

# Disabled people or disabling jobs ? Working conditions in adapted work enterprises<sup>(1)</sup> in France.

Abbas MOALLEM<sup>(2)</sup>

**RESUME** This study of 638 work situations and workstations in over 200 Adapted Work Centres in France shows that little real effort has been made to adapt and create workstations for people with learning disabilities. On the contrary, disabled workers are often placed in unacceptable and dangerous working conditions that sometimes even exaggerate their individual disabilities. Such workstations provide appalling working conditions that can be damaging to workers' health and sometimes even dangerous. By not allowing individuals to improve their performance and productivity, and thus to reinforce their

social standing, they instead create further handicap and disability.

**KEYWORDS** Working conditions, ergonomics, sheltered workshops, Adapted Work Centres.

**INTRODUCTION** Integrating people with learning disabilities into the workforce in France, as in the rest of the world, is a recent phenomenon. In 1957, less than 45 years ago, legislation led to the creation of the first supported working centres (Adapted Work Centres<sup>(3)</sup> and Sheltered

(1) (Centre d'Aide par le Travail) Adapted Work Centres and (Ateliers Protégés) Sheltered workshops ;

(2) Abbas Moallem, Ergo-Consult, P.O. Box 1944, Cupertino, CA 95015-1944, e-mail : amoaallem@email.sjsu.edu

(3) Adapted Work Centres (Centres d'Aide par le travail) have both an economic and a social mission. They are enterprises that must provide work to people who are, to quote the 1975 law concerning people with disabilities, "potentially able to work" ; there is a six month renewable trial period. Adapted Work Centres promote professional advancement and aim at helping people adapt to evolving technologies. People employed in these centres are not (yet) considered as workers and their work contracts have no legal value as such. One result of this is that they cannot profit from free movement of labour in Europe. Adapted Work Centres provide different sorts of work in different sectors : manufacture and sales, services such as upkeep of parks and gardens, laundries etc. However the main sort of work involves subcontracting from ordinary enterprises. Adapted Work Centres can also provide disabled workers with the opportunity to work in community settings : in enterprises, doing local government jobs or for private individuals. Ministerial decree n°77-1546 31st December 1977 and 86-510 14th March 1986.



Workshops<sup>(4)</sup>) providing people with learning disabilities with the opportunity to engage in professional activities. The first Adapted Work Centres were created in 1960. Today, some 1200 Adapted Work Centres and sheltered workshops offer adapted work to more than 70 000 disabled workers, especially people with mental disabilities.

By creating special working structures, adapted work enterprises enable people with disabilities to pass from professional inactivity to professional activity in mainstream production. For those whose disability remains an obstacle to integrating the mainstream workforce, these centres provide a way of avoiding being excluded from professional activity.

The role of adapted working structures is even more important given the difficulties of the job market in the current fragile French economic context (low growth rate, high level unemployment, etc.), rendering employment more inaccessible than ever to people who perform less well.

#### Work in Adapted Work Centres.

Work is an essential form of human activity ; it is the way the individual integrates today's society as well as being the way society defines individuals. In France, the psychological and social effects

on the unemployed of the crisis in the job market is clear proof of this.

Since Adapted Work Centres were created, the notion of work has undergone profound changes. There has been a spectacular rise of automation and computerisation, and economic competition is ever stronger. From the beginning of the 1980s, centres have made an effort to adapt to this new conception of work. Nonetheless, many limit themselves to providing work solely for occupational reasons and not for its results.

Several examples illustrate the nature of occupational work. Aberrations have been reported such as management staff disassembling pieces at the end of the day so that the disabled workers can reassemble the same pieces the following day. In other cases, the material on which the work is to be performed is purposefully placed at a distance from the workstation so that disabled workers can carry it to where it is to be mounted, thus occupying as many people as possible. Justified as educational by the people in charge, such methods are clearly reprehensible. Costly and totally unproductive, occupational work cannot continue to be financed by public subsidies. In addition, one cannot ignore the damaging effects

(4) Sheltered workshops (*Ateliers protégés*) are small private enterprises. The only difference from ordinary enterprises is that their vocation is to bring disabled workers to the point of being able to find a job in the mainstream labour market. Production conditions aim at reproducing mainstream working conditions (management hierarchy, workstations, machines, access, etc.). Sheltered workshops do not provide other sorts of support, such as psychological or educational assistance. From a legal point of view, people working in sheltered workshops are salaried workers. Their remuneration is proportional to their productivity. Ministerial decree n°78-75 and 78-76, 17th January 1978.



of such methods not only on the disabled workers whose chances of ever integrating the mainstream workforce become lesser by the day, but also on the hard won credibility of the Adapted Work Centres.

