to establish and maintain a proactive behavior in organizations. The underlying trend at european level can be summed up by the following:

- to develop at EU level of a unit standard qualification, at identical quality standards in training and expertise, qualification of "*qualified consultant in the field of OSH*";
- unanimous recognition of this qualification by all EU Member States, thus having a uniform trained personnel who is able to work in any country in the EU;
- existence of a EU accredited body, which provides both on-line interface between skilled consultants and economic units, as well as validation of OSH specialists as "*qualified consultant*", so this issue to have a unified approach at EU level.

In this regard, we propose to adopt a generic "*qualified consultant*" name in Romania, for all OSH specialists, renouncing to the older qualification or maintenance in parallel of the two types of approaches with the major disadvantage that these qualifications are not recognised at EU level being only valid for Romania.

Critical analysis of the current OSH professionals training process

Critical analysis of the current training system and practices is meant to reveal the imperfections of OSH educational process taking place at present and identify existing weaknesses, so that the forthcoming proposed training methodology to take into account the emerging requirements of EU documents, and to immediately adopt these requirements.

From a formal point of view, there is a market for the trainers of the OSH professionals, which, in some cases uses relatively modern training methods, including e-learning. There are accredited courses NATB (National Adult Training Body), offers that can be completed without the presence in the classroom, only through on-line interactions. In terms of the actual situation we should make a clear distinction between the following two categories:

A. Academic training at university level (bachelor, master and doctoral degrees). In this regard we have highlighted the following features:

- **there is no unified structure of training at bachelor, master's and doctoral level in the accredited universities** for such programs. Currently, suppliers of dedicated safety training are the University of Petroșani, "Lucian Blaga" University of Sibiu, Transylvania University of Brașov, University "Politehnica" of Bucharest, "Politehnica" University of Timisoara, Technical University "Gheorghe Asachi" of Iasi. We must remember that until 1989 the only University with curricula relating to the training of OSH in Romania was the one in Petrosani [2] .
- **lack of consistent educational plans for postgraduate courses which address similar themes** confirms that often in higher education subjects are not selected and structured in such a way as to meet the demands of students/learners and the labour market;
- **development of curricula to meet the requirements of the labour market in Romania and in the European Union** and allow recognition of skills obtained by accreditation/certification systems/professional empowerment recognized worldwide, is hindered by a too restrictive content and unsuitability to the safety and health at work field of the standards used to evaluate university study programs;
- **sporadic collaborations between universities, professional associations, research institutes, businesses, Labor Unions, employers ' organizations and trade unions** in terms of organizing and structuring the process of training and retraining of specialists in the field of safety and health at work;
- **the absence of institutional arrangements between the ministries that should promote the integration of safety and health at work in all levels of education** (Ministry of National Education and the Ministry of labour, Family and Social Protection); at the present time continuing training of adults in the field of safety and health at work is not correlated with educational offer of universities, there is a real rupture between the two educational systems;

- **partnerships between Romanian universities and universities with recognition at european level** in the field of safety and health at work, are missing or are in the early stages.

B. Vocational training, which aims at developing strictly the skills required for OHS professionals at medium or higher level, without an academic tinge. Normally, such training should lead to the development of skills necessary for effective management of risks to the economy. Occupational health and safety specialists and technicians frequently communicate with management about the status of health and safety programs. They also might consult with engineers or physicians. Specialists and technicians write reports, including accident reports, and enter information on Occupational Safety and Health Administration recordkeeping forms. They may prepare documents used in legal proceedings and give testimony in court. Those who develop expertise in specific areas may develop occupational health and safety systems, including policies, procedures, and manuals. The responsibilities of occupational health and safety specialists and technicians vary by industry, workplace, and types of hazards affecting employees. At European level, the practice of training workers involved in OSH is altogether different than in Romania. There is a maximum of one or two units qualified for that purpose. For example, IFA, through its Academy in Dresden, trains workers involved in OSH for all German industry, in a harmonised way, supported with valid and verifiable qualifications, which are identical in terms of skills. For a particular specialization, for example in the method Layer of Protection Analysis (LOPA) or Safety Integrity Level (SIL), there is similarly one or two specialized companies in the United Kingdom, which are recognized by professional associations as designers or developers of these methods that support such courses [1].

