Summary Limits to lifelong learning

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Summary and conclusions

5.1 Lifelong learning

Education and training is seen as a key means of enabling workers to maintain their employability, not only increasing their productivity in their existing jobs but also enhancing their opportunities on the labour market in general. This has prompted successive Dutch governments to make lifelong learning one of the central tenets of policy. The present government is building on this with its proposal to create an 'individual learning account' for everyone in the Netherlands holding an initial qualification, and specific measures to make it attractive for older workers too to continue their development (Kabinet-Rutte III 2017). The underlying thought is that creating opportunities for people to follow education, courses and training will increase employee participation in these activities, in turn improving their labour market position.

Despite the importance attached to lifelong learning, the share of the labour force participating in education and training activities has remained more or less static. The Netherlands Institute for Social Research (scp) has accordingly carried out research into the barriers people experience to participating in education and training. The study looked primarily at job-related education and training, and at the *dispositional*, *situational* and *institutional* barriers that people experience. *Dispositional* factors and barriers are related to an adult's self-confidence, for example due to earlier learning experiences, and their intrinsic motivation to engage in education or

training. Situational factors and barriers stem from someone's personal circumstances, for example having children or needing to provide informal care. These circumstances can mean that there is no time for activities other than work and providing care. Institutional factors and barriers are concerned with circumstances which are created by an employer or provider of education and training, for example.

S.2 Participation in lifelong learning

The first research question addressed in this report is as follows:

To what extent do different groups participate in formal learning, non-formal learning and informal learning after completing their initial education?

The following constituent questions were investigated:

- 1. What percentage of people participate in education and training, and is this formal, non-formal or informal learning?
- 2. How does the rate of participation in formal, non-formal and informal learning in the Netherlands compare with other countries in the European Union?
- 3. How has participation in education and training changed over time?
- 4. Does the participation in learning activities vary between different groups in society?

These questions were investigated using quantitative databases.

1. What percentage of people participate in education and training, and is this formal, non-formal or informal learning?

Participation in formal and non-formal learning is heavily dependent on question formulation and time frame

To obtain a picture of adult participation in formal, non-formal and informal learning, we drew on a variety of national and international databases. A widely used measure of participation in education and training is the percentage of adult respondents in the Dutch Labour Force Survey (LFS) who have taken part in some form of education or training in the preceding four weeks. This shows that just under one in five adults are taking part in education or training at any given moment. Although the Labour Force Survey provides a good snapshot of adult participation in education and training, it is less suited to ascertaining what proportion of the Dutch population keep up their knowledge and skills. Adults who have followed some form of education or training six months or even just over a year ago, for example, may have acquired very useful skills which they need to practise their profession or to change jobs, and will therefore have little need for further education or training. Many education and training activities, such as courses, are short, and participation in them by both workers and non-workers tends to be spread out over time. Data from several sources, including the Programme for the International Assessment of Adult Competencies (PIAAC), the Dutch Labour Supply Panel (Arbeidsaanbodpanel) and the Lifelong Learning Survey by the Research Centre for Education and the Labour Market (ROA) provide a better insight into the degree to which adults engage in lifelong education and training. However, the findings of these studies show wide variation in the participation rate of adults in education and training, from just under 40% to around 65%. There is also a marked lack of information about the nature and duration of the education and training followed, and its quality. This makes it difficult if not impossible to present a reliable picture of the percentage of adults who maintain or increase their knowledge and skills through education and training.

Substantially higher participation in non-formal learning than formal learning

Around 58% of adult respondents in PIAAC 2012 said they had followed one or more courses or training programmes. That is a large share of the 65% of respondents reporting that they had participated in formal and/or non-formal learning. In the Adult Education Survey (AES), participation in non-formal learning activities is broken down into courses, workshops and seminars, work-related training and private lessons. Roughly 40% of adults in the AES had taken part in a course during the preceding two years; around 30% had attended a workshop or seminar and roughly a quarter had participated in work-related training. A small percentage had followed private lessons. Set against the share of less than 10% who have followed formal education or training, the data from the AES make clear that

– in line with the data from the PIAAC study – participation in education and training mainly concerns non-formal learning.

Highest relative participation is in informal learning

It is even more difficult to obtain a reliable and valid picture of informal adult learning than of participation in organised courses and training. However, both the PIAAC survey and the Labour Supply Panel suggest that a very high proportion of Dutch citizens acquire new knowledge and skills through the performance of their work and in their day-to-day practice. Approximately 93% of adults in the PIAAC survey report 'learning by doing'. Roughly a quarter of adults say they acquire new knowledge or skills every day in this way, while the same proportion say this occurs on a weekly or occasional basis. The Labour Supply Panel reveals that around 87% of those in work have acquired new social and cognitive skills in their work during the past two years. Around four in ten employees report a marginal increase in social and cognitive skills, but almost half say they have learned a good deal or a great deal in terms of these skills.

2. How does the rate of participation in formal, non-formal and informal learning in the Netherlands compare with other countries in the European Union?

