

VET Partnership between Schools and Companies – the Role of Teachers and Trainers

Lessons from a Peer Learning Activity

Policy and Business Analysis

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1. Introduction and recommendations

This report describes the process and outcomes of a peer learning activity (PLA) which took place in Vienna, Austria from the 5th March to the 8th March 2007.

The peer learning activities form part of a programme set up in the context of the in the context of the Education and Training 2010 work programme. The present peer learning activity was proposed by the Thematic Cluster on Teachers and Trainers with the purpose of creating a cooperative learning space for policy makers and social partners on the issue: Cooperation between VET schools and companies.

The PLA was hosted by Austria and the following countries were represented:

- Austria, Estonia, Germany, Iceland, Ireland, Italy, The Netherlands, Portugal, Romania, Slovenia and Sweden

The overall structure of the PLA reflected the theme: Partnership between schools and companies – the role of teachers and trainers.

- On day 1, focus was on company trainers, their situation and competences;
- On day 2, focus was on VET school teachers, their situation and competences;
- Day 3 was set aside for discussions on cooperation between the two worlds;
- Day 4 was the final day when we returned to the four questions and aimed at arriving at conclusions and recommendations.

On each of the three first days, we heard presentations from a number of the participating countries addressing the day's topic.

In *chapter 2* below, a number of observations and conclusions of the three first days is highlighted followed by a short presentation of some topics that were brought forward in the country presentations. *Chapters 3 – 6* goes through the four questions that were developed during the preparation phase and addressed during the PLA.

On the basis of the discussions throughout the PLA and particularly the discussions and conclusions of the last day, the consultants have developed a number of recommendations which are presented below.

Recommendations for teachers

Competence requirements to VET teachers are changing. Curriculum development and design is in the process of being decentralised in most European countries, and teachers are becoming more directly involved in curriculum planning, often in cooperation with enterprises. The requirements to skills and competences of trainees are also developing and the pace of change is increasing.

The decentralisation of development and management of VET programmes is an important and potentially very fruitful trend, which is an essential precondition for ensuring good partnerships between schools and companies.

In order to support VET teachers in exploiting the opportunities of their new role in more decentralised VET systems and in contributing effectively to the development of rapidly evolving curricula and good partnership relations between schools and enterprises, the following steps and types of initiatives at the level of VET teachers are recommended: :

- VET teachers should increasingly orient themselves towards the experiences and challenges of the companies where their students and trainees are to take up work, and should orient themselves towards integrating this knowledge into their curriculum development work on an ongoing basis.
- In response to the more central role of VET teachers for curriculum development, teachers should increasingly orient themselves towards working in self-reflective development teams, building among other things on well-developed relations with relevant networks of enterprises.
- In response to the evolving requirements of trainees' skills and competences, and as a consequence of the new requirements of the teachers' role in education development, a clearer professional profiles of VET teachers should be developed and stronger focus to increasing VET teachers' own skills and competences given. Just as trainees are increasingly expected to take upon them a responsibility for their own learning, VET trainers are well advised to adopt a similar approach to their own professional development.

Recommendations for company trainers

Company trainers are likely to continue to play an important role in ensuring and developing good partnerships between schools and companies. At the same time, expectations towards company trainers are not always entirely clear. The professional profile and identity of company trainers may be somewhat unclear, and the logic of production, predominant in work place training context, may collide with the logic of education, prevalent in VET schools. Furthermore, the application of modern didactic principles in work place settings is becoming increasingly imperative if enterprises are to maintain a sufficient inflow of well-trained workforce, especially in the light of the shrinking youth cohorts in Europe.

These potential or actual gaps and challenges must be bridged, if school-company partnerships are to be developed further in the future.

- Company trainers should, wherever relevant, establish close and ongoing personal and professional relationships with VET teachers. They should seek systematic and ongoing exchanges of experience and, if possible, engage in common training development activities.
- Company trainers should be encouraged to strengthen their pedagogical and didactic competences and to develop their consciousness about their professional and pedagogical role in relation to trainees.
- In addition, in order to retain and increase the attractiveness of VET training for young persons, company trainers should increase their focus on their relational competences and other personal competences such as team work, the ability to work with young people, and networking and communication skills.
- The training of company trainers should not be overly formalised and not be too lengthy. If the training requirements are too extensive it may reduce the attractiveness for companies to take responsibility for the recruitment and training of trainers. Consequently,

flexible and innovative training forms should be adopted in cooperation between companies and VET institutions.