Another approach is needed if adapted work structures, whether they be of an occupational or a cottage industry nature, are to evolve towards semi-industrial and industrial production. To identify this approach it is essential to take into account ergonomics and what is known about how people function in work situations. Using ergonomics, people's disabilities can be taken into account by adapting existing workstations or creating new ones at the same time as respecting work safety requirements and optimising working conditions. People with learning disabilities not always being able to protest about their working conditions, it is the enterprise's duty to make available what is necessary to assure correct hygiene, safety and working conditions.

**RESEARCH METHODS** This study of work conditions and safety took place over a period of

twenty years in the context of diverse interventions (work condition audits, creating and adapting workstations and centres) in more than 200 Adapted Work Centres in France. During these interventions, several hundred different workstations in different sectors (woodwork, packaging, ironwork, mounting and assembling, etc.) were analysed, and slides were taken. A total of 638 slides

of workstations were then classified into groups according to the ergonomic problem in question. Given the large variety of workplaces and work stations, the groups were divided into four major categories.

1. Bad posture (the workstation makes the operator work with uncomfortable or dangerous posture).
2. Badly adapted equipment
3. Dangerous work environment (too much noise, bad lighting, non hygienic, too little room to work in...)
4. Serious handling problems (the operator has to carry or handle very heavy loads)

This classification does not take into consideration minor workstation problems: only the extreme situations are taken into account. Each situation is classed once only, according to the principle workstation problem observed. For example, if slides show a major problem concerning inappropriate equipment as well as a dangerous work environment, the equipment problem will have priority over the work environment problem. Contextual and social issues are not taken into account. Even if it is difficult to use photographs to assess work problems in a rational way, the classification method chosen has the merit of providing a general overview of working conditions in Adapted Work Centres.



**RÉSULTS** Some 638 Adapted Work Centre workstations were observed to be poorly adapted or dangerous. In 37 % of cases, workstations had not been appropriately adapted, thus putting disabled workers into bad postural

positions. Inappropriate equipment, creating uncomfortable and tiring working conditions, was being used in another 36 % of cases. In 19 % of cases, the work environment was potentially dangerous and 6 % of cases showed serious handling or carrying problems.

**Table 1 : Workstation problems in Adapted Work Centres.**

Type of problem	Number	%
Bad Posture	240	37.61
Badly adapted equipment	233	36.52
Dangerous work environment	125	19.59
Handling and carrying problems	40	6.26
Total	638	100%

**BAD POSTURE** In 37 % of cases, the operator has to work in an extremely uncomfortable position, with the risk of creating musculoskeletal disorders. These bad positions are very often essentially caused by inappropriate workstations and to a lesser extent by operator behaviour (lack of training). To illustrate this sort of problem, several examples of the commonest sorts of situations are presented.

Example 1. Electronic work station.  
The operator is doing meticulous work on electronic components. The work is complex and each operation lasts several minutes per item. During each operation, the operator has to hold the same static position for several minutes in order to do the job correctly. Notice (Photo 1) that the guide is placed very low with the opening on the side. Because of this, the operator has to lower his head, turn it (rotating the neck to the left) and bend down to see what he is



doing. This movement is repeated scores of times every day. The operator has never complained about his workstation nor about the pain and has continued to do the job on a daily basis during different periods over several years. The nature of the work (as he is the only person capable of doing it in the workshop, it is quite rewarding) and the fear of being moved elsewhere are probably the major reasons stopping this disabled worker from complaining and demanding better adapted work conditions.



