

Competence, health and good working conditions – for the future of work

How we can promote the ability to work, competitiveness and capacity for change
Third memorandum



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Foreword

Key to a successful future

Competence, health and good working conditions – How we can promote the ability to work, competitiveness and capacity for change: the title of the third memorandum from the Expert task force on demographic change and work at the Initiative Neue Qualität der Arbeit (Initiative for a New Quality of Work, INQA) is a perfect fit for the current situation on the German labour market. Well-trained and well-educated employees are being sought in many places, and there is currently no foreseeable end to that trend. The reason for this is not only the favourable economic winds blowing in Germany; demographic and structural changes are also having an impact on the current labour market. The average age of the workforce is rising due to a frequent shortage of qualified young professionals. However, the labour market is not just getting older; it is also getting more female and more varied too. This is placing greater challenges on modern human resources management.

In the current professional world, competence means more than just formal qualifications and professional experience. Communication and social skills are key requirements, especially in a networked economy, for a successful working life in an interactive and global working world. An awareness of one's own abilities and limitations and the ability to recognise when it is time to "recharge one's battery" are also skills. People need to learn how to find the right balance between work and other parts of their life, how to cope with day-to-day stress, how to find the right way to relax and, more generally, how to look after their health. This is not just important for the individual, it's also of vital interest to businesses. The greater the demands on employees' skills and the more difficult the search for qualified employees becomes, the less we can afford people falling ill at work and as a result of their work. Consequently, employee-friendly working conditions that contribute to combating adverse psychological effects and promoting mental health and performance are now on the agenda.

It is against that backdrop that this memorandum offers a wealth of facts, suggestions and points for discussion. The memorandum is a contribution to the debate from the Demography team of experts at the Initiative for a New Quality of Work. Management and employees from the chemicals industry were actively involved in, and offered a critical perspective on, the production of the memorandum. It is with this in mind that we would like to thank the Initiative for a New Quality of Work for giving us this forum for discussion. One conclusion or another may, of course, be the subject of heated debate, and we look forward to the continued debate that we hope will extend beyond our team of experts as well as beyond the Initiative for a New Quality of Work. We therefore view the memorandum as an appeal for skills acquisition, qualifications and health to be given top priority by businesses and in society as a whole.

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Prologue

Competence, health and good working conditions – improving competitiveness for the future of work

The world in which we work needs skilled workers

Demographic change is already well under way. The economy, government and society have begun facing the challenges of an ageing population. The question of whether the competitiveness of German businesses can be guaranteed by an older workforce in the context of global competition can be answered in the affirmative. The high level of qualifications of the domestic German workers and their level of commitment are key requirements for such economic success. A paradigm shift has been taking place for some time now in the worlds of politics and economics. The appreciation of older employees is growing; never before have so many older people been in employment in Germany than today. Within a decade, the employment rate of the 55-to-64 year-old age group has risen by a factor of 1.6. In 2012, 75% of people aged between 55 and 59 and 47% of those aged between 60 and 64 were in employment. Our aim must be to establish the necessary framework as quickly as possible to ensure that as many workers as possible can remain in employment until they reach the statutory retirement age.

The Initiative for a New Quality of Work has been working towards achieving that goal for more than ten years. Back in 2004, the call was made in the “Demographic change and employment” memorandum. It was written by a project group called “Growing Older in Employment – 30, 40, 50 Plus”, and states the efforts to address the issue of the ageing population must be begin with a rethink. Growing older does not mean a loss of capabilities. On the contrary, skills in many areas grow over a lifetime, in particular those skills that are important in the modern world of work. They include, in particular, problem-solving skills based on knowledge acquired through experience, social skills, quality awareness and loyalty.

This view was not a new approach in 2004, and was in fact familiar to and undisputed by gerontological experts; nevertheless, it was an unfamiliar concept to many companies and HR departments. The INQA has set itself the task of communicating these research findings through practical steps. After more than ten years, the results are proving positive. Many businesses are committed to sound, practical solutions and ensuring competitiveness in the context of demographic change, and are making use of the various INQA campaigns and the resources offered by the Initiative for those purposes.

In the second memorandum entitled “Securing the future through prevention – Strategies for a world of work aligned to demographic change”, age-friendly working conditions, health promotion in the workplace and lifelong learning were presented as the cornerstones of a broader understanding of prevention in working life. The key message was that prevention is necessary for a longer healthy working life. It takes account of a person’s entire professional life, focusing on the issues of health, work ability and employability. In the case of an individual’s professional career, the primary

aim is to balance out requirements, demands and resources so that employees remain healthy and in employment when they reach the statutory retirement age. This cannot happen without establishing a social framework; one that incorporates effective occupational safety and a wage policy that promotes that balance. Promoting this model, developing practical solutions and then implementing those solutions at company level is an ambitious goal, but – given the successes achieved over the past few years – not a utopian one.

This third memorandum, “Competence, health and good working conditions – for the future of work”, produced by the Demography team of experts, puts the promotion of skills at its core, and emphasises that this is a process which extends throughout a person’s life span, from kindergarten to the professional daily life. Skills promotion has a positive impact on employees’ personal development; it also contributes to improving workplace conditions and boosting a company’s capacity for innovation and competitiveness. Skills promotion is the “missing link” in demographic policy, the connection between personal, health-related, corporate and economic benefits.

The Initiative for a New Quality of Work has developed into an enabling network that brings together the key stakeholders with a view to shaping the working world of the future. The Initiative has been at the forefront of the debate on work satisfaction, sustainability and on making the world of work fit for the future from the outset. The Initiative is both an initiator of and a driving force for regional and supra-regional cooperation, which enables and promotes the exchange of knowledge and experience.

It is in this forum that stakeholders such as the companies’ personnel management and workers’ representatives as well as stakeholder from the health sector, the social sciences and the health insurance as well as OSH institutions find solutions to ensure that the world in which we work is safe, healthy and competitive. In this context, the INQA is a platform for developing, sharing and transferring practical knowledge. It also provides space for discussions geared towards developing new solutions. This third memorandum from the Demography team of experts is also committed to this goal. The memorandum is intended to spark a debate; it invites the reader to reflect on key issues and thus adopts positions on such matters. It therefore takes a more pro-active approach to raising socio-political issues and does not simply confine itself to an economic analysis. Over the following pages, research findings are analysed, categorised and measured against the goal of managing the demographic change in the world of work. In so doing, the authors of this memorandum have also made simplifications with a view to setting out clearer positions. The aim is to identify ways of structuring workplace conditions so that they are economically sustainable and are a positive experience for employees of all age groups. Although this memorandum is not a position paper of INQA as a whole, it may however serve as the spark required to ignite a broader debate in society. The INQA is already promoting business-related projects with this regard, transferring knowledge to companies and supporting the practical implementation of such knowledge. INQA thus offers a sound repository of knowledge and, at the same time, disseminates the knowledge and expertise needed by companies and organisations for the current and future processes of change.



**1 Growing international
competition, rationalisation
and demographic change**

Growing international competition, rationalisation and demographic change

1

Starting position and forecasts

The economy and society are undergoing a dynamic process of change and adaptation. The productivity and performance of businesses and people are becoming more and more important. Global competition and the international division of labour are forcing the heavily export-oriented economy to pioneer innovations and to achieve ever greater productivity in order to be able to keep pace with the constantly evolving world market. At the same time, most industrial countries are also witnessing demographic change, which is exacerbating the conditions for the economy and presenting additional challenges for society.

Innovation is the main driver for the sustainable growth of a national economy (see Aghion and Howitt, 2009; Acemoglu, 2009). Skilled workers are an essential requirement for innovation and high productivity. Skills development entails life-long learning and the promotion of a willingness to innovate. It is the most important and most

sustainable response to the pressure for rationalisation exerted by the global economy. At the same time, skills development is also a strategy for managing demographic change (Kahlenberg/Spermann, 2012).

What sets those employees who are meant to sustain this innovation process apart? They are people who, in addition to sound professional expertise, are able to manage change and have the skills to shape the future. Without these prerequisites, access to attractive fields of work will become increasingly difficult. People who lack the skills described above must try to find niches in the businesses which are not strongly competitive. Only economic sectors with low productivity, and also usually low profitability, remain available for companies lacking employees with the aforementioned skills.

The increasing rationalisation of society will also cause those sectors to shrink and lead to a decline in their profitability. At worst, the employees in these sectors face the threat of long-term unemployment.

The world of work of the future demands a high degree of flexibility and willingness to change.

Following trend research, the world of work of the future will increasingly be one of fewer stable and secure organisations and jobs. The distinguishing features of future concepts such as Industry 4.0 and the digitalised working environment are highly-specialised, flexible networks. Employees will be forced to respond to changes flexibly, to see themselves as the planning centre for their own professional development (U. Beck) and to act like an entrepreneur of their own workforce (Voss/Pongratz, 1988).

Companies organised in the form of networks are able to change, or even be dissolved, more readily than traditional organisations. In Walter Powell et al. (1996), a manager uses the image of a flexible company as an archipelago of interconnected actions. Small islands between which links, communications and cooperation are established both very quickly and repeatedly anew.

These new organisational forms require an enormous willingness to adapt and change on the part of people on a scale comparable to that which the rural population had to demonstrate in the 19th century in the course of industrialisation. During that period, people were forced to abide by the rigid and inflexible discipline required by the newly established industrial firms; however, at the same time, they were tied to the company by a “post” guaranteed for the long term, and were thus offered some security. Such safeguards are increasingly available today. One possible compensation for the loss of ties and security is the enjoyment of a standard of living that is high by global comparison – and a gain in terms of individual freedom in a context of increasingly tough international competition.

It is clear that not everybody can make the necessary adjustments. The statistics produced by the Bundesagentur für Arbeit (Federal Employment Agency) have been showing this for some years now. Almost three million people are not in gainful employment, and the majority of them have not been in work for many years. Despite the lack of skilled workers and professionals, many young people cannot find an apprenticeship for vocational training. It is also difficult for

people from a migrant background, who either migrated to Germany themselves or are the children of migrants, to gain access to the labour market; the situation is similar for people with disabilities or chronic illnesses and people with outdated professional qualifications or experience that is no longer valued. The existence in tandem of young people who can find a good, skilled job anywhere and people who no longer appear to be “needed” in the labour market and have been driven out from even the last refuges is not an unrealistic scenario. However, in such a segmented society, there are no winners, since the social costs for everyone are too high.