Recommendations for school managements

VET school managers have a clear responsibility to ensure that VET teachers and trainers are made aware of the opportunities and challenges mentioned above and the requirements these challenges pose to both teachers and trainers.

At the same time, school managers are also responsible to develop, at the institutional level, the necessary institutional framework and platforms for good partnerships with relevant companies.

- School managers have to understand the new and emerging requirements for VET teachers, and should establish – wherever possible – the right incentives for VET teachers to take up a central role in ongoing demand-oriented curriculum development, to encourage teamwork and working relationships with company trainers and companies etc.
- School managers should, wherever relevant, encourage the establishment of partnerships between schools and enterprises at different levels. This might happen through both informal and more formalised partnerships, to supplement the formal cooperation structures stipulated by overall VET legislation etc. Partnerships with specific objectives, for instance in the form of common school-enterprises development projects, holds the potential of bringing together VET teachers and company trainers, thereby encouraging the development of common and/or mutually enriching perspectives, approaches, methods etc.
- Specific forms of cooperation, which should be encouraged include the increased use of insourcing of VET-trainers in companies for a period of time, for instance also in the form of enterprise-relocated learning modules, and insourcing of company trainers to VET schools for the implementation of specific tasks or training modules, for instance in cooperation with VET teachers.
- Increased use of common continuing training of VET teachers and company trainers should also be considered as a way to promote cooperation and the establishment of shared approaches and methods.

Recommendations for social partners

The school world and the VET education system cannot alone bear the responsibility for the provision of vocational education and training. Thus, the provision of good VET is dependent on an efficient integration of theory, practice and work based learning, and on the integration of company needs, requirements and perspectives into learning.

- A deep and active involvement of the social partners in the development and provision of VET is very important if good partnerships between companies and VET schools are to be developed and maintained. Where this is not already the case, the social partners should be encouraged to take upon themselves an important role in the ongoing development of VET. This applies both at the overall system level, and at the level of the actual provision of VET, i.e. in schools and at workplaces.
- Where relevant, the social partners should strengthen their capacities for contributing actively to VET development. At the system level, this may mean the establishment of networks, methods and tools which can provide information on, possibly emerging, skills

needs and competence requirements in specific segments of the labour market, and channel this information into the policy making process. At the level of providers, this may mean the mobilisation of the necessary human resources, including for instance training of relevant representatives, for the participation in school management activities, curriculum development activities, or other activities aimed at ensuring a balance between the demand for skills and competences and the supply of teaching and training.

Recommendations for VET policy makers in the member states

The trend in VET is towards increasing decentralisation with a view to stronger and more rapid adaptation to changes in company needs for skills and competences. At the same time, the structural economic development implies that new types of skills and competence requirements are emerging continuously.

- VET policy makers should explore new ways to ensure flexibility and adaptability in VET systems, to reflect new and emerging needs for skills and competences. One key question is whether the responsibility for ongoing curriculum development can be further decentralised, which would provide for a stronger role for the social partners. It would rely on the development of stronger systems of output-oriented evaluation as a replacement for attempts at centralised control of curriculum and learning contents.
- VET policy makers should ensure that enough incentives exist and enough room of manoeuvre are in place for VET schools to develop close and committing partnerships with enterprises and the social partners.
- VET policy makers should consider new initiatives in order to further develop the qualifications and competences of VET teachers as well as company trainers, in order to reflect the requirements of more decentralised and flexible systems with stronger and broader roles for VET teachers and trainers.

Recommendations for European VET policy initiatives

European initiatives have an important role to play in facilitating development processes in VET at national, regional and local levels. The exchange of experiences and the development and promotion of good practices is a relevant field of action. However, there are also good reasons to adopt more direct approaches which formulate recommendations directed at relevant actors and stakeholders at various levels.

- It should be considered to develop at European level a set of guidelines concerning the development and operation of good partnership between schools and companies in Vocational Education and Training.
- It should be considered to develop ongoing practices of review on the basis of these guidelines, and to make the result of these reviews the subject of activities for highlighting the importance of school – company partnerships.

Danish Technological Institute Aarhus, Denmark, 9 March 2007
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Under contract to the European Commission, DG Education and Culture.