Relatively high participation by the Dutch in formal and non-formal learning

The Eurostat participation figures show that Dutch adults take part in education and training activities relatively more than adults in most other European Union countries, being not only substantially above the average for the EU as a whole, but also higher than in the surrounding countries of Belgium, Germany and the United Kingdom. Across the EU, participation in education and training is only higher in the Scandinavian countries than in the Netherlands. Earlier findings from the PIAAC reveal a comparable picture (Buisman et al. 2013). The high Dutch participation in education and training applies for both formal education and non-formal activities such as courses and training. Recent figures based on the Adult Education Survey even show that the Dutch, together with Swedes, have the highest relative rate of participation in Europe in formal and non-formal education and training (cf. Central Statistics Office Ireland 2018).

Participation in formal higher than in informal learning

While the PIAAC survey shows the Netherlands to be among the leading countries in terms of participation in formal education and training, it scores only average on informal learning activities. Although adults participate more in informal learning than formal and nonformal learning, they use their day-to-day activities as a learning opportunity less than people in other countries.

3. How has participation in education and training changed over time?

Comparison over time reveals that participation in education and training activities is not increasing. The participation figures reported for the Netherlands by Eurostat have

remained unchanged over the last three years, and data from the Labour Supply Panel for the last ten years and from the ROA Lifelong Learning Survey for the period 2004-2013 also show no change in adult participation in education and training. The number of learning activities in which people participate also showed no marked change between 2008 and 2016. The percentage of adults participating in two, or three or more, formal or non-formal learning training activities has also remained more or less stable over time. The ROA observed a few years ago that if anything, the intensity of participation by those in work appeared to be declining rather than increasing. The duration of courses followed by workers declined between 2004 and 2013 from an average of 25 hours to 21 hours.

4. Does the participation in learning activities vary between different groups in society?

Employees participate more in education and training than others

People in work participate in learning activities more often than non-workers, with the highest relative participation found among salaried employees – although participation by self-employed workers has risen sharply in recent years and has almost caught up with salaried employees. The percentage of non-workers engaging in education, courses or training is substantially lower, though this applies mainly for economically inactive adults (not in work and not looking for work) – a group who have no clear incentive to qualify for work. Job-seekers participate in learning activities much more often than those not seeking work, though their participation is still lower on average than that of workers.

Younger employees engage more in learning activities than older ones

Participation in learning activities is highest among adults aged 25-34 years. Participation in the 35-44 age group drops slightly, though the difference is relatively small. Participation in learning activities by adults aged 55 and over is lower than in the younger age groups, though the gap has narrowed steadily over the last ten years. This may be linked to the raising of the state retirement age and the reduced opportunities to take early retirement, which could make it worthwhile for employers to offer training programmes to their older employees and to actively encourage them to take part in these programmes. This in turn may have led to an increase in the willingness of older employees to take part in education and training.

Highly educated engage most in education and training

Participation in learning activities is highest among adults with a higher professional or university degree, and significantly higher than among those with secondary education. Lower-educated adults participate in education and training the least. The differences between these groups are relatively wide. Education level is the most important predictor for following education programmes. It is related not only to participation in education, courses and training, but also to informal learning. People with a higher education level report greater participation in informal learning than those with a secondary or lower educational level. This is related among other things to the fact that highly educated people

are generally in jobs which require a greater variety of skills, making them more inclined to improve and develop their skills further.

These learning participation differences based on education level also prove to be stable over time, suggesting that people with a secondary education level, and especially those with a lower educational level, are not closing the gap relative to their more highly educated peers. This in turn increases the relative skills gap at the start of their employment career.

S.3 Reasons for engaging in learning activities and barriers to doing so

The second research question addressed in this report is as follows: What are the underlying reasons for different groups to participate or not participate in learning activities?

The following constituent questions were investigated:

- 1. What are the reasons for different groups to participate in formal and non-formal learning?
- 2. What barriers do groups encounter to participation in formal and non-formal learning?
- 3. To what extent do these barriers accumulate in specific groups, leading to reduced participation in learning activities?

These questions were investigated using analyses of quantitative databases as well as interviews with 39 respondents.

1. What are the reasons for different groups to participate in formal and non-formal learning?

Many people in work do not feel an acute need to engage in learning activities. They think they broadly possess the knowledge and skills they need to perform their work adequately. A large proportion feel they would also be able to carry out more complex tasks without difficulty, and do not feel an urgent need for education or training based on the tasks they are called on to perform in their jobs, nor for tasks they might be asked to perform in the future. Almost half those in work assess the likelihood of needing different competences in the future as fairly low. Others do expect changes to occur in their work which will demand different skills, but for most of them this is not a reason to take part in education, courses or training in anticipation of those changes.

Formal education is followed mainly from a career perspective

Just over one in ten respondents in the Adult Education Survey say they are participating in formal education or a lengthy course. Around a fifth of this group are doing so in order to acquire elementary skills or attain a secondary education qualification. Just a quarter are following a programme at senior secondary vocational (MBO) level, while slightly more

than half are following a higher education programme. To a greater extent than other learning activities, these programmes are aimed at increasing the prospects of finding work and improving career prospects. Accordingly, formal education is regarded as a suitable means of achieving a major career step, for example to change jobs or obtain a higher position.