Steps to implement a program of OSH training/career development

The proposed model adopts the principles from advanced Western countries, i.e. a model with two branches, a branch of proper vocational training and a branch of academic training. The general pattern, as shown in Figure 3 is composed of the following components :

- **general contextual, OSH instructional component**, which has the role to raise the future OSH professional his awareness regarding OSH issues, legal framework, accident models, statistics, etc. The stage is completed with a theoretical verification;
- **the training component in risk analysis**, including aspects of identification, assessment and risk analysis. This component has as framework the ISO 31000: 2009 standard "Risk management — Principles and guidelines", and ideally also contains one of the methods of assessment used at european level. This stage ends with a practical examination in which the trainee will be required to analyze the risks in a specified job, with custom attributes. This analysis can be

- performed if possible at the student's working place and will be presented in draft form;
- **component of risk prevention/mitigation.** This component will introduce, in addition to organisational and technical best practices, also the ALARP general concept and application of that getting to their jobs and economic units. This stage will also end with a practical testing through the means of a project;
 - **safety management component,** primarily intended for persons with higher education. This evaluation will be done in a practical way by developing and implementing a system of OSH at the economic unit in which the trained person is working or in a specific case study.

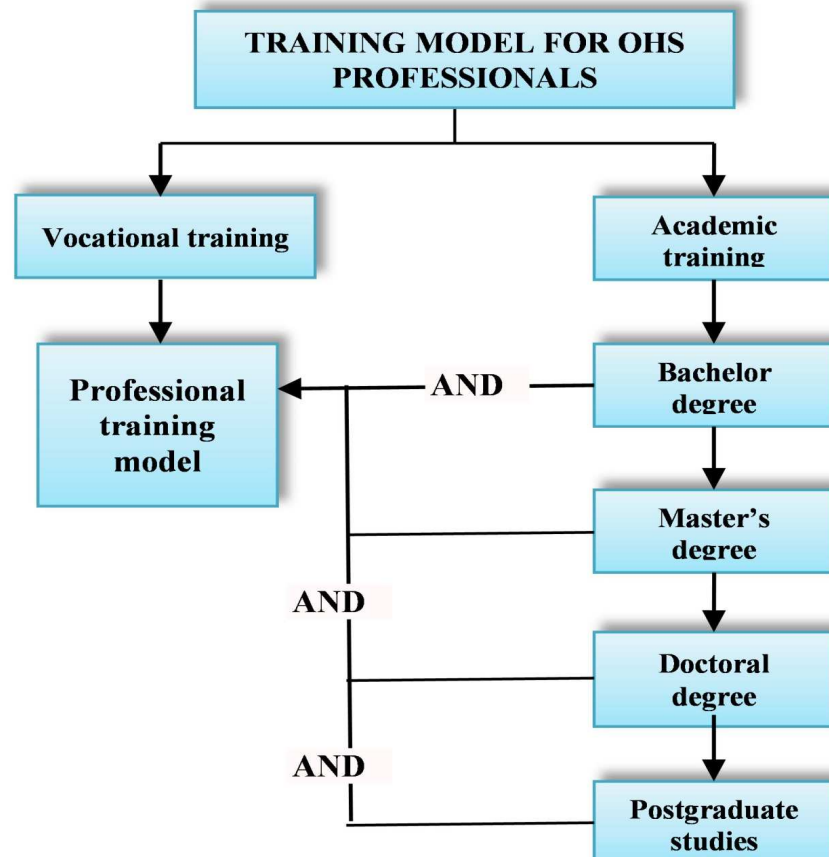


Figure 3. General framework of the OHS training process

Source: Author's own elaboration

The general model can be completed, as outlined in Figure 4 with a specific component:

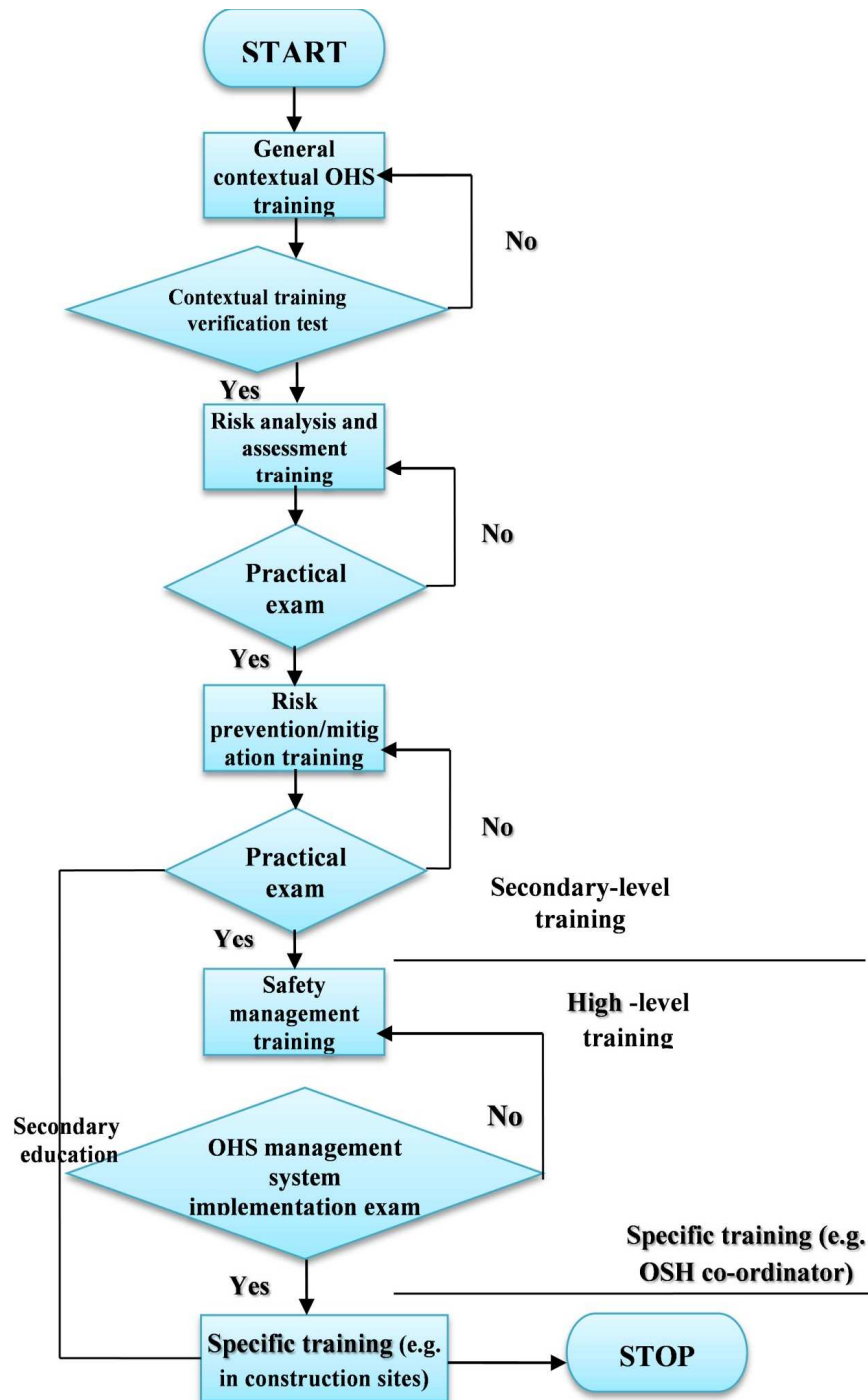


Figure 4. The completed general model of training
Source: Author's own elaboration

Summary

Occupational health and safety specialists and technicians, also known as OHS professionals help prevent harm to workers, property, the environment, and the general public. For example, they might design safe work spaces, inspect machines, or test air quality. In addition to making workers safer, specialists and technicians aim to increase worker productivity by reducing absenteeism and equipment downtime and to save money by lowering insurance premiums and workers' compensation payments. Some specialists and technicians work for governments, conducting safety inspections and imposing fines. Some specialists, often called loss prevention specialists, work for insurance companies, inspecting the facilities that they insure and suggesting and helping to implement improvements.