2. The Process of the PLA

According to the guidelines¹, a peer learning activity should include the following elements:

- 1) Presentation by the host country of opportunities and constraints for policy development and implementation;
- 2) Initial reactions of the “peer learning” countries;
- 3) Site visit (if appropriate);
- 4) Discussion on the key issues, as identified from the initial reactions of the “peer learning” countries;
- 5) Short presentations by ‘peer learning’ countries on alternative policy approaches;
- 6) Identification of key messages, conclusions and questions from the PLA, possible follow-up activities and opportunities for dissemination;
- 7) Evaluation of results and methodology based on a questionnaire.

The PLA in Vienna included all these elements. The programme is attached in annex I. Instead of going through the programme items one by one, the following section will seek to relate the focus of each item as well as the questions it raised and the reactions it inspired.

2.1. Preparation

In order to prepare the participants and provide a focus for the PLA, a background report had been prepared² giving an overview of challenges and different solutions pertaining to the topic of the PLA with examples from European countries. Further, the participants had been asked to submit brief country reports in answer to a short questionnaire (see annex II). On the basis of the country reports, the consultants had prepared a synthesis report³. These documents had been sent to the participants beforehand. On the basis of this documentation, the Commission has identified four questions as particularly central, and these questions were relayed to the participants by email shortly before the event. The questions were:

1. What are key elements to ensure an active partnership between schools and companies and a good coherence between school-based and work-based learning?
2. How can schools and companies effectively cooperate in the translation of curricula guidelines into the planning of teaching and learning processes?
3. What are the key competencies that a) teachers and b) trainers need in order to ensure good cooperation and partnership between the world of school and the world of work? How should these competence requirements be supported and managed at system level?
4. How can trainees be enabled to function as linking pins between schools and companies?

¹ Note for the Education and Training 2010 Coordination Group (ETCG) on the Methodology for the peer learning activities (PLAs) in the context of the Education and Training 2010 work programme.

² Andersen, Tine and M. E. Hansen (2007): Partnership between VET Schools and Companies. The role of teachers and trainers. Background Paper. DTI under contract to EU DG EAC.

³ Andersen, Tine and M. E. Hansen (2007): Partnership between VET Schools and Companies. Synthesis Paper. DTI under contract to EU DG EAC.

2.2. The participants

A list of participants can be found in annex III. Two participants had been invited from each country – one representing expertise on VET systems (typically a representative of the Ministry of Education) and one representing the social partners.

2.3. The hosts

The PLA was hosted by Austria. The Austrian Ministry of Education, the Austrian Ministry of Labour and the WKÖ, the Austrian Federal Economic Chamber⁴ all contributed positively to the success of the PLA by making financial and organisational resources available. The practical arrangements were undertaken by ibw, Institut für Bildungsforschung der Wirtschaft, a research institute with close links to WKÖ.

2.4. The execution of the PLA

As already mentioned, each of the three first days was structured around one of the elements of the partnership between schools and companies – the trainers, the teachers and the preconditions necessary for establishing and maintaining good partnerships.

Day 1: The situation of trainers

The day started with general briefings introducing the Austrian apprenticeship system and the organisational context. First, we paid a visit to the Career Information Centre of the Economic Chamber of Vienna (BIWI), where Mr. Leo Hödl, director of BiWi, presented the Centre and its activities. Subsequently, the apprenticeship system was presented by Ms. Sabine Archan from the Institute for Research on Qualifications and Training of the Austrian Economy (ibw). Finally, the system for basic and continuing education of company trainers was presented by Mr. Erich Huber, director of the Apprenticeship Office within the Economic Chamber of Vienna.

In the afternoon of Day 1, we paid a site visit to Fernwärme Wien, a subsidiary of Stadtwerke Wien. Fernwärme Wien is a large company, which trains a large number of apprentices (a so-called "training company"). In total, Stadtwerke Wien trains about 350 apprentices a year. Fernwärme Wien employs full-time trainers and has established in-company training facilities (workshops). Upon visiting the facility, we got a presentation of trainer networks by Ms. Gabriele Aurednicek, who is responsible for the apprenticeship program in Fernwärme Wien, Ms. Edeltraut Novak from Bank Austria and Stefan Praschl from ibw.