Courses, workshops and training programmes are by contrast focused on the existing job

Although career considerations are also a reason for some adults to participate in courses, workshops and training programmes, this form of learning is mainly aimed at improving their competencies in their current job. This form of participation is likely to involve mainly in-service and refresher training for employees. The initiative for this generally comes from the employer, who also makes time available to employees to participate in these activities (sometimes in combination with investment of employees' own time), and bears the costs. In some cases, the initiative to participate in courses and workshops or seminars appears to lie with the participant rather than the employer, but here again these are mainly work-related learning activities.

Private courses are mainly followed for personal and social reasons

Adults follow private courses relatively less often; around one in twenty respondents in the Adult Education Survey report that they have followed such a course over the last two years. In contrast to other learning activities, job-related reasons play a substantially less prominent role here. The main reasons for following private lessons are their usefulness in day-to-day life and, above all, the opportunity to meet new people, as well as the participant's interest in the topics covered in the lessons.

2. What barriers do groups encounter to participation in formal and non-formal learning?

Family commitments

Just under a quarter of Dutch adults report that they would have liked to participate in education or training in the past year but did not do so. A large proportion of them say this was because of having to look after children or other family commitments. Family commitments are an important reason for those who have recently participated in education, courses or training not to engage in more learning activities. At the same time, providing informal care or looking after children is rarely if ever a reason for not participating in learning activities at all. This could indicate that both workers and non-workers are in many cases reasonably well able to fit education, a course or training into their family life, but that it is difficult within a relatively short time frame to participate in learning activities more often. This appears to be more difficult for women than for men, probably largely because women generally take on a greater share of looking after children and the household than men.

Work commitments

The time people devote to work does not determine whether or not they also participate in learning activities. In fact, people who spend a lot of hours on their work follow education, courses or training as well. It may be that they are able to engage in one or more activities during working hours, but it is also possible that having a busy job does not pose an obstacle to participating in learning activities. Employees with a long working week just as often follow several education programmes or courses as employees who work three or four days per week. Only employees who work a very small number of hours participate less in education and training. It cannot be seen from the data what the reason for this is, but it seems plausible that several factors are at play. It may be that some employees deliberately choose a small part-time job so that they can also devote time to other activities, thus eliminating the need for (work-related) education and training. It is also possible that employees who spend only very few hours at work lack the resources to engage in further learning activities. Finally, it may be that employers are less inclined to invest in education or training for these employees given their relatively small contribution to the work process.

At the same time, workers relatively often report that the time taken up by their work prevents them from participating in education or training. This applies especially for workers who have already engaged in some form of learning activities during the past year. It seems reasonable to assume that they are not able to follow education, courses or training in addition to their work, nor to devote time to these activities during working hours.

Personal circumstances

A substantial group also state that they have not participated in learning activities due to health reasons, age or other personal reasons, whereas they would have liked to do so. These personal reasons appear to be linked mainly to the impossibility of following any learning activities whatsoever: those who cite personal reasons have not engaged in any learning activities at all in the recent period. Adults who have done so less often cite personal reasons as a reason for not engaging in (even) more learning activities. Personal circumstances are also a more important reason for women and lower-educated people not to follow (additional) learning activities than for men and people with secondary or higher education.

Costs

The costs of education, courses and training are also a reason for some adults not to participate in (further) learning activities. The costs are not just a problem for adults who have not followed any education or courses at all in the recent period, but also for those who have. They can therefore present an obstacle to those who might potentially embark on education, but can also deter those already participating who would like to do more. The costs are a problem particularly for the lowest income groups, but a more limited number of adults from the highest income brackets also say that the costs prevent them

from participating in (more) education or training. Women cite the costs as a problem relatively more often than men.

Lack of employer support

A lack of support from their employer can also play a role in deterring people from engaging in (further) education or training. This is a factor both for those who have not recently engaged in learning and for those who have, but wish they had done more. People with a higher education level also find to roughly the same extent as those with a lower or secondary education that their employer does not cooperate in helping them to participate in more education or training. This applies equally for men and women. On the other hand, adults from the lowest income groups state substantially more often that they receive no support from their employer. This could indicate that they are more reliant than others on support from their employer to enable them to pursue education or training, and/or it is also possible that employers are less inclined to support education and training for this group, possibly because they are performing low-paid work which does not require further training, and investing in such training could result in overqualified employees (and possibly their departure). It is also possible that people from the lowest income groups work relatively fewer hours and that it is therefore less attractive for employers to invest in them.

3. To what extent do these barriers accumulate in specific groups?

The study population was divided into ten groups based on background characteristics that are associated with participation in learning activities. For three of these groups, the extent to which their participation is influenced by dispositional, situational and institutional factors was explored. The three groups were selected because they participate relatively little in learning activities, even though it is important for (retaining) their job that they continue their development. Considerable differences were found between individuals within each of these groups, and a proportion of them reported either that they have no need for (additional) education or training, or that they experience no barriers to participating. There are also specific circumstances within each group which prevent them from following education, a course or training, or which make it difficult for them to participate if they would like to do so.

Little ambition and little opportunity to deepen and broaden skills

The first group subjected to closer examination in this study consists of men aged between 45 and 60 years with senior secondary vocational education, who have been in their present job for a considerable time. Most of them have no specific need for education or training. The absence of the prospect of a different job or of changing employer means they lack the incentive to follow education or courses to broaden their skills, and sometimes even to consider this. They prefer to develop gradually by learning from day-to-day experience as a way of keeping up and if possible expanding their existing expertise. This appears to be reinforced by the attitude of employers, who see them as loyal, experienced workers.

