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Effects of work-based learning on companies involved in VET education

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Abstract

The paper studies the effects on companies from taking on apprentices for work-based learning. What are the benefits and costs that can be identified?

In a series of semi-structured in-depth interviews with companies and school representatives, we study the effects of work-based learning at five Swedish companies that run their own VET schools.

Our overall conclusion is that there are significant net benefits to the companies themselves, primarily through lower recruitment costs but also through positive effects on the skills of supervisors and other staff, as well as of the companies' brand and community commitment. These long-term benefits clearly outweigh the short-term cost of time-loss and strenuous for staff to supervise the trainees.

Keywords: Apprenticeship, Skill, Occupational Training, Education, Education Expenditures, School, Firm Behaviour

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Introduction

In order to understand what is needed to get the systems for vocational and on-the-job training to work better is necessary to learn how such systems affect the participating firms. Unless the companies themselves benefit from taking part in these systems by providing, inter alia, supervision and equipment, the practical skills needed by the business sector will be difficult to create.

In this paper, through semi-structured interviews with companies and school representatives, we study the effects of work-based learning at five Swedish companies that run private VET schools. What are the benefits and gains as well as the disadvantages or costs that can be identified?

We will use the terms trainee, intern and apprentice synonymously in the paper. Different countries use different terminologies to describe the participants in systems of work-based training because of different traditions and because the systems for vocational and on-the-job training differ. In the theoretical part “trainee” is used because it is the term mostly used in the previous research. In the results section “intern and apprentice” are used since it is the terminology that is closest to the Swedish model of vocational training.

Previous research

There is a lack of research studying the effects on companies from taking on trainees. Instead, the pupil and school perspectives dominate previous research, and perhaps especially so in Sweden.

However, in a study by Gustafsson (2003) work-based learning is analysed from a company perspective. It finds that the incentives for companies to offer internships is based both on their own benefit in terms of finding talent for permanent employment, but also in terms of a social commitment. In another study from the same year (Lundberg 2003), about apprenticeships within the building sector, a number of different costs and benefits were identified. It is about the costs of supervision and materials, and also about benefits and advantages such as productive work efforts and, above all, reduced recruitment costs for companies. Similar results are also available in a later study (Swedish Federation of Consulting Engineers and Architects and the Swedish Construction Federation 2012), where the addition of new skills and contacts with the educational system are also emphasised as important benefits.

There are, however, several overviews from the EU and OECD that study costs and benefits that companies can expect from work-based learning (OECD 2009; Hoeckel 2008; European Commission 2013; Mühlemann and Wolter, 2013). It should be emphasised that direct comparisons between countries with dissimilar traditions in work-based learning, e.g. in apprenticeships, are rarely accurate (Hoeckel, 2008). There are also a number of other studies from various countries.

Table 1 below summarizes the benefits and costs we have found in previous research:

Table 1: Benefits and costs of work-based learning for the participating company

Benefits	Additional production	Hogarth et al. (2012), Dionisius et al. (2008), Schweri and Wolter (2003), Nechvoglod et al. (2009)
	Contribution from the government	Nechvoglod et al. (2009)
	Contributions from organisations, unions, etc.	Nechvoglod et al. (2009)
	Increased community commitment	Hogarth et al. (2012), Dionisius et al. (2008), Schweri and Wolter (2003), Nechvoglod et al. (2009)
	Reduced recruitment costs	Hogarth et al. (2012), Dionisius et al. (2008), Schweri and Wolter (2003), Nechvoglod et al. (2009)
	Improved matching	Hogarth et al. (2012), Dionisius et al. (2008), Schweri and Wolter (2003), Nechvoglod et al. (2009)
	Meet the future needs of the organisation	Hogarth et al. (2012), Dionisius et al. (2008), Schweri and Wolter (2003)
	Attract talent	Hogarth et al. (2012), Dionisius et al. (2008), Schweri and Wolter (2003)
Costs	Salaries for trainees	Hogarth et al. (2012), Dionisius et al. (2008), Schweri and Wolter (2003), Nechvoglod et al. (2009), Hoeckel (2008)
	Materials	Hogarth et al. (2012), Dionisius et al. (2008), Schweri and Wolter (2003), Nechvoglod et al. (2009)
	Supervision	Hogarth et al. (2012), Dionisius et al. (2008), Schweri and Wolter (2003), Nechvoglod et al. (2009)
	Increased administration	Hogarth et al. (2012), Dionisius et al. (2008), Schweri and Wolter (2003), Nechvoglod et al. (2009)
	Protective clothing	Dionisius et al. (2008), Schweri and Wolter (2003)
	Drop-out of trainees	Hogarth et al. (2012)
	Wear on machinery	Nechvoglod et al. (2009)

As should be clear from the table, according to these studies, there may be a variety of benefits for the companies in taking on trainees. Trainees may contribute in various ways to the company's production, but in the main, work-based learning seems to contribute to improving the skills supply. In addition, increased community commitment is viewed as advantageous.