Observations of day 1

The first precondition for partnership is that companies agree to contribute

One point that was underlined was that the apprenticeship system depends critically on the willingness of companies to take on apprentices. This depends in part on the company getting value from the apprentices. Therefore, selection procedures for apprentices may be just as tough as for regular employees, which is the case at Fernwärme Wien. However, the perspective of not being able to terminate a contract with an apprentice who does not perform according to the company's expectations may deter some companies from engaging in apprenticeships. Discussions are on-going in Austria in order to address this issue (A new

⁴ The Austrian Federal Economic Chamber is, by law, the representative of the entire Austrian business community. Membership is compulsory and comprises all Austrian companies.

legal framework might be adopted in Austria, which would allow the "training companies" terminate a contract with an apprentice under specific conditions).

Company size is a main factor influencing the situation of trainers vis-à-vis schools

In Austria, there is a strict system for the approval of "training companies". Among other things, the system requires the companies to appoint trainers with a certain level of qualifications. There are considerable differences in the amount of resources that companies devote to apprenticeship training. As an example, out of the 4,500 enterprises that train apprentices in Vienna, 3-400 employ full time trainers, and they are typically big companies. Trainers must be authorised, which demands that they are either master craftsmen, that they have passed an IVET trainer examination or that they have taken a course of forty hours. For the continuing development of trainers, courses are offered, but the take-up leaves something to be desired, in particular in small companies.

Trainers need to cooperate with teachers on 'youth problems'

In spite of the tough selection procedure⁵, and although many young people who are considered as "difficult" in the school have no problems in a company environment, company trainers still have to relate to the problems accompanying adolescence, as apprentices are from 15-19 years old. Such problems may require close communication with the school, and this is usually handled on a day-to-day bilateral trainer-teacher basis using email.

Day 2: The situation of teachers

On day 2, we visited a part-time vocational school and a Teacher Training College. Furthermore, we had a combined site visit and lunch at a restaurant which is also a small, family owned company which employs a small number of apprentices who are learning to be cooks and waiters.

At the part-time vocational school, Inspector Mr. Friedrich Hainz as well as four principals introduced the school and described the teachers' educational and professional background as well as describing how the school cooperates with companies on training. Again it was stressed that conditions are very different according to the size of the companies.

At the restaurant, the owner, Mr. Wolfgang Glotz, introduced 4 of his 6 apprentices and told us about his experiences in training.

At the Teacher Training College, Gerhard Pahr, Jutta Zemanek (Vice-Rectors), and Walter Swoboda (Head of unit) introduced the education of teachers which stresses professional didactics rather than general pedagogics or professional training (as teachers should have a professional qualification).

VET teachers education can be planned with a view to strengthen partnership

In Vienna, subject teachers are required to have at least 3 relevant work years experience when they commence their education to become a VET teacher. These professionals are then assigned to a school and start teaching at the same time as receiving education part time. The second year of the three year education is full-time education, whereas the 1st and 3rd years are

⁵ The 350 apprentices a year are selected from a pool of approx. 1,000 applications on the basis of their academic achievements and motivation.

part time teaching, part time education. Hence the education seeks to establish a strong synergy between the professional background, the didactics and the teaching practise.

Cooperation on the equipment side is a good starting point

In several lines of training at the part-time school, part of the equipment was donated by large companies. But in addition, the school has ventured into product development together with private companies in the development of technical equipment suited for teaching by e.g. simulating different electrical circuits.

It takes time to establish and maintain the relations which lead to effective cooperation

At the part-time school, it was stressed that good cooperation depends on close relations at a personal level is important. One of the principals stressed that he and his teachers had regular meetings with the company trainers on professional and / or pedagogic subjects.

The more company owners are involved in education and training structures, the better they understand the need for part of the training to take place in the school

The restaurant owner stressed that after he had become a member of the sectoral board, he had come to much better appreciate the need for his apprentices to go to school.

Day 3: Cooperation and partnership

On day three, we first heard a presentation of a study⁶ by Mr. Arthur Schneeberger, ibw, concerning cooperation between schools and companies followed by a round table discussion on the same topic. The round table consisted of: Mr. Alfred Freundlinger, Federal Economic Chamber; Ms. Edith Kugi, Federal Chamber of Labour; Ms. Gabriele Schmid, Federal Ministry of Economics and Labour; and Mr. Werner Gatty, Federal Ministry for Education.