There is little or no opportunity for transfer or promotion, and employers therefore focus mainly on maintaining competences.

Overcoming personal obstacles and making time for education and training

A second group which received attention in the study consists of women working parttime in the care sector. A proportion of them say they are uncertain whether they would be able to complete a course or education programme.

Those women who do take the initiative to follow education or a course are very determined to finish it. Parental attitudes appear to play a role here: although not applying equally to all women in the study, there appears to be a link between the value attached in their youth by their parents to a good education and the degree to which they participate in lifelong learning. Where following education was encouraged or where the parents served as a role model, women are more likely than others to follow education or courses during their career.

With a few exceptions, all the women had children living at home until recently, or were still looking after children. For these women, the birth of their children meant that for a time they focused entirely on their family life and gave up their jobs. Many of them went back to work again after a few years, most deliberately opting for a part-time job so they could also continue looking after the children at home. None of them cited this as a direct impediment to participating in education or training; it was not the case that the time they devoted to care tasks at home alongside their work meant they had insufficient or no scope to follow education or a course. However, for some of them it does appear to have had an indirect influence on their further development opportunities. Some said that employers do not always offer the same training opportunities to part-time workers or impose the same training requirements as on full-time workers. In addition, a number of women, after being out of the employment process for a while, have often returned to work in a comparable role to the one they were in previously, and first have to master developments that have taken place in that role. They also often deliberately mark time in order to be able to continue combining work with family life; many of them have no ambition to progress their career.

Self-employed have to organise and pay for education and training themselves

A third group are self-employed workers without employees (sole traders/freelancers). This group participate relatively less in education, courses and training than others. While this is not true in absolute terms for highly educated sole traders, most of this subset, too, take part in learning activities less than they did when they were still in salaried employment. This is partly because training was often a regular part of their work with their previous employer, and a number of organisations pursued an active Human Resource Development (HRD) policy which offered ample development opportunities for individual employees. By contrast, highly educated self-employed workers have to organise their own education or training which, unlike in paid employment, means there are no performance interviews in which attention is devoted to specific development needs. There is also less

recourse to certain education and training schemes offered by the employer's organisation.

The same applies for the costs. Although certain restrictions apply to companies' training budgets, most highly educated self-employed workers report that they had ample opportunities as employees to follow education or courses at the employer's expense. Where constraints were experienced, these were more substantive than financial. As self-employed workers, however, they have to bear the costs of education and training activities themselves. This causes some of them to weigh carefully how much added value following education or training will provide for their work. It also leads to deferral of participation due to the high costs, or even to a decision not to participate in education or training at all.

System not always adequately equipped for the limited time available for learning

The time taken up by education and training also plays a role in the participation decision by self-employed workers, and also in the type of education or training followed. While on the one hand being self-employed means a flexible working week, into which training or education can generally be fitted fairly well, at the same time the decision to become self-employed also stems from a conscious desire to create space in the work schedule – for example in order to have time for the family or to pursue other interests – or else they have come to appreciate this flexibility during the time that they have been self-employed. Education and training have to compete with these other priorities and interests. People are willing to make time for learning activities to which they assign great value, but this willingness is not there for other learning activities, or they only participate in activities which take up as little time as possible. For some self-employed workers, another factor is that time spent on education or training means loss of income, making the effective costs of following time-intensive education or courses high.

The education and courses offered are not always a good fit for what self-employed workers need. Not only is following full-time education not always possible because of the investments this demands, but it also often incorporates components which the potential participant has already covered. At the same time, some self-employed workers do have a need for accreditation and, if possible, an official diploma. The Recognition of Prior Learning (RPL – EVC in Dutch) programme offers some possibilities here, but some still regard it as insufficiently transparent. The period over which competences of workers are assessed is also too limited. A broadening of the RPL parameters could increase the incentive to follow formal education.

S.4 Discussion and conclusions

In-service and refresher training the most popular

Adult participation in learning activities is high in the Netherlands compared with other countries in the European Union. Although the reported participation figures vary widely from study to study, the Dutch are consistently in the leading group. Moreover, that has

been the case for many years. The most popular learning activities are (short) courses, workshops, seminars and training sessions, the main purpose of which is to improve employees' day-to-day performance at work. These activities are often paid for by the employer and can be followed by employees during working hours. The picture that emerged from the interviews was that these learning activities are important for keeping competencies up to date, but are rarely aimed at broadening or deepening competencies to make employees more broadly employable within the organisation or qualifying them for another job.

To enable them to make the switch to a different job or employer, employees tend to follow education or training of longer duration. Employers make some contribution to this, but in the majority of cases they are paid for wholly or partly by the employee. They also mainly pursue these activities in their own time. However, only a small proportion of adults who participate in education and training are following such programmes. This suggests that adult upskilling and reskilling takes second place to existing in-service and refresher training. This does not necessarily mean that employees do not acquire any competences which they could use in other occupations or roles and which could help them make a switch to a different job or employer; they can acquire both more general skills and highly specific skills. However, the study shows that many skills trained are so specific that it is not always clear to employees how they could be used in a different job or role. Training is thus largely a tool that is used based on the idea of a permanent, lasting employment relationship between the employer and employee.