The age profile of the population is also currently undergoing major changes. In the next few years, the sizeable Baby Boomer generation will be amongst the “older” employees in the workforce and will enter retirement between 2020 and 2030. Although smaller sections of the German workforce will benefit from retirement at the age of 63, the statutory retirement age will continue to rise for the majority of workers going forward – as in other European countries, too. Since leaving the labour force prematurely (and other paths away from gainful employment such as a disability pension) are also associated with reductions in income, in the near future those on low incomes in particular will also be required to continue to work into their 60s. This group of older employees on low incomes, in particular, frequently works in occupations in which significant health and skills-related risks are focussed. Those risks are often the result of working conditions which, over the course of a long working life, lead to chronic illnesses or the loss of specialist and interdisciplinary skills. On the labour market, older people are also a high-risk group in terms of long-term unemployment.

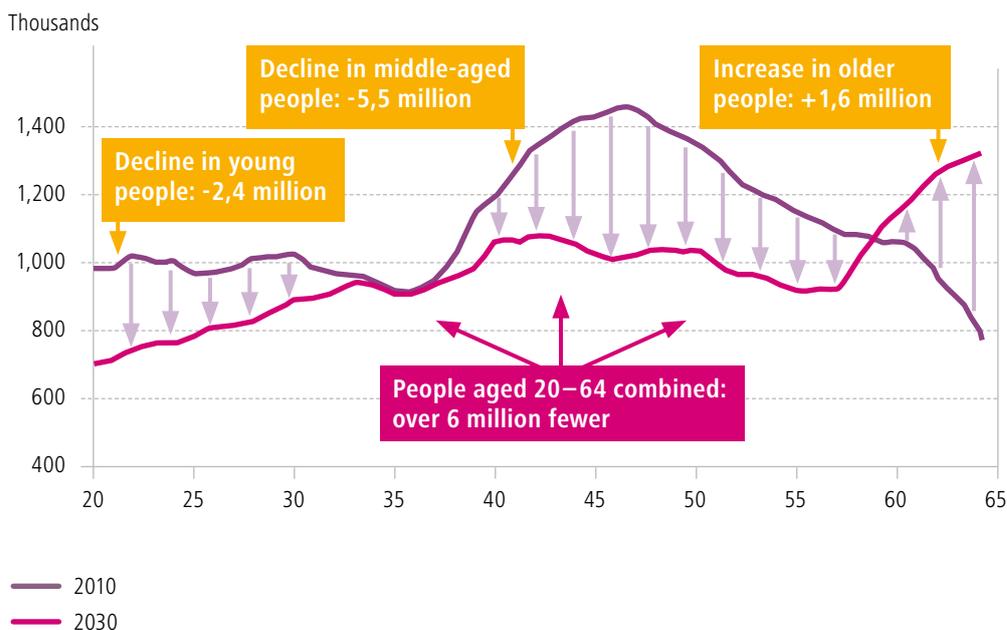
The demographic change in the German population will further exacerbate these structural problems – in Germany and other European countries. There is a risk that groups of workers who are subject to high health and skills-related risks will not be assisted in reaching the statutory retirement age as healthy and productive members of society.

This is not only painful for the workers affected and questionable from the perspective of social justice; it is also counter-productive for the national economy. All forecasts point to the fact that the working-age population is declining, in both relative and absolute terms. By 2050, a third of the population will have to work at a high level of productivity in order to finance the costs of two thirds of the population. The current ratio is already 50:50. Economic policy must therefore be directed towards increasing productivity further. The foundations for such policy measures exist in Germany in technological and political

terms; there is, however, the risk that the high social security contributions will undermine the motivation of those who are forced into working in a highly efficient and highly productive manner. The result could be new conflicts regarding resource allocation, since those who work and provide services would also want to reap the rewards of their efforts and receive what they consider to be a fair wage for their work. The net income of the working population must therefore be sufficiently distinct from any government benefits paid.

The incentive to work and provide services would otherwise be too low. The aim of demographic policy must therefore be to achieve an as high as possible gross domestic product (GDP) per capita (Kahlenberg/Spermann, 2013). The increase in productivity is thus a key challenge presented by the demographic change. It is closely connected with improving working conditions and promoting the ability to manage change.

Age structure of the population between the ages of 20 and 64, 2010 and 2030 (in thousands)



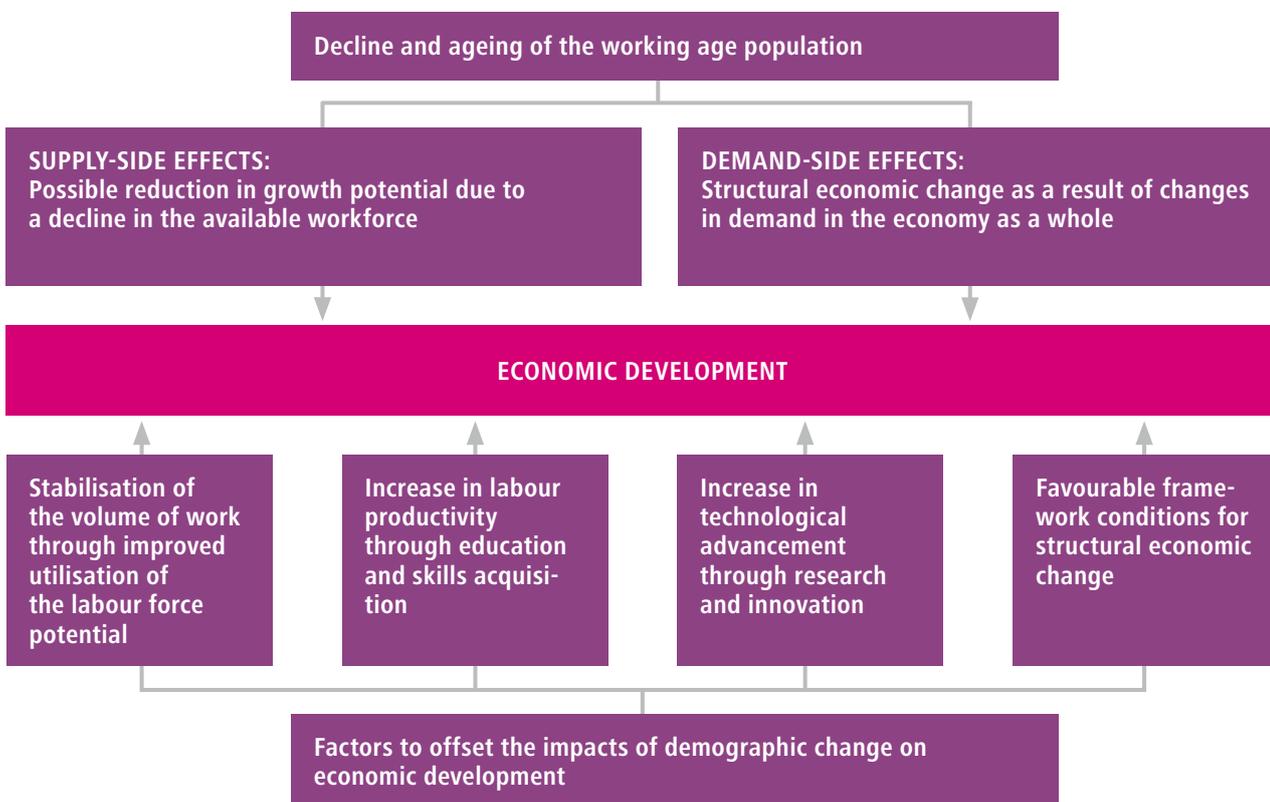
Strategic options for policy making

Which strategic responses must be adopted in this situation? And what implications does this have for policy? The first response must be the improved utilisation of the resources available, namely the labour force and its skills, in businesses and on the labour market. The second response involves exploiting new resources in a targeted manner by adopting a pro-active migration policy. The diagram below shows the principal variables in this regard.

Getting more people into (good) jobs

There remains a gap between the labour force potential available in German society and the number of people in employment. The national economy “allows” itself a far too high rate of unemployment, in particular in the case of recipients of Arbeitslosengeld II (unemployment benefit II). Many people in that group have, often rightfully so, lost hope of finding employment. In the worst cases, this aversion to the work system is “inherited” and passed on to the next generation. The business world regards these people as unemployable. In addition to their lack of specialist skills, conventional wisdom dictates that they also lack the necessary discipline and motivation to be gainfully employed.

Major influences of demographic change on economic development and key factors to offset them



Source: own diagram

Many young people – especially those from a migrant background – are unable to gain entry to the labour market. This is the result inter alia of a failed education policy which, although a great deal is spoken about inclusion and integration, is ultimately based on selection. Year after year, in Germany and other European countries, a lot of students leave our educational institutions with a qualification which does not make them employable in the eyes of potential employers. Where this is a statistically significant phenomenon, the end result cannot be a search to identify the individual failings of the young people, their parents and their teachers. A better approach would be to put the specific social causes of this scandalous outcome under the microscope. Young people must be helped to recognise and develop their skills.

Following a period of parental leave, women and men should be able to (re-)join the workforce as soon as possible. The requirements to enable them to do so remain a complicated issue. For example, there is still a lack of suitable childcare facilities (Kettner, 2012) in Germany. Single parents in particular are in practice excluded from gainful employment due to a lack of, or overly rigid, childcare options. For less qualified women whose potential earnings are therefore lower, a return to work is often not the top priority. For this reason, young women who are forced to manage being a mother and (re-)joining the workforce at the same time require comprehensive support, in the form of universal skill promotion (Friese, 2008). It is difficult for highly-qualified women to return to work after a long break since their skills may have become outdated and they are unable to take up further education opportunities due to their family commitments. In many regions and for many people, there is no public infrastructure that enables people with children to participate in working life.

For around ten years, the rates of participation of older people in the labour force have been increasing in Germany; this phenomenon is primarily attributable to people being in employment for longer. Unlike in the more recent past, there is now hardly any age-related decline in

the labour market participation of the 52-to-58 year-old age group any more. By contrast, the number of people claiming the old-age pension for the severely disabled has risen in the past few years; in 2010, one in eight new pensioners fell into this category (Brussig, 2012). The number of people taking early retirement due to ill health not only remains high, it is, in fact, rising further. There is another particularly problematic issue; in addition to those actually leaving the labour market, there are also a great many people who believe that they will be unable to – or who do not want to – work until their retirement. The main reasons for this are the conditions in which these people work. Employment can – as has been proven – be a source of health, motivation and personal development. Unfortunately, this has thus far been the case only for a small number of professions and occupations. By contrast, poor working conditions cause workers to “flee from work”. In many cases, people who our economy urgently needs do not want to or cannot work any longer (see, for example, in relation to psychological stresses: Lohmann-Haislah, 2013). It is for this reason that, for the majority of employees, the idea of voluntarily extending their working life tends to be a nightmare scenario rather than a utopian dream – and it remains a prospect for a few, particularly well-qualified people who have considerable leeway in their work. For this situation to change, the working conditions themselves and the involvement of workers must be the starting point. With regard to employment, efficiency, productivity and good sense should not be opposing forces, but should rather complement one another.