Important points in the presentation and the discussion were:

Cooperation at national, regional and school management level is a prerequisite for cooperation at teacher / trainer level.

“Teachers cannot do the job alone” – there has to be mutual trust at all levels.

There are different intensities of cooperation

At the lowest level, cooperation takes the form of *information* from one part to the other. The next level is *coordination*, where school and company coordinate efforts to create more coherent training. The third level is full-blown *cooperation* where school and company cooperates in development of training methods, curricula etc.

It is important to create social contexts for cooperation

Cooperation is enhanced, if personal meetings are created in which the content should be half professional, half social. This creates transparency and insight into “the other system”.

There are two focal points for cooperation

⁶ Arthur Schneeberger (2006): Optimising Cooperation between Vocational School and Training Enterprise. Surveys and Analyses of Pedagogical Aspects to Improve the Quality of Initial Vocational Education and Training. Vienna: ibw. Can be accessed at www.ibw.at

One is the individual psycho-social needs of the young learners; the other is the needs of the occupation. From the viewpoint of the learner, (s)he needs to be able to appreciate that the training contributes positively to his/her future and also that activities at school and at work complement each other in a meaningful way. From the viewpoint of the occupation, it is important that the knowledge of the enterprises is continuously supplemented with wider insights and skills taught in the schools.

New professions present a special problem

For the dual system the emergence of new sectors of the economy presents a challenge. An example is the service sector (business services, ICT etc.) where the potential company trainers are often educated in universities and cannot easily relate to apprenticeship training.

Systemic challenges put pressure on teachers and trainers and increase the need for cooperation

. The trade union representative identified three main issues:

- An increasing number of early school leavers who are not sufficiently prepared for apprenticeship.
- A lack of quality assurance of training in some of the companies who train apprentices
- The 40 hours course demanded of for company trainers is insufficient.

Country presentations

Each country was asked to prepare a ten-minute presentation of how their country tackles the issue of school-company cooperation. An exhaustive account of these presentations is not within the scope of the present report. Below, we highlight some points of each presentation with particular relevance for the topic of the PLA.

Three countries had been asked to specifically address topics relating to trainers' situation and needs in relation to partnership: Italy, Iceland and Portugal.

In *Italy*, where most apprenticeships involve persons 18-29, Company training is undertaken by an 'enterprise tutor' who is the owner/director in the SMEs or a qualified employee with at least three years of professional experience. These tutors have to attend a compulsory training course (8 – 32 hours) organised by the Regions. The tasks of the tutor is laid down in a regulation, and among these, the tutor should conduct relations with the training centres to enable positive integration between formal training and on the job experience.

The *Icelandic* IVET includes apprenticeship training, but it is difficult to get sufficient training places. The economy is characterized by small enterprises, and there are no economic incentives for companies to take on apprentices. Also, there is no formal education for trainers/instructors in companies. In order to improve conditions, a project including payment to companies and training of company trainers was carried through and on this basis, discussions have been initiated between the Ministry and the social partners on policies to improve apprenticeship.

In *Portugal* company trainers (tutors) participate in the preparation of an individual training plan for each learner. Each tutor may be responsible for a maximum of 5 trainees, and is responsible for the training and the evaluation of the trainees. (S)he may also participate in the final evaluation of the trainees.

The following countries had been asked to present with a specific view to the teachers' situation and needs in relation to partnership: Slovenia, Ireland and Estonia.

Slovenia stressed that the new demands on IVET in relation both to partnership and education policy in a wider sense put new demands on teachers. The 'new' teacher must be able to:

- Exercise autonomy in a development role
- Contribute to the development of school curricula
- Work in teams
- Cooperate with companies
- Cooperate with learners on the drafting of individual educational plans
- Self-evaluation

Ireland saw the biggest challenges for schools in relation to CVET and outlined the following challenges for VET teachers as concerns partnership

- Assisting and supporting employees to come forward for training
- Persuading employers of the value of in-company training for employees
- Encouraging employers to allow employees to continue training

Estonia saw the recruitment of qualified vocational teachers with high professional qualifications and their continuing education as the main challenge in this respect. The Ministry of Education and Research has initiated efforts to develop a professional standard and new qualification requirements for vocational teachers.

Germany, Romania, the Netherlands and Sweden were asked to address issues pertaining specifically cooperation.