The studies also support the proposition that trainees have a positive effect on other employees of the company, e.g. in that they provide improved methods and skills (European Commission, 2013), and also in that the trainees ask questions which lead to encouragement and to a thoughtful approach to the work (OECD, 2009).

As for costs or disadvantage to companies of contributing to work-based learning, salary costs is important, in particular in countries with more developed apprenticeship systems. Otherwise, it is the cost of such things as supervision, materials, protective clothing, increased administration and wear on machinery.

There are several differences between countries, but also between sectors and the size of companies (Hogarth et al. 2012, Dionisius et al. 2009, Mohrenweiser and Zwick 2009). Mohrenweiser et al. (2010)

also show that trainees in certain industries serve as a long-term investment, while in others they act as substitutes for employees.

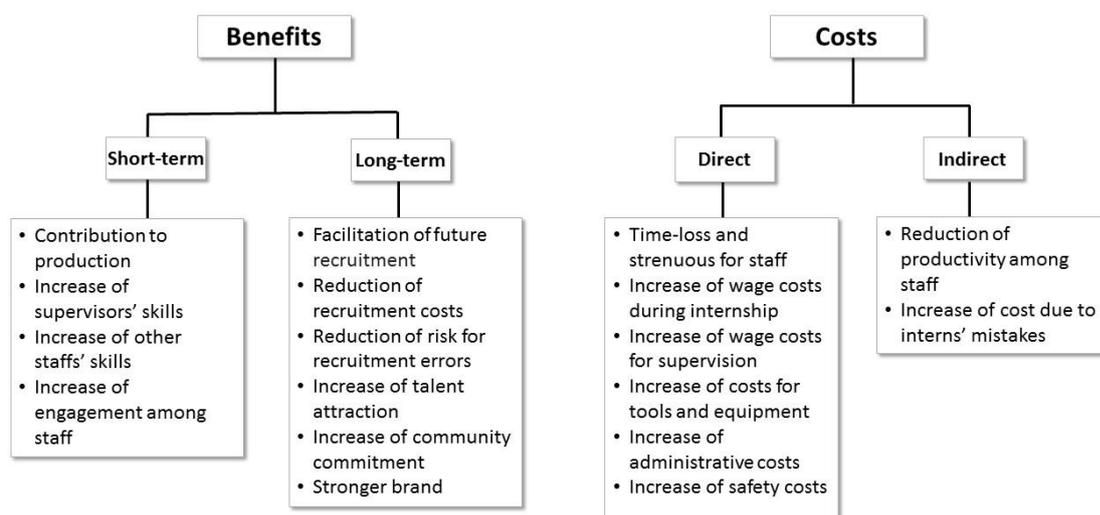
Another significant factor in terms of net cost for companies is the length of the internship. According to Malcomson et al. (2003), the largest investment is made by companies at the beginning of the internship, which means that from the company’s perspective, the potential advantage of the trainees increases over time, given that the trainees become more productive. Companies that view trainees as a way to contribute to production (or reduced salary costs) are also more willing to make large investments in the internships if there is a sufficiently long period available in which to recoup the investment.

Design of the study

Based on the previous research, we constructed an analytical framework where we distinguish between short-term and long-term benefits and direct and indirect costs to companies taking on apprentices within various programmes for work-based learning.

The short-term benefits can be observed during the internship, while the long-term are observed by the company over a more extended period, e.g. in the event of employment. The direct costs are those immediately related to the internship and the indirect costs are those incurred more indirectly as a result of taking on the apprentices. See figure 1 below:

Figure 1: Benefits and costs of work-based learning for companies



Based on this framework we conducted semi-structured interviews (appendices 1 and 2) in five company-run VET schools and six companies. In total 11 interviews with a length of approximately 40 to 90 minutes were conducted with company representatives and school personnel. By using qualitative research in-depth interviews we seek to cover both a factual and a meaning level of companies’ experience of taking on interns for on-the-job training; we could follow-up to certain responses to questionnaires etc. (see e.g. McNamara,1999, Seidman 2006). All interviews were taped

and typed before analyzing the material. Moreover, all interviewees read and commented on the quotes and interpretations before finalizing the manuscript. The interviews were conducted between June and October 2014.