Denial of access to the labour market as well as negative learning experiences and the resulting reservations about and opposition to learning requirements and the need for change also play a key role for the aforementioned groups. The motivation and the capacity to learn must be fostered and strengthened – by businesses, social security systems and (further) education institutions. Employment is of economic importance to people and can give them a sense of validation and recognition. We need motivated and committed workers who can find meaning

in their work even at an advanced age. In addition to overcoming structural and cultural barriers that prevent, for example, single parents or older unemployed people from accessing jobs, the capacity to learn and to manage change must also be developed on a personal level, so that all workers can actively participate in the labour market up until they reach the statutory retirement age.

Increasing labour productivity through education and skills acquisition

We acquire our education and qualifications at school, through vocational training and as part of day-to-day work itself. The lower the level of education obtained by someone at formal educational institutes, the fewer the opportunities for learning later in that person's working life. The philosophy behind education and vocational training in Germany could be summarised as follows: "he that has plenty shall have more". Those most in need of an additional qualification are the least likely to seek one out. These groups are also offered the fewest opportunities by employers.

We have known for decades that people with a low level of education do not undertake further education. The reasons for this are probably formative negative experiences of learning and the education system. Employers also appear to view investment in the further education of low-qualified employees in particular as bearing little reward if sufficient replacements can be found on the labour market. This vicious circle is not easy to break, since all sides – employees, employers, educational organisations – have little incentive to change the situation. The solution must be found in the work itself. In accordance with Taylor's principles, the more work is broken down into small tasks that are repeated in quick succession, the more insignificant qualifications appear to be. Varied and demanding tasks require skills and allow learning to occur at the workplace itself. Such work also

offers competitive advantages, since it enables a flexible approach to be adopted to dealing with demanding customer requirements.

A second obstacle to learning as a natural part of a person's working life is still practised tripartite division of a person's lifecycle (Kohli). According to this, childhood and youth are shaped by the "sanctuary" that is the family and by school; this stage ends when the person finishes school. The adult stage begins when the person takes up vocational training, continues throughout his or her employment and comes to an end when the person enters retirement. The next stage, that of old age, continues until death. This "normal lifecycle" has thus far been the pattern that has guided social policy and is formally supported by a series of social institutions and both political and legal regulations and arrangements.

The three-part lifecycle is, however, an obsolete model. It is not just women who have major difficulties returning to the workplace (see, for example, Allmendiger, 2010); men are also increasingly affected. Up until the mid-1970s, the lives of well-educated German men were characterised by few transitions from one status to another (childhood and youth – education and employment – retirement) and minimised exposure to social risks (primarily unemployment, workplace injury and ill health). Nowadays, even the lives of people in such categories are increasingly "turbulent", and more and more frequently involve exposure to recurring risks and the existence of different stages and transitions between stages in parallel. A not insignificant number of these turbulent lives are becoming precarious, and an interconnected series of risks and problems arises. Thus in addition to the "old" risk groups, such as the chronically ill, low earners, the unemployed and people who have no formal qualifications, "new" risk groups have emerged (see, for example, Bonoli, 2005). These include single parents (primarily women), who in many cases are dependent on unemployment benefit, as well as older unemployed people, who are no longer able to access gainful employment, low-qualified people and younger people, who are hardly ever offered permanent contracts

of employment any more. Self-employed people, who are in a constant fight to ensure the economic survival of their business, can also be placed in that group, as well as people who care for family members.

At the same time, many people are increasingly unwilling to follow a model on how they should live their life over many decades that might not suit with their personal hopes and wishes (Hurrelmann, 2003). A re-imagination of a successful life that focusses on the situations faced and stages experienced throughout life and that enjoys the same level of consensus amongst institutions and individuals has not yet taken hold. At present, lifelong learning sounds more like a threat than an opportunity. Learning will become the norm only if people are assigned varied tasks and enjoy personal freedom to make decisions, and thereby grasp the purpose of and need for learning and the skills acquired as a result. Efforts to bolster people's capacity to learn and to manage change and the components of a good job are therefore closely linked. Each of these two elements – skilled employees and good jobs – needs the other in order to be effective. And together they form the essential basis for the economic success of our businesses and our standard of living.

Technological advancement through research and innovation

Technology and research funding policies are not a focus of this paper. In this section, we will therefore confine ourselves to making just a few observations. Innovation and technological advancement are always driven and implemented by people. People are more than just a residual factor that has not yet been rationalised away despite the introduction of automated processes and the use of robots. As a general rule, employees can pinpoint how work could be organised more efficiently and, at the same time, in a more worker-friendly manner. This has been clearly demonstrated by 30 years of research with test groups.

However, the framework in place does not allow for such changes. Share prices and consultancy agency fees shoot up if a certain level of production can be successfully achieved with fewer and fewer people. This type of rationalisation increases productivity to the benefit of profits but to the detriment of the workforce. German research funding policy has continued to invest far too little and unsystematically in studies into social techniques that demonstrate how people can be involved in efforts to achieve high productivity and employee-friendly working conditions. The promotion of social skills and social innovation is a key prerequisite for the social infrastructure of the workplace in the approaching future scenario dubbed "Industry 4.0" so that the economic opportunities of the networked economy can be exploited (promoter group communication from the Forschungsunion Wirtschaft – Wissenschaft (Science & Industry Research Union) 2013).

Conditions for structural economic change

If the trend researchers are right, the future will belong to new and flexible organisational forms that are fundamentally different to the major industries of today. Those organisations do, however, need a workforce whose attitudes to work are vastly different from today's. The increasing requirement of an apparent flexibility is a major concern for many people and will present new challenges for welfare and social security systems. The German welfare system and the social security funds were established against the backdrop of industrialisation and have thus far performed their roles superbly. It is, however, unclear whether they can offer the right solutions for the anticipated structural change towards organisational forms and personalised working life choices.

Employee skills require favourable working conditions to be fully effective, and vice versa.



2 Distribution of qualifications and knowledge in society

Distribution of qualifications and knowledge in society

Performance of the education system

The education sector as a whole – from nurseries to schools and vocational schools right up to universities – must find a simultaneous and equitable solution to two tasks that are difficult to reconcile. The promotion of talented pupils is unavoidable in an economy that is geared towards high performance. However, less talented or motivated students must not be weeded out and relegated to the sidelines of society. Every group requires support appropriate to its skills. Our economy needs high achievers. It cannot, however, afford for less able people to be devalued and excluded by the education system. The major challenges and performance issues of the education system are also discussed in the fifth and latest *Bildung in Deutschland* national report on education: “In order to improve the education standards of the population as a whole, it is essential that all groups in society participate in vocational training and further education successfully and complete education programmes. Efforts to reduce gender-specific and social dis-

parities are of particular importance. With that in mind, particular attention should be directed towards young men and people from a migrant background. Despite improvements in recent years, the level of education of people from a migrant background remains significantly lower than those without such a background. This is clear from the higher percentage of people who did not complete their general secondary or vocational education and the lower percentages of people with university entry qualifications and degrees amongst people from a migrant background.” (Educational Reporting Author Group, 2014, p. 44).

Pre-school and school education

Nobel Prize winner James Heckman has shown in numerous research papers that providing support in early childhood pays off (Cunha and Heckman, 2010). This has far-reaching consequences for the organisation of crèches and nurseries. The situation in terms of school ed-

education is as follows: it is true that Germany has improved considerably in the PISA ranking over the past ten years (see Klieme et al., 2010). However, talented youngsters are still being overlooked as a result of selection at a too early stage, meaning that this talent is wasted. The social segregation is both a tragedy for those affected and a waste of national economic resources. It also contributes to the relatively high rate of school drop-outs (see OECD 2012; Wössmann, 2007). It would, however, be a mistake to use pre-school education solely as a means of preparation for school education and to focus it on imparting, or preparations for imparting, knowledge relevant to the school system. It is the role of educational institutions – and this is particularly important for children from socially vulnerable families and immigrant families – to teach soft skills that facilitate learning in later life. The aim must be not only to teach mathematical formulae and dates in history, but also to foster a motivation for learning in itself.

Greater focus must be placed on teaching soft skills, both in the vocational education and university sectors.

Vocational and academic education

Germany's dual education and vocational training system is regarded as a model system internationally, and as a result, the youth unemployment rate is also very low by international standards. In some regions and in certain trades and professions, there are now fewer applicants than there are training places. However, the requirements to be satisfied by applicants are so high that, according to the Bertelsmann Institute (2011), some 300,000 young people are receiving further education and training under transitional schemes (such as the entry qualification scheme). In this connection, alternative means of achieving vocational and professional qualifications are required (e.g. modular "return-to-learning" options). However, low-threshold education and training opportunities, such as partial qualification or skills passports (see Jürgenhake/Vormann, 2009), are also helpful. The focus in Ger-

many continues to be on qualifications that have been acquired and are certified, and less on skills and experience gained through practice. The Deutscher Qualifikationsrahmen für lebenslanges Lernen (German qualification framework for life-long learning, DQR) launched in 2013 is intended to make the education system more transparent. Skills frameworks establish a link between the statistical qualification frameworks (which signify certifications) and the skill levels that are constantly changing as a result of action or inaction. However, the application of skills frameworks is still in its infancy (www.kompetenzrahmen.de).

An increasingly high percentage of each age cohort is beginning a university education. The adoption of a school-based approach to university education is made clear by the bachelor's degree system. A bachelor's degree, achieved at around the age of 22, can mark only the entry into a world of lifelong further education. Thanks to technological developments, online universities now offer new opportunities not only for education and training, but also for further education (Kahlenberg/Spermann, 2012).

Consideration of the vocational education and university education systems reveals that they have one point in common: insufficient teaching of soft skills. Such skills have no place whatsoever in either system and at present are regarded as being implicitly taught. On the contrary, a strong focus on factual knowledge and techniques, in fact, means that soft skills are not valued at all and are systematically consigned to the sidelines. Shortcomings in this area occur in particular amongst those who have acquired these skills only to an insufficient extent in their familial environment. In other words, the focus of the education sector consolidates social inequalities and disadvantages children from certain groups in society. The economy and society also ultimately pay the price for this. Dropout rates and terminated apprenticeships reduce the number of potential experts and specialists – people who the economy urgently needs.