In *Germany* - quite similar to the Austrian apprenticeship system with its dual approach - cooperation between school and company has become institutionalised. As a paradox however, the actual practice of communication and cooperation on the local level can be very little. It depends very much on the initiative of individual schools and individual (usually larger) companies and the respective persons involved. As an example the situation of one school and one large company was described: Since VET teachers of part-time schools in Germany have a primarily academic background and focus on theoretical issues, they often lack a practical approach in their teaching methodology. The company has to compensate for this by the training they provide in their company based training workshops. Often teachers are hesitant to visit the company and to learn about the problems to be solved there and the technological state of the art. This company does not only provide the school with some technical equipment but also convinced the teachers to come into the company to carry out parts of their classes in the company's training centre. Another method to improve the cooperation between the two worlds was the installation of a 'council of apprentices'. The apprentices meet once a year to evaluate the quality of their training both at school and within the company. They come up with many essential points and the results are discussed both with the training manager of the company as well as with the school manager and taken very seriously by both sides.

The *Romanian* participants emphasised the importance of the involvement at all levels of social partners. For example, the local part of the curriculum is designed by each school in cooperation with its social partners and adapted to the specific needs of the local labour market, just like social partners involved within consultative bodies at all decision levels.

The *Netherlands* saw the main challenges in overlaps between schools and companies. More and more efficient networking is seen as a means to improve this situation. A central element in the Dutch model for cooperation is the learner's *portfolio* where all work is gathered and evaluated.

Sweden has a much decentralised system which gives great possibilities for cooperation between schools and workplaces. It has been observed that cooperation works best where companies are most involved. There is a lack of vocational teachers in Sweden. Too few enter the teachers colleges. The education for vocational teachers in Sweden is nowadays a three years course without salary at an academic level. Earlier it was much shorter. 'We demanded the best, but lost the good'.

3. Key elements in ensuring active partnership

What are key elements to ensure an active partnership between schools and companies and a good coherence between school-based and work-based learning?

Social partners should be given influence on content and provision of VET

Among the participants of the PLA, it was a common experience that the school world cannot have the sole responsibility for the provision of VET because the content and provision of VET is dependent on a good integration of theory, practice and work based learning. Furthermore, it was the analysis that the school world has a tendency to impose its world views and goals on companies.

Therefore, the social partners should be given influence on the content and provision of VET a national, regional and local level.

During the PLA, some participants made the observation that the labour market and the companies acting in their own interest are “the driving force”, which is a precondition for the establishment of a good partnership and company based training of sufficient quality. Consequently, the right strategy is to make the companies and the social partners share responsibility for the provision of VET by acting in their own interest.

A shared responsibility for the educational process and a shared understanding of outcome goals

The school world and the world of work represent very different perspectives and ways of thinking: In the school world focus is on curricula and the content of formal educational programmes whereas the world of work focuses on the requirements of production and recruitment.

In order to bridge these different perspectives shared *outcome goals* are essential to a good cooperation between the school world and the world of work: What are the key competences of a given profession or job profile? What are the minimum requirements and standards of the student/trainee at different levels of progression? How can each party, the school and the company, contribute to the fulfilment of these outcome goals? What learning processes, at school and company respectively, are required?

Such questions should guide the establishment of common outcome goals and mutual agreements on how each part can contribute to the curriculum. In addition to the outcome goals, agreements on the *monitoring* of the goals' fulfilment and the organisation of the monitoring should be established.

Different routes to the same outcome should be possible

The cooperation between the world of schools and the world of companies should also include *pedagogical* issues. During the PLA, several participants emphasised that learning difficulties and different ways of learning among the students are important to take into account in order to reduce dropout. Dropout, learning difficulties and disadvantaged groups of students are prominent issues in most of the participating countries and the development of

new pedagogical techniques should be an integral part of the cooperation between schools and companies.

Consequently, schools and companies should have a shared understanding of the fact that students do not learn in the same way and make agreements on how different learning processes should lead to the outcome goals. Furthermore, it should also be agreed how learning processes in the school can be complemented by learning processes in the companies.

Furthermore, it was considered important that teachers and trainers have sufficient pedagogical skills, including an understanding of interfacing with people who have special needs, to execute the training function. Apprentices and students should be enabled to achieve a solid basement in learning so that it can be a good starting point for life long learning.