Photo 1 - Electronic workstation

**Example 2. Weighing and filling.**

The operator takes the items and fills the tray on the weighing machine. Once the right weight has been reached, he empties the tray into a box on the floor and then repeats the whole operation. Predictably, this process not only slows down the work cycle, but also demands repeated physical movements of the arms and the hands.



Photo 2 - Weighing and filling workstation

**Example 3. Packaging.**

This operator's working station is not adapted for a person in a wheelchair. Not only is the table too high, but the presence of a box on the table makes the situation even worse. Putting a physically and mentally handicapped person in such a position is intolerable.



Photo 3 - Packaging workstation

**BADLY ADAPTED EQUIPMENT**

Workstations are very often badly equipped and the tools provided are often inappropriate. Low financial returns, ignorance with regard to choosing appropriate equipment, the periodic nature of the jobs and the short duration of the tasks involved often explain this situation. The



examples described illustrate the types of situations that are frequently encountered in Adapted Work Centres.

Example 4. Preparation.

These operators, sitting on the edge of their chairs and leaning their forearms on the edge of a box, prepare items several hours per day. Insufficient means and the ignorance of the people in charge are the two main reasons for this failure to adapt the work situation to the specific workers in question. Conditions are not only harmful for the operators (serious consequences for the back and the arms), but obviously diminish their productivity. The lack of productivity is not due to the person's disability, but a direct result of a badly adapted work station. (Photos 4 and 5)



Photo 4 - Preparation workstation



Photo 5 - Preparation workstation

Example 5. Mounting and assembling.

These workers are mounting and assembling. They are not using the right chairs. One can imagine the effects on the workers' health of several hours of work sitting in these conditions. Adapted seating for corpulent people is commercially available. Even without a wider chair, height adjustable seating would have made the work table more accessible. (Photos 6 and 7).



Photo 6 - Mounting and assembly workstation



Photo 7 - Mounting and assembly workstation

Example 6. Mounting and packaging.

Very often in Adapted Work Centres, assembling and packaging involves placing several workers around a big table. They can be seated (if seating is available) or remain standing. The different operations are organised in a chain: each person does a specific job on the item in question and



then passes it on to the next person. This method of work organisation results in bad posture for everyone, low productivity and damaging psychological effects. The wide, low table obliges the workers to bend down to pick up each object. They have to lean over (turning and bending over) to put the objects into the boxes on the floor. In addition, the duration of each operation not being the same and the workers working at different speeds, this means that they either have to wait for their neighbour to finish their task or to speed up, which gives the same result. In both cases, workers have to put up with long waits, potentially psychologically stressful (Photo 8).



Photo 8 - Mounting and assembly workstation

**Example 7. Mounting and packaging.** Here, workers are unable to put their legs under the table because of badly placed shelving. Given that this job is done sitting down, the operators end up in an uncomfortable position at a distance from the table. Although it would cost very little to adapt the table, the indifference and ignorance of the people in charge allow this situation to go on, with no attempt being made to fix the problem.



Photo 9 - Mounting and packaging workstation

### **DANGEROUS WORK ENVIRONMENTS**

The number of workstations in difficult work environments is an important issue.

In the sample of workstations studied, 19% of the workers are working in a dangerous environment. This percentage does not include many other situations where people are found working in a difficult environment :

- High noise level ;
- Inadequate lighting ;
- Dust, particularly in carpentry workshops.
- Inadequate working space (workstations badly placed, irrational management of waste material, lack of appropriate storage space with consequent risk of accidents, etc.) (Moallem 1994).

Considering that some 80 % of Adapted Work Centre activities are jobs involving industrial sub-contracting, particularly packaging and activities involving little product transformation, one can understand the need for care in choosing and organising transport and handling techniques and equipment.



In addition to these anomalies, individual safety measures are often non-existent, badly chosen or not used at all. These problems are particularly frequent in jobs involving working with wood (carpentry, making pallets).

Dangerous and toxic products are often inappropriately handled and stored. Photo 10 shows a toxic product being kept in a typical French liqueur bottle. This bottle was stored in a cupboard accessible to everyone in the workshop. This sort of case not being rare, it has been chosen to illustrate the general problem.