No sense of urgency to engage in learning

Workers generally feel that they are able to perform their current tasks adequately and do not need additional training for this. Many believe their capacities are being underutilised in their work; only a small number feel that their competencies fall short for their day-to-day activities. Although more than half of workers believe that certain changes will take place in their job which will make it necessary to undergo additional training, not all of them respond to this by actually participating in learning activities. Workers hardly look ahead (see also Grijpstra et al. 2019), and there is consequently no strong sense of urgency to reskill or upskill. Employees (and employers) find it difficult to assess accurately what developments will take place on the labour market, and even where there is more clarity about this, it is difficult to gauge over what period these changes will actually lead to consequences, and how big their impact will be. The lack of urgency is probably exacerbated by the fact that even less is known about the alternatives; if it is difficult to assess how future developments will affect their own jobs, it is even harder to gauge what impact they will have on other sectors or roles.

More reactive than proactive attitude to learning

Despite the foregoing, employees do change jobs, and this is regularly accompanied by participation in learning activity. In many cases, however, this participation is instrumental, only being used when there is a direct reason for doing so. Employees often engage in

learning activity around the time that they change role or employer (Maslowski & Vlasblom 2018).

A similar picture emerged from the interviews. Some employees embark on education or training because they want to change jobs, and then find a different job which matches that training. Others have the ambition to change jobs or roles and are hired on the condition that they follow a course or training for this. In other words, the attitude to learning is more reactive than proactive, with education and training being used to achieve specific career ambitions in the slightly longer term.

To what extent this is characteristic of the Netherlands is uncertain, since no international research has been carried out to identify differences in learning attitudes. The PIAAC study has however looked at adults' 'readiness to learn' (Buisman et al. 2013), and suggests that, while the actual participation by the Dutch in learning activities is relatively high, their readiness to learn is actually lower than in other countries. This includes the desire to understand complex issues and the perceived need to investigate how different elements fit together. The reason that informal adult learning in the Netherlands lags behind their participation in formal learning may also be associated with their lower readiness to learn. This low readiness to learn was one of the factors that led the Social and Economic Council of the Netherlands (SER (2017)) and the OECD (OESO (2017)) to refer to the lack of a learning culture in the Netherlands.

High degree of self-regulation

The fact that learning activity is largely initiated by employers and heavily focused on refresher or in-service training supports the finding that there is no clear learning culture in the Netherlands. The OECD Skills Strategy Report OESO (2017) highlights this is a particular problem. At the same time, however, it is arguable whether these concerns are justified. A high proportion of employees do appear to respond to the need for training when it arises; they just do not anticipate future changes by following education or training. This is an efficient way of dealing with perceived skill shortages, especially for labour market changes which take place gradually.

More structural changes in the nature of a person's employment, such as a move away from a long-term employment relationship to performing relatively shorter assignments for a range of employers (cf. Ter Weel et al. 2018), can probably also be largely accommodated through self-regulation. These changes are to some extent already reflected in the growth in self-employment and the increasing labour flexibility (Josten & Vlasblom 2018). However, where in the past self-employed workers participated much less in education and training, this gap has narrowed steadily in recent years. The interviews with self-employed workers also revealed that many of them have found ways of ensuring that they stay up to date with new developments and that they actively broaden and deepen their own knowledge and skills, for example by joining together in professional networks. However, this applies mainly for highly skilled self-employed workers, who are often hired by companies for their specialist knowledge, and less for the 'flexible workforce' of low and intermediate-skilled self-employed workers. These 'flexiworkers' are mainly used to accommodate

peaks in the workflow, for example for seasonal work or to smooth out temporary fluctuations in workload (Josten et al. 2014). It is precisely these 'flexiworkers' who are less likely to anticipate future developments, thus making their labour market position vulnerable.

Influence of technological change and robotisation

Notwithstanding the foregoing, some sectors and some occupations are likely to experience more rapid and more abrupt changes which cannot be (fully) accommodated through self-regulation. Technological developments and robotisation will lead to the disappearance of a number of current jobs, especially those involving routine work (Autor et al. 2003). It is difficult to estimate how quickly these developments will proceed, but there can be no doubt that a large proportion of the current workforce will be confronted with their consequences during their employment career. It is also difficult to estimate how many current jobs will be affected, especially as artificial intelligence increasingly expands the ability to automate tasks. Using data from PIAAC Arntz et al. (2016) estimate that just under 10% of work carried out in the Netherlands could be automated. This means that a large number of current workers will at some point see their jobs disappear, or at least reduced in scope.

To what extent creating a learning culture might offer a solution for these developments is however unclear at this juncture. If employees acquire new skills through education and training alongside their existing work, this could increase their employability in other areas. Yet it is unclear how well these skills will match the tasks that will be performed by humans in the future, or whether this might require at least some further reskilling. In the latter case, it could be more efficient to organise targeted skills training in the event of (threatened) job losses.