Key components of partnership

Based on the written comments and the discussion some key components of the partnership were lined up:

Policy

- A policy framework encouraging dialogue. There should be an infrastructure on national, regional and local level to ensure the social partnership cooperation.

Space

- Forum, conferences and regular meetings between the world of schools and the world of work
- That VET teachers in school have got the resources (time) to build up personal contacts with key persons in the companies which are relevant for that specific education.
- Resources (time and training) should also be sufficient for trainers in companies.
- To find the right formal and informal forum for the local dialogue that suits the partners involved.

Dialogue, empathy and shared values

- A frank and open dialogue in which problems and disputes were used innovatively.
- A high level of empathy between teachers. They have to understand each others role and possible difficulties. Ideally, teachers and trainers should be co-working and share the same values. Empathy and shared values should be enhanced by professional mobility between schools and companies. Common programmes for the professional development of teachers and trainers could also be a relevant measure.
- Good communication between the management of school and the management of company.

Value for stakeholders – financial as well as developmental

- Students, school and companies need to feel there is a value to the process. Cooperation between schools and companies should benefit both parties, and it could be considered to introduce financial incentives for schools/VET teachers as well as for companies/trainers.

It was a common view that it is a long process to establish a good partnership between the world of schools and the world of work.

Having said this, it was however also recognised that the context of partnership is very different across the countries. Hence, in countries where the partnership is in its developing phase, the goals set should not be too ambitious. In a developing stage, the schools and the companies should concentrate on performing their parts of the tasks in the educational process well and inform the other part about objectives and achievements.

Later, when cooperation and facilitating structures are more advanced, the parties can take steps toward a situation where school and company may assume joint responsibility for the whole education.

4. Cooperation in the planning of learning processes

How can schools and companies effectively cooperate in the translation of curricula guidelines into the planning of teaching and learning processes?

The participants' written comments and the discussion identified the following measures as essential to an effective cooperation between schools and companies in the translation of curricula guidelines:

The translation of the curriculum should take place at different levels

In order to implement the translation and adaptation of the curriculum at school level it was considered crucial that a curriculum framework and basic outcome goals have been settled at national, regional and sector level. In other words, coalitions between the social partners at these levels are necessary to impose the local translation of the curriculum. However, the curriculum framework should leave room for local adaptation to suit the needs of the companies and the students.

Depending on the level, the translation and review of curriculum should have different interval and attention to detail

The distinction between "light" and "heavy" mechanisms was proposed:

- At school/programme level the "light" version should be applied involving programme experts, company experts and student representatives to review and adapt the flexible part of the curriculum annually.
- At national level a "heavy" mechanism involving national committees representing the social partners should review the whole curriculum. The interval of such reviews should be 2-4 years.

Continuous training of teachers and trainers in joint sessions

Joint training of teachers and trainers could enhance a mutual understanding of the curriculum's outcome goals and the pedagogical processes necessary to achieve them. It was emphasised that focus should not only be on the content of the curriculum and its goals but also on methods to achieve them.

Process learning was considered an issue of increasing importance. Also in this connection it was stressed that outcome goals should be clearly described in the curriculum.

Common projects

Regular negotiations presuppose active partners from the school side and the company side. Common projects involving both sides are considered a viable tool. Invitation of school staff to company events and seminars and vice versa was also considered valuable.

Self-evaluation to be done by both sides

It was emphasised that methods for quality assurance and self-evaluation should be organised both at the school and the company. The self-evaluation should focus on the quality and effectiveness of the learning processes in view of clearly defined outcome goals. Students should be involved in the evaluation process at both sides.

5. Key Competence requirements - Teachers and Trainers

What are the key competencies that a) teachers and b) trainers need in order to ensure good cooperation and partnership between the world of school and the world of work? How should these competence requirements be supported and managed at system level?

The translation of curriculum requires new competences of VET-teachers

The discussion in the PLA of this point focused more on the teachers than on the trainers, possibly because the tradition for discussing teachers' competences is much stronger than for discussing trainers' competences and because few of the participating countries have established policies and programmes for recognition and training of company trainers.