In addition, fire security rules are often not respected. Often, extinguishers are difficult to get at, security exits are blocked and inflammable goods are inappropriately stored.



Photo 10 - Toxic product kept in a typical French liqueur bottle

### **SERIOUS TRANSPORT AND HANDLING PROBLEMS**

Carrying heavy loads and hard physical work are very frequent in Adapted Work Centres.

This is due to the fact that Adapted Work Centres are often sub-contracting enterprises. Industrial sub-contracting work usually involves a large amount of handling and transport. For example; an enterprise might subcontract a job involving receiving delivery of hundreds of pallets of packaged items, undoing the pallets, putting a "Special Offer" label on each item, repackaging and putting the lot back onto the pallet. All these operations must be done in a fairly short period of time. The personnel do not have enough time to organise the work and, even if they did, they don't possess the necessary skills to organise rational working methods and techniques.

Carpentry workshops are the other major work sector involving handling heavy weights (woodwork, sawing, making pallets...). Woodwork is a traditional Adapted Work Centre activity. The handling and transport involved is often extremely uncomfortable work. For example, making small lots of made-to-measure pallets, apparently not profitable enough to be done by ordinary enterprises, is subcontracted to Adapted Work Centres. Returns being small from pallet-making, disabled workers often have to do the work without any mechanisation. Several examples are presented.





Example 8. Pallet-making.

The operator in this photo is assembling a pallet. The work involves lifting up the pallet to bring it into line with his body, turning his body, and then putting the pallet down onto a pile of pallets. Notice the operator's body position while handling a pallet weighing between 16 and 36 kilos, depending on the model in question. Even if the operator makes 50 pallets a day, at the end of the day he has handled a minimum of 800 kilos in very dangerous circumstances (Photo 11).



Photo 11 - Pallet making workstation

Example 9. Clearing away sawn wood in a sawmill.

The situation in sawmills with regard to handling and carrying wood is nigh on medieval. The following example shows an operator handling pieces of wood weighing more than 30 kilograms a piece. Similar scenes were observed in most sawmills visited. In several cases, workers were handling 3 to 4 tonnes of wood daily. (Photo 12).



Photo 12 - Clearing away sawn wood in a sawmill

Example 10. Loading wood for sawing.

Planks in this carpentry workshop are placed on the ground. Each worker has to lift them off the ground to put them onto the machine or the table. Given the weight being handled, the height and the distance in question, there is an evident risk of accidents for these workers. (Photo 13).



Photo 13 - Loading wood for sawing



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### **RISK MANAGEMENT AND ACCIDENT PREVENTION**

There seems to be no rational approach to risk management and accident prevention.

The adapted work sector, in spite of the workers' intellectual disabilities, seems to have a relatively low accident rate compared with the ordinary work context (Moallem 1991). This low accident rate is not necessarily due to the security measures in place. Several other explanations must be taken into account :

- (1) In the majority of cases, centres do not use dangerous machinery. The work is done manually, with little major risk for the workers.
- (2) Imposed work rhythms are non-existent and in certain cases there is little real activity. Work is usually slowed down to keep the workers busy, thus indirectly reducing accident risk.
- (3) Meaningful statistics are lacking. Official statistics concerning the adapted work sector were to be found neither in government publications, nor in professional or family organisations (SNAPEI or UNAPEI)<sup>(3)</sup>. In France, the status of salaried worker for disabled workers in Adapted Work Centres has no legal basis. Work accidents are therefore not treated as such. Statistics for sheltered workshops are included in the general statistics for the branch of activity in

question. Furthermore, the method of analysing work accidents in this sector is not sufficiently reliable: Adapted Work Centres do not all have the same rates of activity. Some are very productive with heavy work timetables. Others are far from being overworked, with a more "occupational" philosophy. As a result, general statistics for this sector may well be of little real use.

