Niersverband: New Formal Qualification Development

What does this case study demonstrate?

This case is a very important example of a company driven improvement of competences and skills, related to actual and recent demands coming from new environmental requirements of national and European directives and regulations – being developed in a co-creation process with external institutions and a short-termed integration in a formal (VET) system.

The reason was that the competences of the current skilled workers were not sufficient anymore for fulfilling the given tasks. A new holistic approach had to be developed to improve the competences, capabilities and skills of the workers. On the labour market no relevant occupational profiles existed at that time.

Therefore a social innovation process was conducted, affecting all the categories and aspects of WPI up to systemic change in the VET system. The innovation process was oriented at fulfilling a societal need for sustainable environment, done in co-creation with the management, the head of department of human resource, the employees' representatives and the concerned employees themselves; and in co-operation with the vocational schools and their teachers; and in the end with the formal responsible authority of the VET system.

Workplace innovation elements: work organisation practice, learning and reflection partnership, structure and system improvement, workplace partnership

Context

As a public institution, Niersverband is one of 10 water management (incl. flood protection, morphology and biology) institutions of the government of the Land North Rhine-Westphalia, integrated in a regional structure of municipalities. It has a high participation tradition and culture, fixed in the organisation structure of the company. The company has to fulfil public demands (EU and national directives and regulations) and has to update the competences of its 360 employees continuously because of the changing societal and environmental developments.

The company intends to improve employability, self-responsibility and interdisciplinary conditions. It is about reaching high water quality and the improvement of river morphology and fluvial topography. This task is done in a holistic way, integrating different skills and competences, in team work structures and self-responsibility.

Co-developed formal education and training programme ("Wasserbauer") (skilled workers for the re-naturalisation of rivers, stream water, flood prevention, etc.) to fulfil the Water Framework Directive (Directive 2000/60/EC)

New competences were needed for skilled workers which did not exist. Therefore the organisation decided to develop – in cooperation with a public education and training organisation - a new occupational profile and the related formal training. The new occupation was designed and developed together with the relevant actors inside and outside the company. New combined, interdisciplinary competences, skills and capabilities were needed to fulfil the external demands concerning ecological paradigms and regulations (EU directive, master plan NRW). So the development of specific hydraulic

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engineering ("Wasserbauer/in") was needed for land restoration measures and their contribution to water quality. Instead of waiting for a response on this demand from the Vocational Education and Training (VET) system, the company decided to develop and finance this new profile on its own with volunteers of the staff, implementing it in the end in the formal VET system (pilot education and training course). The content of the profile and the course were developed in co-creation: personnel department, employees' representatives, teachers and trainers, and the employees themselves. Over three years the development was done step by step. Teachers and workers (trainees) developed the curriculum and the learning contents together – based on the demands of the workplace. After the pilot phase, the basic contents of the curriculum were certified before the qualification was integrated into the regular initial education.

In the end a new occupational profile was born "Wasserbauer/in" (hydraulic engineer), that was integrated in the VET system for initial (3 years course) and continuous vocational training (2 years course), embedded in the German Dual System (phases of vocational school and in-company training). The shorter, two years continuous training course helps the Niersverband to overcome demographic change by replacing retired employees with training of own staff within a shorter time (two instead of three years). After a two-year training also elder trainees are qualified in hydraulic engineering. The scope of tasks is now up-to-date and compatible with the colleagues' knowledge. This improves also their work autonomy.

So who benefits?

Because the WPI was developed in a co-creation process, integrating the relevant internal actors (head of personnel department, employees' representatives, and the concerned employees) all of them benefit directly from this experience.

In the end the employees can now work more autonomously with the new qualification developed from the experiences of the workplace. The trained employees now have a higher and recent qualification and also a higher salary for their new job and competences. There was a high willingness of the employees to participate in the project.

Prognosis

Because of the European directive and the regional master plan for the re-naturalisation of water streams and courses, this new vocational education and training model and qualification could be disseminated to other European countries as well.

The company and its employees can now do their work in a more holistic and comprehensive way. The holistic demand of re-naturalisation and flood control is now answered by the holistic professional knowledge of the workers. This improves the quality of work and the quality of organisation. The trainees work is now more self-determined, they can read and interpret a plan on their own, analyse the relevant approaches and conduct the necessary measures on-site.

The Niersverband gives further training to its employees to make possible a plan that offers a different range of services. The employees work in teams and learn together. The workplace-innovation-process has not been finished yet, because the company is still driving it in the direction of a European formal acknowledgement. The new profile and competence of the skilled workers has an important impact on every issue, because the new skills are important to comply with the "market" demands (directives, regulations, etc.), lifelong learning and improvement of competences of the workers (and their market relevance, employability), organisational aspects, efficiency and effectivity.

The main motivation of the company is to stay "competitive" in a way that it could fulfil its given public objectives. The impact on the company internal organisation is to be a more self-responsible work organisation, high skilled and up-to-date qualified workers, and a higher income for those who passed the exam. The impact of the VET system is an approved new and practical relevant occupational profile.

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