Concerning the teachers, it was a general opinion that the competence requirements have changed in the latter years and will continue to do so. Compared to earlier, curricula are revised more often and teachers are more directly involved in curriculum planning than before, often in cooperation with companies. Unless the teachers' competences are continuously kept up-to-date there is a risk of mismatch between VET supply and demand. VET teachers have – traditionally – been working alone and concentrated on disseminating knowledge to the trainees. Today, the teachers need to work in teams, they have to guide the trainee more than “just” transferring knowledge, and they must be able to plan, describe and reflect on their own teaching practices. Furthermore, technologies and production processes are changing rapidly. Consequently, experience in companies and sensibility to what is going on in them are of increasing importance. Competence requirements of VET teachers should be differentiated from those in general education, and it was proposed to involving teachers and trainers more directly in the planning of curricula for teacher training and in training of teachers and trainers / tutors / supervisors.

Attitudes at both sides should be open, positive, and flexible

The need is not only for competences, but just as important for ‘the right attitudes’ A positive attitude to learning in a life-long learning perspective as well as a positive attitude towards ‘the other side’ (school or company) is important and should be supported by (company or school) management.

VET teachers and trainers need strong relational competences

In the discussion, there was a strong focus on the need for personal and methodological competences. Personal competences which were considered important include: Empathy, the ability to work with young people, the ability to work in and contribute to a team, networking skills and communications and problem solving skills.

Professional skills and knowledge requirements include: Insight into learning processes, knowledge about the economy and selected occupations, insight into the conditions of companies and into work processes (teachers), project skills, innovation skills, didactics, particularly as concerns the learning process in a work environment, pedagogy, and psychology. Specifically, teachers' skills regarding evaluation and self-evaluation need to be enhanced.

Management of schools needs to set the scene

As the tasks and roles of a VET school teacher differ from those of general education teachers, VET school management has a responsibility to see that new teachers become aware of the specific demands on their role and also that the staff is given opportunities and resources to continuously develop their role. School management must support positive attitudes to partnership and create opportunities for the two worlds to meet, e.g. in seminars on issues concerning topical company-relevant issues (and preferably with participants from companies).

Incentives for development will speed up change

It was a general opinion that especially teachers have too few incentives to develop the aforementioned competences and to become more involved in cooperation. The participants hence saw a role for social partners as well as for authorities in creating incentives, including financial incentives, for teachers. Such incentives could be linked to e.g. remuneration or pension schemes.

Some participants remarked that if teachers' jobs were based on a monthly or yearly amount of working hours instead of being linked to a number of teaching lessons, this could contribute to a more flexible planning and hence make it easier for the single teacher to include communication with companies in his or her schedule.

The selection of trainers should take personal competences into account

There were raised some concern that too strict requirements on trainers' competences may lead to the rejection of trainers with strong personal abilities to deal with adolescents but less strong on the academic side. It was argued, that companies should not become schools in the effort to ensure coherence and goal-orientation in the individual training plan.

Occupational mobility should be supported at all levels

Finally, the participants agreed that increased occupational mobility between the two worlds would greatly enhance cooperation. Hence, any efforts to enable and facilitate job rotation between VET teachers and trainers should be welcomed.

6. The learner as the linking pin

How can trainees be enabled to function as linking pins between schools and companies?

Trainees should not be responsible for cooperation

The participants of the PLA agreed that the learning outcomes of the trainee is one of the main objectives of cooperation, and as such the trainee could not and should not be charged with the responsibility of being the main linking pin between the two worlds. Having said that, the participants accepted that trainees have a special position, as they possess first hand insight into both worlds. The question should therefore be rephrased and it should instead be asked how the trainees' could be empowered so as better to use this insight in her or his learning process and which instruments could support this.

Portfolios may provide valuable tools in ensuring continuity

The individual trainee's portfolio of work done both in school and in the company may rightly used provide a valuable tool. A portfolio may both be physical (a file or folder containing documents) or virtual (an e-portfolio). However, experiences from the Netherlands indicate that the e-portfolio may as yet be too advanced for some teachers and trainers, especially in SMEs.

Other measures to empower trainees include:

- 'Tripartite' meetings between the teacher, trainer and trainee to evaluate progress.
- Encouraging trainees to regularly reflect on their individual learning process (possibly as a preparation for a tripartite meeting)
- School welfare services to support individuals in developing self-esteem and confidence and to support in conflicts and crises
- Increased use of projects where both school and company plays a role
- Inclusion of trainees on local or regional school boards.