Further education

Participation in further education reduces as people get older and is highly selective. Further education opportunities are predominantly taken up by the middle class and usually take the form of courses, often as evening classes. Those people who have a particular need for such further education are the very group which does not embrace this opportunity. Further education opportunities therefore hardly ever reach key target groups or miss them completely. This is concerning on the one hand since the necessary funds are provided by society as a whole through taxation, but only the few are benefiting. Those with the greatest objective need continue to remain on the sidelines. This raises the question of how to reach the so-called “educationally alienated” groups – and if taxpayer funding can be justified if the opportunities available are taken up only selectively. On the other hand, the question arises whether these funds do not in fact constitute a bad investment since they are not being used to get people with learning gaps fit for the labour market.

The latest technological developments will bring immense change to the further education opportunities available, the further education market and the further education institutions themselves – and perhaps also make them more attractive. However, it is more than questionable whether the accessibility barriers are being dismantled for those who have not undertaken further education under the traditional system. Our society should therefore ensure that, over the five decades after obtaining a professional qualification or a university degree, further education can become the norm for everyone (Kahlenberg/Spermann, 2012). With that in mind, it is the role of politicians to create the necessary framework conditions (see in this regard Proposition No 3).

The workplace as the central place of learning

The education system is of fundamental importance for the development of skills, motivation and general learning competence. It lays the necessary foundations that can later be corrected or offset only with great effort and at great expense. The workplace itself offers many opportunities for learning. It is a place in which an employee can continually expand his or her knowledge and gain experience if the working conditions allow or actively require this. Our traditional understanding of learning largely ignores this and fails to acknowledge the learning potential offered by the working world. However, this learning potential is also unfairly distributed in society. Well-educated people are usually assigned tasks that further develop their individual skills. Less educated people are often employed in workplaces that offer them little opportunity for personal or professional further development.

Informal learning in daily working life

Learning in the world of work does not occur just on training days or in seminar rooms, but in fact mostly takes place on an informal basis. Every time people successfully master a workplace-requirement, every time help is given to a colleague, and with every new piece of equipment that is tested, information is shared – and learning strategies are applied. Such strategies are also developed on the basis of existing experience through structured problem-solving, systematic testing and exchanges with colleagues.

Workplace learning promotes reflexivity – and personal development.

Communication is at the heart of such strategies. Such learning should be perceived less as the acquisition of job-specific knowledge and skills in the conventional and narrow sense of the word, and rather in the sense of the building up of behavioural knowledge that “promotes an efficient approach to dealing with requirements” (Hacker & Skell, 1993, p. 17). Skills that involve “managing whole categories of activities [effectively] in changing circumstances” (Ibid., p. 18) take centre stage. Such learning is therefore intended to be incorporated into the operational value-creation process on a flexible basis and, on that basis, to provide access to skills and capabilities in changing organisational and technological contexts – and meeting competitive standards in terms of time and quality.

It will be of crucial importance in the future for employees to develop the skills, capabilities and strategies in order to be able to capitalise on these requirements for self-managed learning in the workplace. The sum of those learning skills, capabilities and strategies is referred to as a person’s “learning competence” (see Chapter III for further information). Informal learning takes place “on the job” and “near the job”. Workplace arrangements that promote “on-the-job learning” are based on strategies such as work structuring, mixed work and management by objectives. “Near-the-job learning” is facilitated by means of concepts such as the quality circle, health and safety circle, problem-solving groups, project work and learning stations (according to Hamacher et al., 2012, p. 76). Communication lies at the heart of informal workplace learning, for example, the continual discussion of workplace tasks and problems with colleagues (Hamacher et al., 2012). Dehnbostel (2015) focuses in particular on the concept of reflexive action in the working process. For this to be successful, workplace tasks and working conditions that enable skills to be acquired or consolidated are required. Learning opportunities should be offered on a low-threshold, low-requirement basis.

Successful informal learning works by achieving harmony between three factors, the learning challenge, trust and support, and can give em-

ployees an experience of self-efficacy, which in turn makes further learning processes easier. “In addition, we have established that trust grows when professional challenges are successfully overcome, whereas the confidence to take on such challenges is dependent on the extent to which the learners feel supported in their endeavours” (Eraut, 2004, p. 271).

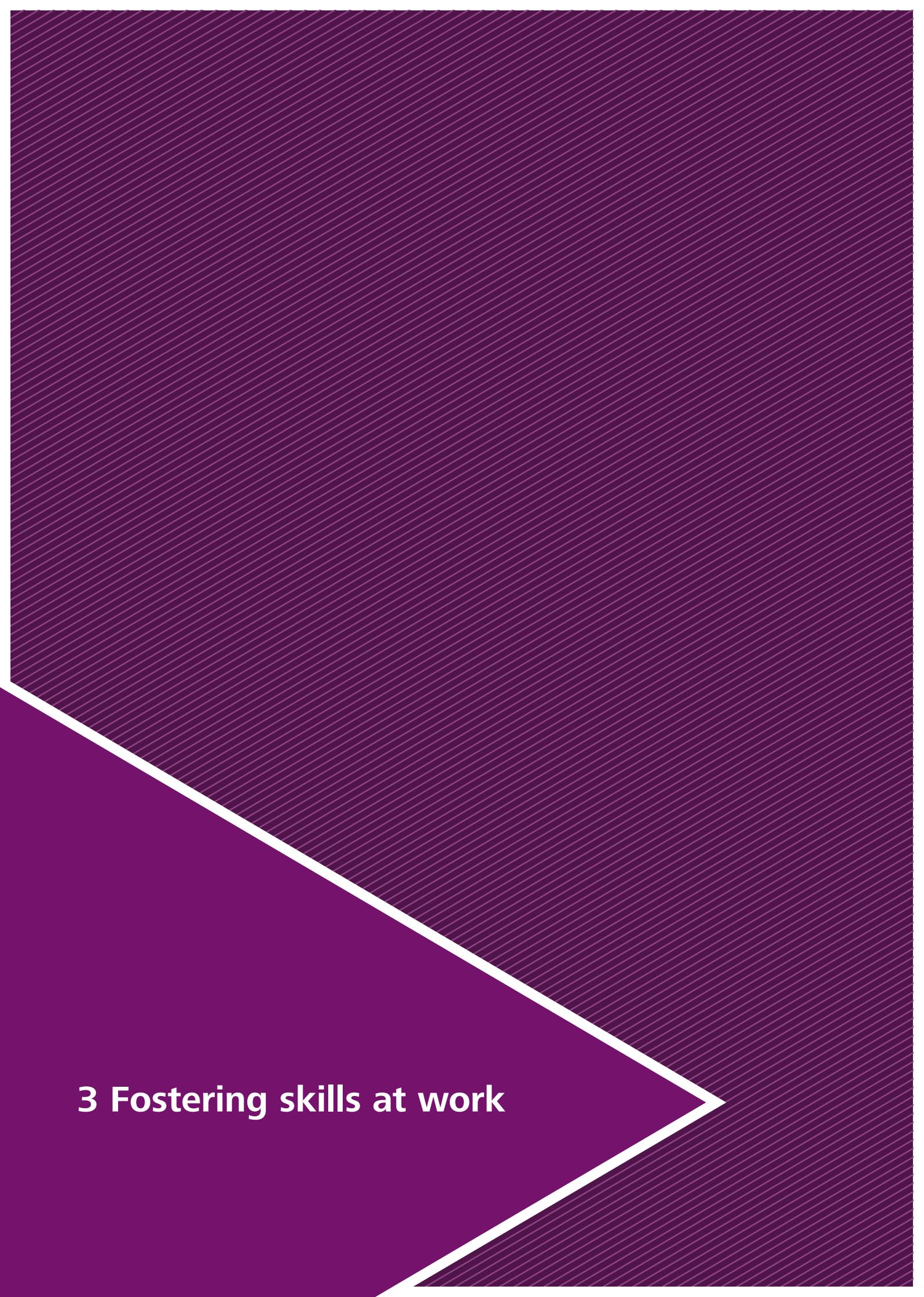
A learning-friendly work environment

Qualifications and skills that are not used or applied at work are lost. “The greatest obstacle to learning is an activity in which there is objectively nothing to learn” (Hacker/Richter, 1990). Accordingly, when structuring workplace tasks, consideration should not only be given to the short-term, economic effects, rather account must likewise be taken of effects geared towards employees’ continued ability to work, effects that in many cases often become apparent only over the long term. One fundamental principle applies: “learning is learned through learning” (Hacker, 2010).

There is another aspect which must be considered: “in order to promote employees” skills during the working process itself, the working environment must be structured in a way that is conducive to learning” (Frieling et al., 2007). Learning competence grows in an environment that is structured so as to be conducive to learning and that promotes participative human resources management and a health-conscious performance policy. All those factors bolster the resources and opportunities for action of employees in the interests of health and greater productivity. Therefore, if we want a highly-qualified and motivated workforce, we must structure and organise the work accordingly. There is no other alternative if we wish to stake our economic claim in an environment of international competition.

A working environment that promotes learning has a positive impact on skills and personal development. Rau (2004) concludes that a working

environment that is conducive to learning (i.e. that offers “learning opportunities”) is positively associated with health. The cognitive performance of employees also benefits from learning conducive working conditions. With regard to the period that extends beyond mid-adulthood, Sonntag concludes: “The positive impacts of the complexity of the work carried out and the scope for decision-making and review ensure that cognitive performance is retained. The organisation of the working environment in such a way that learning and development are promoted goes hand in hand with mental agility and skills development” (Gesamtmetall, 2014). Working arrangements are usually a matter for operational managers, i.e. group or team leaders, senior nurses, sales or warehouse managers. These managers influence informal learning in the workplace: through their organisation of working arrangements and their influence on working relationships. As managers, they can directly facilitate learning opportunities in day-to-day work by setting challenging tasks, providing support and enabling learning. They also have an indirect effect by fostering a spirit of trustworthy cooperation that prevents any fears of making a mistake (Eraut, 2004).