Through a unique approach at the European level, i.e. by defining minimum requirements and competencies for a "*qualified consultant*", the OHS training process can be improved through:

- uniform European approach;
- common certification of skills, making it possible to conduct specific activities of OSH in all EU countries;
- management and employee awareness regarding the integrated approach to process management and total management of the company as a tool for sustainable development;
- adaptation to the European quality level of qualification and training establishments; the process of validation and certification requests can take place through a transparent, rigorous and objective verification of the entire structure of OSH training in Romania, at all levels, using external assessors.

Education and training have become more important than ever to support people to choose the path to permanent career success. Lifelong learning opens up the prospect of building a fulfilled life and full of satisfaction, with positive effects on the economic and social environment. A modular system of continuing vocational training in the field of safety and health at work makes it easier to obtain by persons of partial or full qualifications, both through participation in training programmes in the field of safety and health at work and on the basis of accreditation of prior learning.

This system should be built on a coherent National Framework of Qualifications in the field of safety and health at work to ensure national recognition of skills and qualifications acquired through work experience or in formal, non-formal or informal, learning contexts, thus promoting the coherent learning paths enabling people to continuously improve their skills and to acquire formal qualifications when necessary.

A modular and flexible system of continuous professional development in the field of safety and health at work should be based on a system of evaluation and recognition of professional competences which allow to follow different paths to acquire or update thereto, necessary to cope with the changes in the occupational environment.

Unlike other areas, a centralized, efficient and operational at the national level in the field of OSH education and training, coupled with professional insurance systems to the professional risk would be beneficial for Romania.

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**BADANIE RUMUŃSKICH WYMAGAŃ SZKOLENIOWYCH NIEZBĘDNYCH
DO ROZWINIĘCIA BEZPIECZEŃSTWA PRACY I KARIERY KONSULTANTA
ZDROWIA W UNII EUROPEJSKIEJ**

Streszczenie: Kontrolowanie wypadków przy pracy i chorób oraz związanych z tym kosztów jest priorytetem w większości firm. Wybór wykwalifikowanego specjalisty do udziału w działaniach dotyczących bezpieczeństwa i ochrony zdrowia w miejscu pracy, może być ważnym krokiem w tym procesie, pozwalając na rozwój karier zawodowych na tym polu. Niniejszy artykuł ma na celu określenie wymagań i umiejętności, jakie rumuński system edukacji szkoleń powinien opracować dla konsultantów Bezpieczeństwa i Higieny Pracy, w celu sformułowania projektu metodologii szkoleń jako podstawy do ustanowienia unikalnego standardu pracy, który ułatwi dostęp do Europejskiej kariery zawodowej BHP. Naszym celem jest zainicjowanie znaczącej debaty i refleksji, w celu zaangażowania wszystkich zainteresowanych stron w integrację w temacie bezpieczeństwa i higieny pracy w programie nauczania i praktyce uniwersyteckiej.

Słowa kluczowe: Bezpieczeństwo i Higiena Pracy (BHP), szkolenie, konsultant, ścieżka kariery.

研究制定职业安全及健康顾问生涯中，欧洲联盟所需的罗马尼亚培训要求

摘要: 控制职业伤害和疾病和相关的费用是在大多数公司的首要任务。选择到专业人员参加工作场所的安全和健康的活动可以在此过程中，允许的在这一领域的职业生涯发展的重要一步。本文件的目的是确定的要求和罗马尼亚的教育和培训系统应制定职业安全及健康顾问，以便制订培训方法草案，作为建立一个独特的职业标准，将促进欧洲奥什职业生涯获得的基础的技能。我们的目标是要推出有意义的辩论和思考，以整合职业健康和主题实践和大学课程中的所有利益有关者参与。

关键字: 职业安全及健康（奥什）、培训、顾问、职业生涯路径。