- (4) In addition, each centre can offer several activities: woodwork, metalwork, sub-contracting, gardening, etc. Obviously, the amount of risk and the number of accidents and their gravity vary from sector to sector, given the different machinery and the nature of the work being done. Figures for each centre and mean figures for the whole sector would not give a true picture of the situation. It would be essential to measure accident frequency by sector of activity and to take into account the number of hours really worked. Often, workers with mental disabilities do not work directly with dangerous machinery, these jobs being left to management.

During 1999, we analysed the medical records of several Adapted Work Centres. Management had recorded only one accident. This lack of thoroughness was explained by one manager by the fact that the incidents in question were not serious enough "to go to the trouble of making a

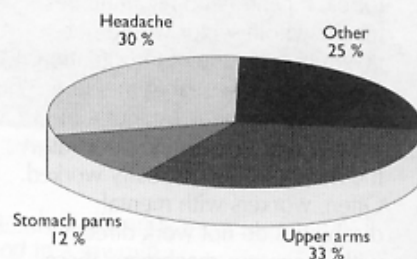
(3) S.N.A.P.E.I. : Syndicat National des Associations de Parents d'Enfants Inadaptés - 7-9 rue de la Boétie 75008 PARIS - France.

U.N.A.P.E.I. : Union National des Associations de Parents d'Enfants Inadaptés - 15 rue Coysevox 75018 PARIS - France.



record of them". Analysing the medical registry of an Adapted Work Centre with 80 workers, it was discovered that 30 % of complaints concerned headaches, 33 % injuries to the upper limbs and 25 % other problems (Graph 1). These data indicate real problems with working conditions. For example, the head position in Photo1, apart from other possible injuries it might cause, may well be the cause of workers' headaches. The same reasoning holds for problems relating to arm positions (Photos 2, 3 and 4) and their potentially damaging effects.

**Graph 1 : The nature of 208 injuries registered in the Medical Registry of an Adapted Work Centre during 1998.**



**CONCLUSION** With the evolution of adapted work structures towards greater productivity, new machinery and increasing output, in short, with the industrialisation of this sector, risk prevention policy and safety measures need particular care. If in earlier days

the implications on workers' health of not wearing protective helmets or gloves may not have been too serious, (true working time was short), today, not respecting safety and hygiene rules can have serious consequences.

Putting adults with mental disabilities into Adapted Work Centres rather than into psychiatric hospitals or other such institutions is a considerable step forward. Today, however, simply putting them into an Adapted Work Centres is no longer sufficient. Accent should be put on the quality of the service provided, the quality of care and on the quality of life of people with mental disabilities in Adapted Work Centres.

Such quality is essential for the State, for people with disabilities themselves, for families and for management in order to guarantee real work for people with learning and mental disabilities and their integration into society. It is not sufficient to put a group of disabled workers into a workshop in a pleasant atmosphere and to keep them occupied with costly or unprofitable activities. Doing a real, efficient job, a job that is recognised as such, is valorising for people with disabilities and can help change the ways that others see them. But this can only be done in a rationally organised, comfortable and safe working environment, associated with adequate social and professional support and worker training on hygiene, safety and working conditions. We cannot go on ignoring the fact that adapted working conditions are pertinent indicators of a service of quality.



The work situations described in the current paper can be encountered in most Adapted Work Centres supposedly providing adapted work to workers with mental disabilities. The apathy and passivity of management staff in certain centres can only be deplored. When explaining anomalies such as infringement of safety rules (not wearing a protecting gown, for example), management rarely perceive their own professional behaviour as questionable, nor are they conscious of their own liability. The fact that they are working with disabled workers is the excuse generally given for not applying the rules. (Moallem 1996, 1994)

After more than 18 years of consulting as an ergonomist in Adapted Work Centres and sheltered workshops (more than 200 centres in France) and after training several hundred professionals in charge of managing disabled workers in workshops, we

observe that the problems concerning the working conditions of disabled workers are rarely taken into account, even in the more critical cases. A massive mobilisation of all parties concerned - associations, management, staff and government authorities - appears to be essential if we were to change this inhuman situation.

Furthermore, it must be stressed that workers with mental disabilities in France, generally unable to express their point of view concerning working conditions, are represented by their employer, i.e. the parent association that runs the centre. These associations often remain inactive even in the most catastrophic situations.

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