The study was limited to five schools where the following criteria were met:

- The programme had been in existence for a long time
- The programme had effective supervision
- Company management and first-line managers must have had an active project ownership
- The work-based learning must have had a thorough content and structure as well as a quality assurance
- There must have been a commitment from the course providers
- There must have been an opportunity for companies to influence the design of the programme

By choosing courses with elements of work-based learning in which the criteria are met, we wished to ensure that the impact on the companies were not due to inadequate programmes. It should be noted, however, that there are other upper secondary schools that also meet the above criteria. Those that have been selected are geographically dispersed, have different designs and operate in different industries.

The following company-run VET schools, and companies linked to these, were interviewed. The people interviewed are found in *appendices 1 and 2*.

- Göranssonska School (GS). Owned by Sandvik and Sandviken municipality Internships are carried out within Sandvik.
- GTG – Gothenburg Technical upper secondary school. Part of Gothenburg Technical College AB. Owned by Volvo Personvagnar, AB Volvo and the city of Gothenburg. Internships are carried out within Volvo and Volvo Cars.
- MTG – Mälardalen Technical upper secondary school in Södertälje. Owned by Scania and AstraZeneca. Internships are carried out at Scania, AstraZeneca and Telge.
- Peabskolan. Owned by Peab where internships are also carried out.
- SKF Technical upper secondary school in Gothenburg. Owned by SKF where internships are also carried out.

All these company-run VET schools selected are independent schools whose potential profits are reinvested in the business. They are all relatively small, independent schools and how long they have been in existence varies greatly. Scania and SKF, for example, have been running private VET schools for over 70 years, while AstraZeneca stepped in as owner when MTG was founded in 2012.

All the private VET schools offer students the opportunity to study for a specific qualification. Peabskolan is also the only school that accepts unqualified students. These VET schools have internships lasting 20–40 weeks in total. For safety reasons, students at SKF and Peab do not generally begin internships until study year 2. Students who study at SKF and Göranssonska School have the opportunity to carry out their internship abroad.

Our results

In this section the results of the interviews are summarized. Benefits, both short-term and long-term, as well as costs, direct and indirect, of taking on apprentices are reported. Each section concludes with a short summary.

Short-term benefits

Short-term benefits are advantages that companies see regarding the work-based learning. The advantages can be measured during training. It may be that the interns are seen as a resource in the form of labour, or that their presence in one way or another increases competence.

Contribution to production

For obvious reasons, it may be difficult for students to contribute to the production, especially during the first year of study. For safety reasons, before 18 years of age, it can be difficult to be part of the real operation. No conclusive responses have emerged about whether students contribute to production. This may be because those interviewed have interpreted “contribute” in different ways.

Jan Johansson, GTG headmaster, says that some of the students go out on internships after only 2 weeks in year 1. For obvious reasons, this is then often about “shadowing” and the apprentices do not contribute very much to the production. Björn Axelsson, HR manager at Volvo, believes that the apprentices who do their internships quickly get involved in the work and also contribute to the production.

Students at SKF carry out their first internship in the second year. Headmistress Ann Malmberg believes that students are prepared and are treated well. Peter Elmfeldt, HR Manager at SKF, considers that students from SKF grow into the company’s operations. In the third year, they definitely contribute something to the production.

Maria Hernroth, Peab/Peabskolan, believes that the interns are well prepared when they do their internships. Students at the school carry out their first internship period in the second year. She believes that the company gets an apprentice who is productive at work quite quickly.

MTG sends students to Scania, AstraZeneca and Telge. According to Scania, the students have relatively advanced skills (Westerlund, 2014). Patricia Pettersson, AstraZeneca, believes that students may contribute to the production during the internship:

“Yes, we have heard many good examples, that our apprentices are very knowledgeable in several areas. It may be health and the environment, it may be valve types, i.e. very technically specific skills, but also fire and electrical skills. I hear many times that a student has provided input to the supervisor that has led to a better solution than if done in the way originally intended by the supervisor. The students definitely show their skills when they are out there.” (Pettersson, 2014)

Per Sjöberg, Sandvik, says that the school has a clear goal for the students at GS. They must be able to contribute more and more, and then “pretty quickly fit into a real job”. Sjöberg also believes that the internship periods pay off well, because during holiday periods the company gets competent temporary staff.

Increase of supervisors’ skills

The interviews conducted showed that the companies consider supervisors’ skills to be increasing. The supervisors grow with the responsibility, gain leadership skills and become more innovative.