3 Fostering skills at work

Fostering skills at work

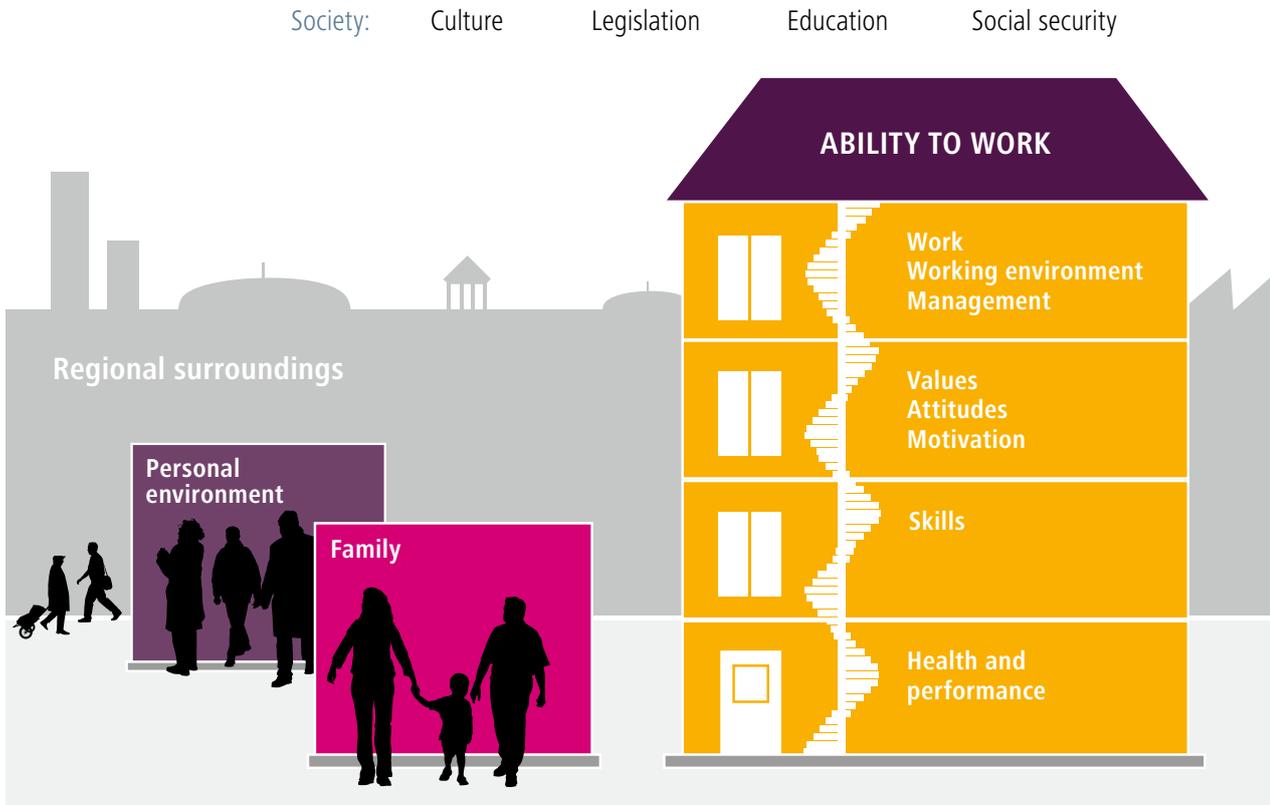
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The promotion of learning throughout a person's life is the key answer to the demographic challenge facing the labour market. However, both our educational establishments and our social system have thus far failed to rise to that challenge. Neither system was designed for the tasks ahead of us. Their roots lie in the distant past and they enjoyed their success in the industrial society of the 19th and 20th centuries. They are, however, ill-equipped for a situation in which the skills of all members of our society need to be mobilised to ensure provision of a sufficient number of qualified and motivated employees for the economy. A viable, theoretical and empirically substantiated basis is needed in order to make adjustments to those systems. In this regard, there are two potential concepts that, as bridging concepts, offer guidance for policy options: the "house of work ability" model and the theory of "learning competence".

The "house of work ability"

Taking as his starting point the extremely high rate of early retirement in Finland, Juhani Ilmarinen developed and tested a concept, dubbed the "house of work ability", that brings together learning, health and working conditions. The term "work ability" refers to the relationship between the ability of a worker and the working conditions; it is understood to mean the capacity to manage certain tasks in certain work situations and seeks to achieve a permanent balance between workplace requirements and employee skills. This model is based on empirical findings and academic studies, primarily longitudinal studies from Finland. For example, in one study (von Bonsdorff et al., 2011) conducted over 28 years (first surveys conducted in 1981, last surveys in 2009), around 6,000 employees were repeatedly interviewed (some 2,800 people still participated in the last wave). By bringing together all the factors that determine a person's ability to work, the result is the "house of work ability".

The balance between workplace requirements and skills and capabilities must be constantly re-adjusted.



Source: Finnish Institute of Occupational Health 2011, AGE POWER, graphic designed by Mitja Ahola

The integration of workers into a social fabric forms the ground floor of the house. That social fabric is characterised by specific effects on health and performance. Health covers physical, mental and social health and is a pre-requisite for workplace performance. The second floor is focused on job-specific education and training, and involves employees acquiring knowledge and professional skills over the course of their working life and possessing sufficient technical and social competences. Building on that, the third floor houses the social and moral values of the employees, their attitudes and their personal views on how they fit into working life. In this connection, individual perspectives in relation to the workplace culture are of particular importance. Finally, the fourth floor comprises the work itself, bringing together all aspects of its organisation and the physical, mental and organisational demands. Managers and their approach to leadership enjoy special status on this floor. The first key point is that these four floors are in balance and, should problems arise, the concept

of work ability must be reviewed on a floor-by-floor basis and, where necessary, “order” must be “restored” (Ilmarinen/Tempel, 2002).

Maintaining work ability is the joint responsibility of management and employees (Richenhagen, 2009). It is thus closely linked to the workplace working conditions. By contrast, employability is a broader term, and looks beyond a person’s current job to the labour market as a whole. The term “employability” thus refers to the skills, capabilities and qualities of a person in relation to the requirements and opportunities offered by businesses and the labour market (Richenhagen, 2009). Given the increasing decline of long-term job security, the “industry-wide” aspect of employability is growing in importance.

What does this mean in practice? It demonstrates that we would be wrong to view learning, health and employment as being separate from one another. Viewed from the perspective of ensuring that a person remains employed until he or she

reaches the statutory retirement age, these aspects are interconnected. Success can be expected only given integration. Working conditions have a positive and negative impact on health and qualifications. If we want healthy, qualified employees, we must start by reshaping work appropriately. With that in mind, the “house of work ability” demonstrates that the sole focus cannot be on structuring work in accordance with ergonomic criteria in a narrow sense. Leadership and corporate culture also have a major influence on how the ability to work changes during a person’s career. Awareness of these factors and effects is key to maintaining a person’s ability to work for the duration of his or her working life.

The concept of “learning competence”

The concept of learning competence (Stamov Roßnagel, 2008) is used to describe and predict the learning behaviour and outcomes of employees in the work context. It subjects one partial aspect of the “house of work ability” to particularly intensive scrutiny.

The basis for learning competence is the learning focus. It encompasses universal, subjectively important learning objectives, such as expanding knowledge and developing skills, as well as concealing skills gaps. The learning focus also covers epistemic beliefs, such as, for example, how learning works (e.g. “learning means memorising” or “learning means problem solving”) and how knowledge is acquired (e.g. “knowledge is objective”). The learning focus significantly influences the choice of learning techniques, the learning assessment and the willingness to engage.

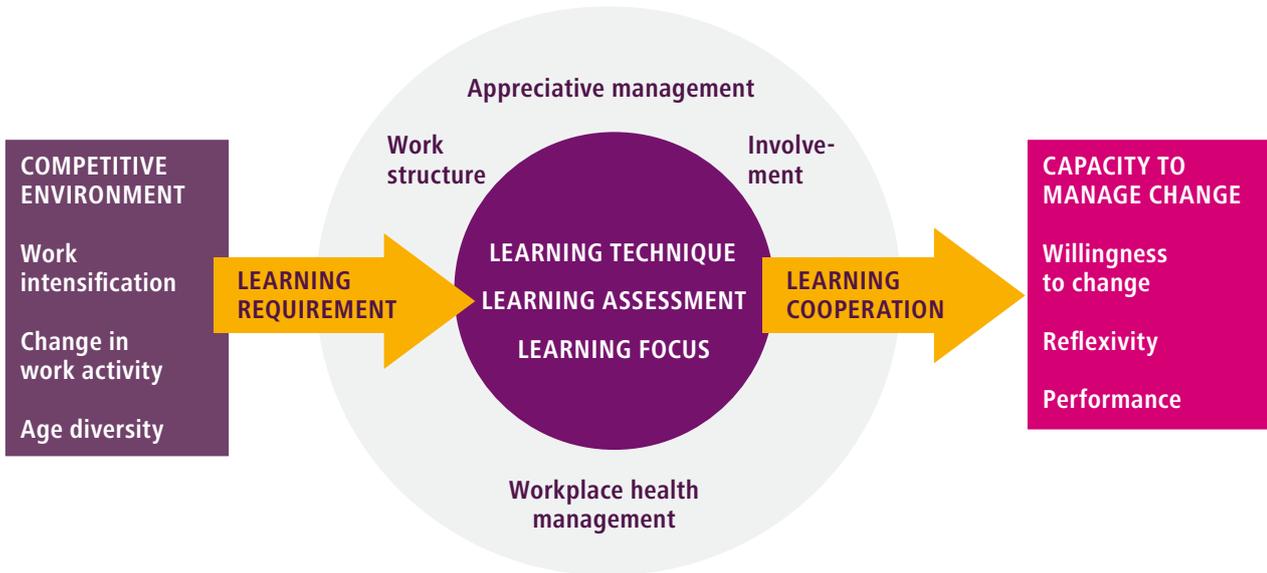
The assessment of learning, as the second stage of learning competence, is rooted in an individual’s self-diagnosis of his or her learning needs; this involves determining the fields of learning in which his or her knowledge or skills need to be expanded. This self-diagnosis goes beyond just general assessments (“I’m a competent user of

the XY model”) and into the setting of learning objectives (“... but I’m still unsure about how the troubleshooting function works”). Learning competence means setting specific objectives (“I want to understand the troubleshooting function so that I can manage things without involving the boss”), planning one’s own learning with a view to achieving those objectives (“Where can I find information about troubleshooting?”) and evaluating that learning (“Am I now actually able to troubleshoot faults on my own?”). Learning competence is rounded off by knowledge and mastery of learning techniques. This level is concerned with learning in a narrow sense and covers techniques (e.g. working with key text excerpts, visualisation techniques) for processing and acquiring the content to be learned.