On the other hand, regularly following education or training could lower the threshold to further training, thereby potentially enhancing the flexibility of employees. Highly educated people more often participate in learning activities in their later careers, and people who take part in post-initial education or training are more likely to follow education or training again later (Maslowski & Vlasblom 2018). Additionally, workers who participate in education and training are more likely to develop their skills further through informal learning. Heckman (2000) has previously described this mechanism as 'learning begets learning'. However, the association between participation in learning activity and education level makes it difficult to determine to what extent past learning activity genuinely lowers the threshold to further learning; it may be that the higher likelihood of further learning activity is (mainly) attributable to other factors that are associated with a higher education level.

Initial education still important

This study shows that initial education plays an important role. It offers access to work and therefore to further learning opportunities. Employees with a higher education level are found relatively more often than those with lower and secondary education in roles which offer the opportunity to participate in further education and training. They are also more

likely to acquire new knowledge and skills through informal learning, for example because their work is more varied or challenging. This also means they have more opportunities to progress to a different job or role. That is already the case for a large group of highly educated people in their twenties and (early) thirties, for whom the learning culture is already more or less a reality. On the one hand this means that there is a reasonable chance, despite the stagnation in participation in recent years, that the participation in learning activity will increase over the next five to ten years; the relative education level of children and young adults is rising steadily (Vogels & Maslowski 2017), and this will contribute to boost the low participation in learning activity.

On the other hand, it is arguable whether this is the group that will be hit the hardest in the short and medium term by the changes set to take place on the labour market; the jobs of lower and secondary-educated workers are likely to be hit harder by automation and robotisation. This study shows that, based on initial education level, the differences between groups of employees have not narrowed. More than 20,000 young people in the Netherlands still leave school each year without an initial qualification. In addition, a large group of young adults with a senior secondary vocational qualification enter the labour market each year; whilst many of these students are aware of the need to maintain their skills after completing their education, this does not apply for all of them (Turkenburg & Vogels 2017).

Different factors play a role in lower participation in learning activity

A large proportion of today's employees, and especially those who are older, have attained only a lower or secondary education level. Those with a lower education level, in particular, often find it difficult to engage in further learning activity. Although their numbers are small, it emerged from the interviews that there are several, partially mutually reinforcing factors at work here. Their low education level means they are sometimes unable to access certain education programmes, or have to spend longer completing them. Their low education level means they are often in low-skilled jobs. Employers are not always willing to invest in their low-skilled employees, and their low earnings mean the employees themselves are not able to pay for education themselves. These situational and institutional barriers are sometimes exacerbated by low self-confidence in their ability to complete a course of education, and a lack of enterprise needed to systematically explore the possibilities.

Workers with a secondary or higher education background who wish to engage in further learning activity are often able to achieve this, but they too regularly encounter obstacles which prevent them from embarking on education or training or cause them to defer doing so. The barriers encountered vary depending on the individual. They include factors such as personal characteristics, for example low self-efficacy or low motivation, financial reasons, time commitments for work or family, or the support offered by the employer. Sometimes, one of these issues is the reason for not participating in learning activities at a given moment, but often it is a combination of factors which throws up a barrier. This means that there is no single 'switch' that can be thrown to promote participation in education

and training, but that measures need to be taken in a range of areas to remove these obstacles.

S.5 Pointers for policy

More flexible education

While it is true that formal education leading to a qualification accounts for a relatively limited share of the learning activities in which workers and non-workers participate, it does fulfil a very specific function. It serves mainly as a means of gaining promotion or changing jobs. As well as deepening their skills, for adults who follow these programmes the qualification attained is a very important declaration of intent about the next step they wish to take in their career.

Under the previous Dutch government, measures were introduced to make it easier for people in work to access both senior secondary vocational (MBO) and higher education, by allowing phased participation in individual modules (TK 2016/2017). Workers and job-seekers can now follow labour market-relevant modules in senior secondary vocational education, leading to a certificate. These are recorded in a Diploma Register so that employers can see at a glance which competences participants have acquired. Experiments with demand-led funding in higher education, in which workers are offered a voucher which covers part of the tuition fee, will be terminated by September 1, 2019. An intermediate evaluation of the experiments to make higher professional education more flexible has revealed a number of teething troubles (Van Casteren et al. 2018). There are doubts to what extent it is structurally feasible, particularly for funded institutions, to provide teaching at a price that is attractive to employees and employers. On the other hand, the experiments do appear to be meeting a need. Some of the intake comprises people who have previously followed a higher education programme but not completed it because they found it difficult to combine it with work and personal life, or because they were unable to find a programme which matched their personal preferences and learning needs (Van Casteren et al. 2018).

Recognition of prior learning

Regular senior secondary vocational (MBO) and higher professional education (HBO) do not always meet the needs of workers and job-seekers, and take too little account of the knowledge and experience already acquired by the learner. The accessibility could be increased for workers and job-seekers through the current Recognition of Prior Learning programme. A procedure has been in existence since 2004 to enable skills to be recognised based on work experience. This procedure was succeeded in 2016 by an agreement on recognition of prior learning between the Ministries of Education, Culture & Science, Social Affairs & Employment and Economic Affairs and representatives of employers and employees (Stcrt. 2016). Recognition of prior learning by education institutions (the 'educational route') is still fraught with problems, however. In higher professional education, accreditation of previously acquired skills mainly takes place during the teaching pro-

gramme (Van Casteren et al. 2018). Accreditation prior to the start of the programme is a laborious process, as is accreditation at the start of the programme. However, this prior accreditation is very important for people in work, because it enables them to gauge how much time they will need to follow a programme. Moreover, the time investment they have to make to provide 'evidence' must be efficient, and the procedure must not be too lengthy. The Committee on demand-led funding for senior secondary vocational education (Commissie vraagfinanciering mbo) (2017) proposed a digital skills passport for senior secondary vocational education, which could potentially offer a means of demonstrating prior learning when entering higher professional education.