Basic cognitive skills are essential requirements for learning competence. They enable new and challenging learning objectives to be tackled. According to Horn & Cattell (1966), basic cognitive skills (intelligence) are divided into experience-dependent skills (e.g. language skills and strategic thought) and non-experience-dependent skills (“fluid” skills, e.g. short-term memory, ability to suppress irrelevant information). Basic cognitive skills develop differently over the course of a person’s life. Whilst crystallised functions tend to improve with age, the trend is in the opposite direction in the case of fluid functions. Learning how to cope with new challenges in day-to-day life and new work-related tasks, in particular in the case of older employees, depends upon the extent to which crystallised functions are used and fluid functions are available and/or supported. Accordingly, skills development should therefore primarily focus on promoting declining, fluid cognitive functions, especially in the case of older employees (Gajewski et al., 2012).

The concept of learning competence is used to describe and predict the learning behaviour and outcomes of employees in the work context.

Learning competence at the workplace



Richter /Stamov Roßnagel /Saupe-Heide

Participation in further education and continuous learning throughout a person's working life develop job-specific knowledge and can produce a level of self-confidence that enables the person to work at a professional level inside or outside the company or organisation. Reference is also made in this context to "key skills". These skills can assist in the management of requirements that are the result, for example, of a change of activity in the company. Key skills thus make a direct contribution to maintaining the ability to work. Fluid functions are of particular importance when the activities assigned or demands made change. Such changes are to be welcomed since they can prevent an individual from performing the same tasks in monotonous repetition, but they do present new challenges that need to be managed. Accordingly, if the aim is to sustain employee health and manage the current workplace demands, then the primary aim of capacity-building is to ensure employees' continued ability to work. Fluid functions decline with age, and this can adversely affect the ability to learn, flexibility and employability. That decline can, however, be significantly reduced by means of favourable working conditions (Marquié et al., 2010) and personalised training measures (Gajewski et al.,

2011). In addition, newly acquired skills can also provide support when a individual moves from one role, department or company to another. Acquiring new skills can thus contribute to guaranteeing a person's continued employability over the long term.

Learning competence is of particular importance in connection with informal learning in the workplace, since a variety of learning techniques and sustained motivation are necessary for such workplace learning. Learning competence is essential for mastering of day-to-day working requirements, since it is needed in order to acquire job-specific knowledge and activity-related skills. Employees with a higher level of learning competence have greater learning successes and are better able to manage the demands resulting from learning and further education in the workplace (Stamov Roßnagel, 2008).

Globalisation and demographic change represent both a challenge and an opportunity. They can be used to increase productivity and competitiveness by improving working conditions and promoting the technical and personal skills of employees. Developing learning competence is the key to this. Operational managers have this

key in their hands in day-to-day working life, but they need the support of management and the bodies representing workers' interests.

Capacity for creative development and change competence

How can workers be prepared to retain their identity in the constantly changing world of work so that they can make sense of changes and be motivated to manage change? How can the necessary foundations be established and maintained in the working process so that employees remain stakeholders who are active participants in events, articulate their interests, set objectives and get involved? The answer lies in the capacity for creative development and change competence.

The **capacity to manage change** refers to the ability of an individual to

- ▶ deploy skills and use qualifications in changing circumstances in a targeted manner;
- ▶ react to the different and changing requirements of work and life situations; and
- ▶ handle the relevant requirements in question in a productive manner with a view to his or her personal professional development (see Wittwer, 2001, p. 246).

The impact of the capacity to manage change can be felt at a social, institutional/organisational and technical level. On a social level, the capacity to manage change means being able to contact and communicate with strangers in constantly new and changing situations. On an institutional/organisational level, it concerns the ability to move with confidence to a new organisation, for example to another company. This includes, for example, identifying the relevant system of values and standards as well as the established habitual and behavioural patterns, reconciling them with one's prior experience and evaluating them. On a technical level, the capacity to manage change means being able to apply knowledge and abilities acquired in a completely different context to other or changing (work) situations.

The capacity to manage change thus enables individual skills and qualifications to be transferred. Knowledge acquired in the past can be adapted to the requirements of the new situation.

The capacity for creative development goes beyond the capacity to manage change. It means the acquisition of knowledge about the possible ways of influencing and organising things, circumstances, social situations and social processes. The individual does not adapt to the environment and attempt to succeed in that environment, rather he or she influences the environment itself.

Both capacities are essential. Acquiring the capacity to manage change is important for every individual, since external factors force, or at least trigger, adjustments. This cannot, however, be the benchmark as far as policy development and achievement of emancipatory goals are concerned. The aim here involves demonstrating a will to embrace creative development through collective action at various political levels, for example inside a company, as well as in networks, associations or trade unions (Wittwer, 2001).

Long-term HR strategies, skills promotion and age-appropriate learning

The capacities to learn and manage change are essential pre-requisites for long-term human resources (HR) strategies with a view to adopting a preventive approach to tackling health and skills-related risks. In organisations built upon involvement and participation, the capacity for creative development enables employees to further develop and expand upon health and skills-related issues pro-actively. Strategic HR planning can form the basis for a dynamic and differential approach to organising work. In this connection, job families, i.e. related occupations and areas of activity, form the starting point for consideration of paths to mobility. In view of the delayed impact of qualifications, strategic HR planning can exploit mobility processes in a targeted manner with a view to achieving job rotation in the course of an individual's career.

Remaining active and creative in a dynamic work process and setting one's own objectives: the capacity for creative development and change competence are indispensable.

Job families – i.e. related occupation and areas of activity – can open up new paths to personal development.

However, a recent survey conducted by the Initiative for a New Quality of Work shows that, in over 1,200 companies and of more than 7,500 employees, only 22% of firms have a HR plan that goes beyond the next 3 years. A greater focus should be placed on long-term HR planning so that companies can truly capitalise on the potential offered by strategic HR planning.

Strategic HR planning and other long-term HR planning concepts place jobs into four categories:

- ▶ entry level jobs: jobs with a relatively short settling-in period;
- ▶ transitional, developmental or promotional jobs: they allow for a change of job and create prospects for further professional and personal development;
- ▶ long-term jobs: these are flexible in regard to the adjustment of activities to altered performance profiles and are characterised by changing roles and responsibilities.
A person can work in such a job until he or she reaches the statutory retirement age;
- ▶ exit-level and wind-down jobs: despite the demanding responsibilities that require a higher degree of skills and knowledge acquired through experience, they offer age-appropriate working conditions and also enable people to work until they reach the statutory retirement age (Frevel/Geißler, 2013).

Long-term HR strategies help to ensure an individual's continued ability to work over the course of his or her working life by implementing varied and performance-appropriate requirement structures and providing learning incentives (for further details, see Berendes, 2011; RKW, 2014).

Younger and older people alike are capable of learning. Older people do, however, require a different framework for learning and further education (Falkenstein, 2010; Stamo-Rossnagel, 2008). In laboratory trials, the training progress of older people taken as a whole is somewhat lower than that of young people, in particular where the material is new, unfamiliar and ab-

stract (Nyberg et al., 2003). Kliegel et al. (2003) also found that young people made slightly better progress with learning; this study also involved observing older people who had developed their skills to a superb degree through learning.

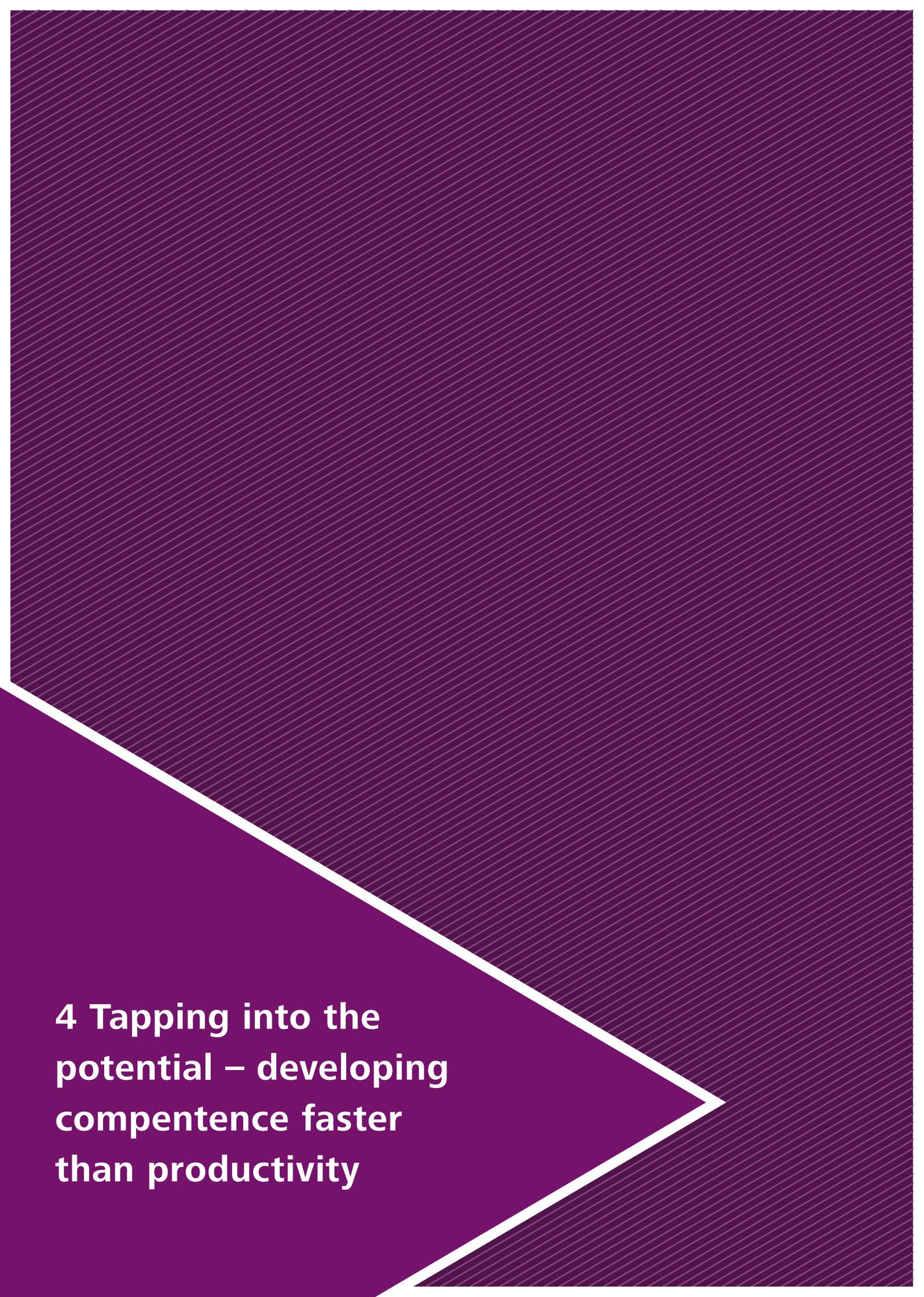
Learning later in life is influenced by a variety of factors. These include impaired perception due to old age, a lack of learning experience, too little prior knowledge and an insufficient grasp of the subject matter. The nature and structure of the learning material, self-assessments and prejudices based on age also affect learning success. In addition, older people tend to be more easily distracted than younger people (see, for example, Getzmann et al., 2013) and have problems looking for information (Wild-Wall et al., 2007). This should be taken into account when designing learning material and learning environments. Older people also deal with feedback differently and, in the case of some tasks, learn from their mistakes to a lesser degree than young people (Wild-Wall et al., 2009).

Falkenstein (2010) drew up some basic rules for the learning and further education of older employees:

1. Do not be influenced by your own prejudices about age or the prejudices of others.
2. Remember that older people are in principle similarly good, and in some cases just as good, at learning as younger people.
3. Time pressure must be avoided.
4. The presentation of learning content must be optimised both visually and acoustically.
5. There may have been an erosion of the ability or willingness to learn due to prior negative experience or work situations; this must be taken into account.
6. Learning content must build upon the older person's existing (technical) knowledge.
7. The content taught must be as relevant to day-to-day working life and as specific as possible.

8. The learning material should be broken down into appropriate sections and clearly arranged. The time spent looking for important information in texts should be minimised by structuring the course materials appropriately.
9. Distracting information should be avoided or minimised.
10. The learning material should be logical, specific and clear.

It is particularly important for success in learning that older people can structure the learning material independently (Kliegel et al., 2003). Many older people adopt strategies to compensate for limitations during learning. Learning later in life should therefore be largely self-managed, self-organised and self-determined. In the case of certain tasks, such as learning how to use IT applications for example, age-specific learning groups should be preferred.



**4 Tapping into the
potential – developing
competence faster
than productivity**

Tapping into the potential – developing competence faster than productivity

It is clear from the analysis contained in this report that qualifications and skills are key to improving the productivity of the German economy. At the same time, they are important parameters in the management of demographic change in the labour market – and are closely connected with one other significant parameter: health. The concept of the “house of work ability” is based on the assumption of a very close link between skills and health, with the result that investment in skills and qualifications also has a positive impact on health.

Efforts can be made to increase productivity by adopting a very wide variety of concepts.

Not every one of those concepts is compatible with the concepts of good and decent jobs; in fact, some of them are blatantly at odds with such notions. Improving productivity through the acquisition of more skills and qualifications seeks to achieve a balance. The aim is to create productive and good jobs, jobs that workers enjoy and do not regard as a burden imposed by someone else, jobs that people enjoy doing and which it may even be possible for them to continue doing – and continue to enjoy doing – even after retirement. There is, however, still some way to go to achieving this; many obstacles have to be overcome, by both workers and companies, as well as by politicians, the social security system and the education system.

The world of work

► Recommendation No 1: Productive, innovative and good working conditions should not be a contradiction.

Analysis:

Nobody wants to do a job that they consider simply to be a chore. It is for this reason that it is essential that good working conditions are created. Leeway for personal action, involvement in company decisions and the opportunity for workplace learning are all ingredients of good working conditions. The enactment of the Arbeitsschutzgesetz (Occupational Health and Safety Act) marked a key stage in Germany for the creation of such jobs. That law requires that a comprehensive risk assessment be conducted. In addition, employers are required under that law to guarantee and improve the safety and the protection of the health of employees in the workplace by adopting occupational health and safety measures. Establishing humane working conditions is explicitly mentioned in the law as just such a measure. Its implementation has, however, thus far been lacking. There are two reasons for this. There are still employers and HR managers who can see no point in providing good jobs and regard providing good jobs and achieving economic efficiency as a contradiction. In order to manage

demographic change, many companies need to undergo a cultural change; that change must be driven by social partners and social insurance schemes. At the same time, external monitoring of working conditions in Germany is poor due to cutbacks to the competent bodies' resources, meaning that the supervisory authorities have little capacity to prevent companies from ignoring occupational health and safety requirements.

Recommended action:

For the vision of good working conditions or "good work" to become a reality, two interrelated strategies must (continue to) be pursued: the Initiative for a New Quality of Work with its strong focus on management and employees offers the crucial basis for efforts to support companies to change their corporate culture by providing appropriate assistance. At the same time, existing occupational health and safety law must be enforced. To that end, the competent bodies must also be provided with the necessary resources and assigned clear responsibilities. Learning on the job and learning in the workplace are key objectives connected with the organisation of working conditions. The risk assessment should be expanded to cover the learning opportunities and barriers to learning at work. Companies must be supported in introducing management systems that implement and monitor this in as non-bureaucratic a manner as possible.

► Recommendation No 2: Good working conditions must be profitable for companies.

Analysis:

The literature on the promotion of health in the workplace abounds with evidence that investment in health pays dividends for companies, albeit only after a certain period of time. Companies which are under short-term pressure to succeed – pressure exerted, for example, by quarterly reporting – often view such longer-term investments with scepticism.

Recommended action:

In order to achieve a quicker return on investment, a simple system should be created whereby companies that are investing in, or that have invested in, good jobs secure a financial advantage. This could be achieved, for example, by reducing social security contributions, offering tax incentives or providing access to particularly attractive financing terms. The models in use in the field of accident insurance (e.g. the insurance provider BG BAU) could be the basis for initial considerations.

► **Recommendation No 3:
Investment in skills and
qualifications.**

Analysis:

According to the forecasts of trend researchers, our society must bid to the ideal of a very long period of employment with one employer farewell. Economic change will give rise to organisations that are significantly more flexible and also demand even greater flexibility of employees. Periods of employment in which a person changes role, company or occupation may be interrupted by periods of unemployment or further education. With that in mind, it is essential to develop corresponding skills and attitudes, without which it will be impossible to meet this challenge.

► **Recommendation No 4:
Equitable protection
against unavoidable
labour market risks.**

Analysis:

It can be assumed that, given the primacy enjoyed by the goal of particularly high productivity, there are workplaces (and their number will in fact continue to increase) in which employment until retirement age will be the exception to the rule. The loss of ability to work in these workplaces must, therefore, be regarded as a calculable risk for which collective provision must be made. Individual provision against such risks is scarcely possible, in particular where they are combined with low pay.

Recommended action:

Companies should prepare their workforces for the growing forces of dynamic change by offering a working environment that is conducive to learning. The Federal Employment Agency is also required to support these processes by providing opportunities to workers who wish to improve their employment prospects. In the case of unemployment, this could, for example, take the form of a bonus scheme intended to bolster the personal motivation of insured persons to invest in further education. Providing a working environment that is conducive to learning and promoting formal further education must be pursued as complementary strategies intended to increase work ability and employability. The resources of the labour market must be developed in a targeted manner to secure experts and specialists for the future.

Recommended action:

Such provision can be guaranteed by means of a collective bargaining policy that opens up new opportunities at a timely stage for employees in such high-risk jobs to move to alternative activities within the same company, the same industry or even in completely different economic sectors, and that provides cushioning against any financial losses. Alternatively, or in addition, it must be discussed how this increased risk for certain occupations and industries can be managed by means of contributions to unemployment insurance, possibly with risk surcharge. It is essential that employees affected by such risks are given the opportunity to move to other activities that make it possible for them to secure employment until they reach retirement age. Qualifications and investment in skills are the keys to achieving this.

► **Recommendation No 5:
Chronic illness or disability must
not be a barrier to employment,
but rather a part of day-to-day
working life.**

Analysis:

The expectation that a worker will remain healthy throughout his or her working life has always been a fiction that has had very little to do with reality. Illness and disability are, unfortunately, part and parcel of a normal life. This is demonstrated more than clearly by the statistics on illness types provided by health insurance funds and those concerning rehabilitation and early retirement provided by pension insurance schemes. The ageing of the working population and the cuts to pensions are making it more difficult for workers with chronic illnesses and those who have suffered from serious ill health to leave the labour force before reaching the statutory retirement age. At the same time, the economy is also no longer prepared to do without those workers who, despite having health

issues, are still important to businesses because of their skills and qualifications. The now already high percentage of employees with health issues will therefore rise even further. Scientific studies show that people with chronic illnesses can possess a good ability to work if a balance can be struck between the demands on them and their capabilities, and if the leeway these employees especially require is optimised.

Recommended action:

Cooperation between social insurance schemes and health and pension insurance funds, on the one hand, and companies and employees, on the other hand, must be improved in order to optimise rehabilitation in general terms. The findings of the health insurance funds may help to identify imminent needs for rehabilitation at the earliest possible stage. The best form of rehabilitation is that which mirrors the individual's job as closely as possible, takes account of the stresses and pressures of that job and is closely coordinated with the company doctors.

School and vocational training

► **Recommendation No 6:
Giving all young people
professional prospects.**

Analysis:

Year on year, young people leave the education system for a life of unemployment without any prospects for the future. This affects young men and women from a migrant background equally. We can neither afford to do without this group of potential workers nor may we overlook the risk that might arise if they are not sufficiently integrated into society. The resultant costs for society, the social security schemes and for the people concerned themselves are grossly disproportionate to the investment that would be necessary to eliminate this undesirable development.

Recommended action:

Young people from a migrant background who are not sufficiently integrated into German society are the core target group whose acquisition of qualifications must be promoted and facilitated. The credibility of the strategy to guarantee experts and specialists for the future will need to be assessed by the extent to which it succeeds in preparing this group for the labour market and integrating these young people into companies. Pupils who do not achieve a school-leaving qualification must be given the opportunity to access the labour market through a specialised programme that is intended to offset any skills or knowledge gaps. The related schemes and programmes currently offered by the Federal Employment Agency must be expanded.

► **Recommendation No 7:
Education skill development and
training opportunities for all**

Analysis:

Germany's dual education and training system is regarded as a model system internationally. However, an increasing number of companies are complaining that they are no longer able to find school leavers who have the necessary qualifications to meet their needs. The result of this is that school leavers with qualifications that do not fully meet businesses' expectations are

unable to access the dual education and training system. For the companies concerned, every training place is an investment decision, but not one that always pays off for the company.