Customisation

The pilots concerning flexible education and the experiments in higher professional education are also intended to offer students more options as regards pace of study, teaching method and the order in which modules are followed. In practice, however, little use is made of this freedom in the experiments in higher professional education (Van Casteren et al. 2018). Universities of applied sciences have little incentive to encourage this 'independent learning pathway' teaching format, because having a large number of individual learning pathways demands more coordination and a greater time investment. Students themselves also appear to have little interest in deviating from the basic programme. In some cases this appears to be due to the intake of recent MBO graduates, whose main concern after completing their MBO education is to be able to work. The experiments with flexible programming enable them to combine work with following a further education programme, but they are less concerned about the order and format in which this is offered. Other people in work also show little initiative to follow a personal learning pathway, even though they could benefit from it. Education institutions could play a more active role here, both via the study coach and in the information they provide to students.

Support through an education and training budget

For many adults, education and training, especially formal education or a longer course, is expensive. Lower-educated adults are generally unable to bear these costs themselves and are reliant upon their employer or government bodies to pay for the education or training they would like to follow. But many people with senior secondary vocational education, too, would not follow education and training courses if they had to pay for them themselves. And while highly educated adults generally have less difficulty affording education or training, they too are sometimes deterred by the costs. The costs of education, courses and training thus play a role for virtually everyone in deciding whether or not they are willing or even able to follow a particular education, course or training programme. In most cases, an amount of between 500 and 2,000 euros is enough. This would cover the cost of many shorter learning activities, while for those wishing to follow a lengthier learning activity, such an amount would reduce their own contribution to the point where the costs no longer pose an obstacle.

An individual learning account, depending on how it is introduced, could offer a lot of promise here (cf. De Grip et al. 2018), provided a number of existing difficulties can be circumvented. If lower-educated people have to make a major contribution themselves, for example from their gross salary, this can be problematic if they see no opportunities in their current circumstances to set aside part of their income to pay for education or training. Finance could also be a problem for self-employed workers if education or training programmes are largely funded via the employer or sectoral R&D funds. It must also be clear, especially for groups which currently engage in little or no education and training, what opportunities the education and training budget offers for them.

A system of lifelong learning loans was introduced a few years ago for adults who are no longer entitled to regular student finance. This system enables everyone aged up to 55 to take out a loan to cover their tuition fees if they wish to pursue senior secondary vocational (MBO) or higher education programme. Given the expectation that older workers, too, will have to maintain their skill levels, raising the present age limit to the state retirement age would be a logical step.

Prominent role of employers

This study explored what barriers to following education or training are encountered by adults, and particularly those in work. The perspective of employers was not examined in depth. However, it is apparent from the views expressed by workers, for example in the Adult Education Survey and in the interviews conducted in this study, that employers play a central role in the learning opportunities available to workers. Most of the learning activities followed by employees consist of courses and training programmes; they are largely followed on the initiative of the employer, mainly take place during working hours and are paid for by the employer. Employers have a clear interest here: employees follow courses and training primarily in order to maintain their competences for their current work, or else to equip them for technological or organisational changes which (will) affect their work. They therefore play a different role from formal education. Although employees can to some extent also pick up more general competences during job-specific courses and training, these are not interchangeable with longer education programmes, which are focused principally on broadening and deepening knowledge and skills. By financing individual learning accounts for employees, employers and sector organisations could therefore provide an additional incentive alongside the funding for existing job-specific courses and training. If this does not happen, there is a danger that funds from the individual learning accounts will be used to pay for training activities provided through the employer (cf. De Grip et al. 2018).

Employees in the SME sector participate in education and training less than employees of larger organisations (Pleijers 2018; SER 2017). Several reasons are put forward for this. One is that employers in small and medium-sized enterprises concern themselves less with the significance of developments in their sector for the current and future competences of their employees. In many cases they do not employ an HRD adviser and know too little

about what education and training opportunities are available; they also lack the organisational capacity to arrange education and training for their employees. Employees wishing to follow education or training often have to take the initiative themselves. The extra attention devoted by the Dutch government to enabling employers to gain experience with initiatives to promote employee development in the SME sector could lead to a greater awareness on the part of employers. The work-based learning contact points (*leerwerkloketten*) can also play a role here (TK 2018/2019).

Greater employer awareness is also of particular importance in promoting informal learning by employees. While it is difficult to quantify the effect of informal learning (cf. cp8 2016), there are indications in the literature that it plays an important role in the skills that workers acquire (De Grip & Sauermann 2012; De Grip et al. 2016). Informal learning appears to be most important for young people entering the jobs market. As time goes by, the knowledge and skills workers acquire in their jobs steadily declines, in part because they have already gained a good deal of experiential knowledge during their career, as well as in the content of their work. If that content remains unchanged, there is little more to be learned. As workers are given more autonomy and more is asked from them, however, informal learning of social and cognitive skills becomes more important. More challenging tasks and more changes of role are an important source for informal learning.