Recommended action:

Appropriate tools and mechanisms must be created – potentially in conjunction with the collective bargaining policy – that offer incentives to provide training that goes beyond the company's needs and to take on young people in training positions who do not match their "usual" expectations.

Transition between training, employment and further education

► **Recommendation No 8:
Focus on career guidance.**

Analysis:

The transition from the education sector to working life is supported by the Federal Employment Agency. It offers guidance in schools to final-year pupils as well as one-on-one guidance. These support services offered by the Federal Agency are voluntary, but are accessed less frequently by pupils from socially vulnerable families than pupils from more privileged backgrounds.

Recommended action:

The Federal Employment Agency's activities in terms of career guidance must be focussed primarily on outreach guidance in secondary schools. In addition, a framework should be created in such a way that opportunities to access guidance are appealing to the pupils concerned and their families.

► **Recommendation No 9:
Education for all requires
targeting.**

Analysis:

It can be assumed that the taxpayer-funded expenditure on further education – for example in adult education centres – is misdirected to a considerable degree, since these opportunities are likewise not reaching the people who genuinely need them.

Recommended action:

Further education must, in particular, perform a compensatory function for people with skills/knowledge gaps, and should also contribute to ensuring that well-educated people retain and, in so far as possible, expand their skills. Taxpayer funds should not be used to finance courses or programmes that simply meet individuals' leisure interests. Government funding of further education should therefore be restricted to those courses or programmes that address skills shortages and seek to maintain and develop skills. All other courses and programmes must be fully funded by contributions from the participants.



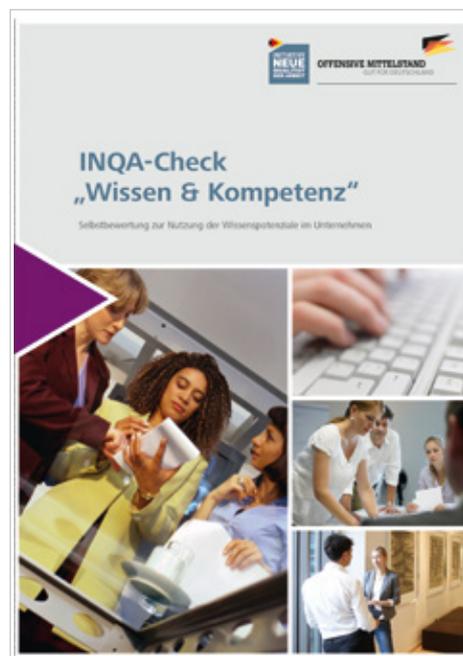
**5 Tools provided by
INQA project support**

Tools for companies and employees

INQA-Check "Knowledge & Competence"

Within the context of the Initiative for a New Quality of Work (INQA), the generIK project (<http://generik.cimtt.de>) was tasked by the Bundesministerium für Arbeit und Soziales (Federal Ministry of Labour and Social Affairs, BMAS) with the development of a self-check tool for companies. The aim was to raise awareness around the issues of "knowledge" and "competence". Through the independent and autonomous application of this low-threshold tool, companies should be able to (further) develop and exploit individual and collectively shared knowledge. The aim is also to bolster existing skills of the workforce and promote new skills.

The purpose of the INQA "Knowledge & Competence" check is to help SME owners, as well as managers of departments or teams, to identify the latent, partially untapped potential of their employees and to establish specific measures to



access new skills. The tool thus actively contributes to the development of a working environment that is conducive to learning.

Alongside the knowledge management model developed by Gilbert Probst, Steffen Raub and Kai Romhardt, the tool is also based on the connections with the company's operational corporate practices. With that in mind, discussions about the tool and its specific contents have been held over the course of numerous workshops with experts, disseminators and, in particular, businesses. In addition, examples of "Good Practice" were collected and incorporated into the INQA check.

The eight core topics have each been subdivided into three to six items, and as a result, a modular list of a total of 33 items is now available. Thanks to this modular approach, it is also possible to focus on just one individual core topic. It takes between around 40 to 60 minutes to complete the INQA "Knowledge and Competence" check. Using a simple traffic light rating system, the urgency of the need for action can be recorded for each item and documented in a pre-formulated action plan. Tried and tested examples of "Good Practice" contribute to understanding the item in question and provide suggestions for specific measures.

In addition, the tool is also supplemented by a overview that covers all the existing and necessary skills for a particular work area, thus providing users of this tool with a low-threshold opportunity to obtain a target/performance comparison. With that in mind, SME-specific language is used to differentiate between specialist and methodological competence and between personal and social/communicative competence in order to make clear the holistic nature of the various competences. It is only through the optimal combination and systematic use of the specialist competences available, the core skills and existing experience that it is possible to react to changes in the company and/or in the working process quickly and on a situation-specific basis.

The INQA "Knowledge & Competence" check is a tool that can be used to manage the ever more frequently occurring change processes and the resulting challenges that arise from them.

www.inqa-check-wissen.de

Business skills modelling in the IREQ project

The aim of the INQA's IREQ project (Interne Rekrutierung – Entwicklungspfade und Qualifizierungskonzepte, which stands for "Internal Recruiting – Development Paths and Qualification Concepts" in English) is to present action plans to small- and medium-sized businesses about covering their future needs for qualified replacement staff by means of internal recruitment – i.e. by developing skills and maximising potential – against the backdrop of an increasingly scant availability of workers. One tool in this regard is the "skills passport". It is used to identify a company's skills requirements on an interdisciplinary and participative basis. First of all, activity-specific job profiles that identify interdisciplinary requirements must be produced. Areas of competence such as personal competence, social competence, methodological competence and leadership competence are usually defined. Three to four specific skills are assigned to each of those areas of competence.

For example, the three specific skills assigned to the social competence could be communication skills, the ability to be a team player and the ability to handle conflict. Each individual skill must in turn be placed in an operational context by identifying at least three factors which are used to determine the necessary requirements specific to the particular job role and which, on the basis of related questionnaires, enable employees to assess their own progress and line managers to conduct a third-party evaluation. The scaling of the requirement profile should be reduced to a bipolar designation process that is easy to understand. Before the questionnaire process begins, the clarity and wording of the factors should be tested on around six employees from different job families and appropriate amendments made ("A Priori Test I"). Furthermore, the use of questionnaires (for self-assessment and third-party assessment) should initially be tested as part of a small pilot study so that any "teething problems" can be eliminated ("A Priori Test II").

www.interne-rekrutierung.de

The digital guide to “Lateral Career Move”

The construction industry, metal manufacturing, nursing, forestry – there are occupations with a limited occupational lifetime in many economic sectors. According to Behrens, these are occupations that cannot be “continued by the majority of workers until they reach the statutory retirement age, primarily on health grounds, and in many cases not even beyond the age of 50”. In the course of their (professional) life, these workers have acquired many skills which are of great value both for them personally and to businesses. Expertise counts, when the experience of these people can continue to be utilised. But how can this be achieved if the individual’s current job has become simply too hard?

One solution to the problem may be to prepare the individual for a career change in a timely fashion as a precaution. Such a new job, one with appropriate duties and that makes other demands than the activities carried out previously, can be continued up until retirement. It should also require similarly high qualifications as the original occupation as to prevent social relegation. Valuable skills, and thus employability, can be retained – and the skilled-labour shortage can also be tackled.

As part of the INQA project entitled “Lateral Career Move – a new career opportunity for older employees”, a digital guide has been developed that assists people to change career by helping them to find a suitable job of equal

value to the best possible extent. At the actual heart of the digital guide, which is designed as an information portal, is a careers database. With its 522 job profiles, it contains all the current professions requiring formal training as well as some professions requiring further training. Users complete an electronic questionnaire to create a very detailed personal profile of some 400 variables. It takes around 45 minutes to answer all the questions. A little time is needed to identify which career change opportunities are actually appropriate. However, the search algorithm is designed so that even a partially completed questionnaire generates results. Nevertheless, the more questions the user answers, the greater the likelihood that the career change opportunities suggested will also be actually suitable.

The search function compares the variables selected in the personal profile with the career profiles in the categories of qualifications, preferences and health. A list of appropriate career change opportunities sorted by relevance is finally generated. The career change guide was developed by the Institut für Arbeit und Gesundheit der Deutschen Gesetzlichen Unfallversicherung (Institute for Occupational Safety and Health of the German Social Accident Insurance Association) and financed as part of the Initiative for a New Quality of Work.

www.wegweiser-berufsumstieg.de

WING: Shaping a sustainable knowledge work in the companies of the future

The INQA project “WING” puts knowledge work at the heart of research and is looking for ways of structuring the labour market of tomorrow in a sustainable and employee-focused way. The association brings together academics and experts from the Institut für Sozialwissenschaftliche Forschung (Institute for Social Sciences Research, ISF) in Munich, the Friedrich-Alexander University in Erlangen-Nuremberg and the IG Metall metalworkers’ union. Other partners include companies such as Robert Bosch GmbH, Software AG and andrena objects ag.

The digitalisation of industry and society is on the verge of a further period of drastic change. Industry 4.0, the rise of the “cloud” and the “removal of the structural limitations” on work as a result of mobile devices all point to one thing: progressive digitalisation and the new levels of quality achieved in computerisation are driving profound changes in the world of work.

A holistic perspective is needed in order to understand the upheavals on the modern-day labour market. The project therefore looks at key parameters within an organisation and considers workplace structures, the workplace of the future, leadership and management, career development and social relationships and culture. Empirical field studies in companies in the IT industry and the electronics and automotive sectors form the basis of the research.

The findings to date show that the digital transformation process has reached businesses and is at the very top of their strategic agendas. New production and business models are being developed, work and the working environment are the subject of fresh ideas, and the “digital natives” are now part of the modern working world. Companies are on the lookout for a new blueprint: their aim in so doing is to move from a rigidly hierarchical and bureaucratic structure that is split into divisions to an integrated, flexible and agile organisation for the digital age based around cooperation. This is spelling fundamental change for knowledge work in particular.

Based on the findings of the “WING” project, the spectrum of possible scenarios ranges from a “digital assembly line and “panopticon” of data surveillance” to a model for a new start in a humanised working world. The research association, in conjunction with its partner companies, has presented and debated its initial findings.

www.wing-projekt.de

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IMPRINT

Competence, health and good working conditions – for the future of work

How we can promote the ability to work, competitiveness and capacity for change
3rd memorandum

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