Combination of learning, work and care

Next to institutional barriers, situational barriers play a role in lifelong learning. In addition to the costs involved, these mainly concern the time needed to participate in education and courses; the time needed for learning competes with the time that can be spent on work and family, relatives and friends. Just under a third of adults who would like to have participated in more learning say that one of the reasons for not doing so was the inability to combine it with their working hours. Interestingly, participation in learning by those in full-time employment is no lower than that of part-time workers. This is probably because much of the learning in which workers engage consists of courses and training programmes which they follow during working hours, and which therefore make no additional demands on their time. The fact that a relatively high proportion nonetheless say they did not follow (further) education or training due to lack of time may indicate that due to their work (and other commitments) they feel as if they have little time to follow education or courses in their own time. Working also limits the number of learning activities available. A relatively higher proportion of workers who report that following education or training is not possible have recently completed other education or training activities. In other words, working does not deter those in work from following education or training, but it does limit the number of such activities in which they can participate.

The same appears to apply for looking after close family and relatives. The participation rate among workers who are looking after children at home or providing informal care is no different from that of workers without care tasks, but at the same time women in particular cite family commitments as one of the reasons for not participating in (further) learning activities. This applies particularly where workers have to participate in learning

activities in their own time (Künn-Nelen et al. 2018); although a high percentage of employees with children living at home are willing to follow a course regardless of whether it is in working hours or in their own time, for a small proportion not being able to participate in working hours is most definitely a reason for not participating at all.

Personal factors play an important role

Policy addresses many of the institutional barriers experienced by citizens in following education or training. Removing situational impediments for employees is largely the task of employers and sector organisations. This study also shows that, in addition to situational and institutional barriers, dispositional barriers also play a role in deterring people from engaging in learning activities. These dispositional barriers, which are linked to self-confidence, appear to be more important in groups where participation in learning activities is relatively the lowest. The study explored the backgrounds and motivations of some of these groups.

In the group of secondary-educated men aged 45 and over, older men in particular no longer have the ambition to move up the career ladder or change employer. In addition, for most of the older respondents, the time when they participated in learning activities which took up more than the occasional few hours is a long way behind them. A few also say that they find it more difficult to learn new knowledge and skills than in the past, and for some of them their priorities are no longer focused mainly on work and work-related qualifications.

A proportion of lower and secondary-educated women working in the care sector say they are not sure they would be able to complete a course or education programme. Most of these women have made a deliberate choice to work part-time in the care sector, often in addition to their partner's (full-time) job. When their first child is born they often give up work temporarily. Their part-time jobs and career prospects cannot be seen in isolation from the division of tasks between partners; this division affects the importance that men and women attach to paid work (Boeren 2011; Portegijs 2018). The Emancipation Monitor (Emancipatiemonitor) shows that women with a secondary education level, but above all those with a lower education level, participate in the labour market much less than highly educated women (Van Thor & Herbers 2018). Lower-educated women also work fewer hours per week on average. They are also less often economically independent, despite a slight increase in their economic independence since 2015.

Vulnerable group of non-workers

In selecting the groups to take part in this study, a conscious decision was made to select groups whose participation in learning activities is relatively low but who are active on the labour market. For this reason, older persons without a job, non-working mothers and unemployed people with health problems and/or financial difficulties were left out of consideration. These are the groups with the lowest participation in learning activities. A proportion of the older persons without a job consists of older women with a partner working full-time. Others include men and women who have taken early retirement or who for some other reason can afford to give up work. They have no need to improve or develop skills for the labour market, and will participate in learning activities primarily out of personal interest. Comparable considerations appear to apply for non-working mothers. The majority of them have a partner who works full-time, while they themselves look after one or more young children. The decision not to work appears to be a conscious one, to free up enough time to bring up the children. A proportion of the third group with much lower participation in learning activities are also not seeking work, but this appears to be less a deliberate choice than a necessity, given the relatively high share of this group who have health problems. Some have financial problems and, although these problems do not apply (to the same degree) for everyone, they do mean that many in this group are living in circumstances which put them at a greater remove from the labour market or make it impossible for them to participate in the labour process. This group also includes unemployed people who are looking for work but who in many cases are low-skilled, in some cases combined with health problems.

The study by Grijpstra et al. (2019) looked in part at the barriers to participation in learning activities for this last group. It shows that in this group, too, there are often multiple problems, combined with negative past learning experiences and a lack of self-confidence. This also applies for people with low literacy, most of whom were in special or practical education in earlier life, or who left the education system without an initial qualification (Sijbers et al. 2016). For this group, too, negative earlier experiences with education and low self-confidence play a role in their decision on participating in education or courses (Stichting Lezen & Schrijven 2018).

Removing institutional and situational barriers will provide an additional incentive for many workers to participate more or earlier in education or courses. For the most vulnerable groups, this could in some cases provide the impetus they need to embark on learning activities, but for many of them, dispositional barriers such as low self-confidence, lack of belief in their own ability and distrust of formal education due to earlier learning experiences, will not be fully removed by policy. Promoting lifelong learning would require an approach specifically targeted to each of these groups.