Thomas Westerlund, Scania, and Peter Elmfeldt, SKF, believe that the supervisors gain leadership skills, become more innovative and receive input into their own work. Per Sjöberg, Sandvik, says that the supervisors enjoy having young people in their workplace. Sandvik also sees that the supervisors get a little leadership training and believes that this has a positive effect on them.

Björn Axelsson, Volvo, believes that those who become supervisors have certain qualities from the start:

“When we talk to people who want to be supervisors they of course have that profile, that they are interested in people and so on. It is often also associated with that person wanting a leadership position of some sort. They are sociable, or have opinions about these kinds of issues. It is often a certain type of person that applies.” (Axelsson, 2014)

But Axelsson also believes that supervisors’ skills increase and they become more innovative:

“They feel that young people come here with a fresh perspective and see things in a different way. The supervisors have to challenge themselves in the way they think about generational shifts and such things, I certainly believe that. I haven’t got any analyses of course, but that’s my opinion.” (Axelsson, 2014)

Patricia Pettersson, AstraZeneca, says that supervisors’ skills increase and generate learning in their own work place:

“They learn a great deal, both about themselves and about how their workplace should be described. We get many comments like, “I was going to show this to the student, but we didn’t have clear enough instructions, we should have that”. So it results in learning and contribution to continuous improvements in their own workplace. And the supervision provides a good boost and increased self-awareness.” (Pettersson, 2014)

Maria Hernroth, Peab, thinks she can see that the supervisors’ own skills increase with the responsibility:

“Yes, and they themselves say so too. Evaluations are very enjoyable. Last year, someone wrote “thanks for letting me develop my skills by having a young person with me”. (Hernroth, 2014)

Hernroth says that the supervisors also become more innovative in their own work to some extent:

“Of course it varies, but when we have discussions about what is most important in a young student, the supervisors always say “he doesn’t need to know anything, but he should want to know”. There must be some enthusiasm, etc.” (Hernroth, 2014)

Increase of other staffs’ skills

As discussed above, the interviews show that there are skills enhancements for supervisors in looking after apprentices. But what is interesting is that those interviewed believe that other staff also increase their competence and efficiency.

Peter Elmfeldt, SKF, points out that he does not have evidence of other staff increasing in competence, but he suspects that this is the case. He sees no signs to the contrary. Björn Axelsson, Volvo, feels that

other staff become more innovative and Thomas Westerlund, Scania, sees that the employees are happy to show off and are a little more “on their toes”.

Pettersson, AstraZeneca, explains that their experience of internship is still quite limited and many therefore take an interest:

“We find ourselves in the midst of a learning experience with this process, I can humbly say. This is the first time we’ve done this. Historically, we haven’t had an upper secondary school, so we’re really starting from scratch and learning more and more. Obviously we have briefings all the time with supervisors and trainers, who show us that ‘this works, but this doesn’t’. It’s a development process for all employees involved, to feel that you are participating, are able to influence, that what you do is important.” (Pettersson, 2014)

Hernroth, Peab, says that that there are many learning occasions:

“When different worlds meet there’s always some learning involved, that’s how it is generally. When the tough harsh world of the main player in the building sector meets the soft school community, clearly there are going to be many exciting learning opportunities. But in some ways, the school world is tough too, inasmuch as it’s so incredibly law-governed and regulated.” (Hernroth, 2014)

Sjöberg, Sandvik, thinks the staff are challenged to become more innovative in their jobs:

“I don’t know whether I can say so definitively, but I believe and want to believe that, absolutely. The reason is that young people have completely different questions and they force you to give some extra thought. We have a relatively small staff turnover, people are happy here, and that quickly becomes routine. We want to create that in production too, but it’s easy to get stuck in a rut. We need to constantly change things up and improve our operations. Hence the need for people that come in, challenge, think innovatively and ask new questions.” (Sjöberg, 2014)

Increase of engagement among staff

It is noteworthy that those interviewed believe they are also seeing an increase of engagement among rest of the staff. A constant throughout the whole group (teams, building sites, etc.) is a feeling of pride and increased motivation.

Per Sjöberg, Sandvik, believes he can see a greater commitment among staff, while Peter Elmfeldt, SKF, perceives that staff feel a positive recognition. Thomas Westerlund, Scania, says:

“I think it’s stimulating when someone asks questions and shows an interest in what you do in your job. In other words, it’s fun to share what you know.” (Westerlund, 2014)

Maria Hernroth, Peab, thinks the staff become more motivated. Björn Axelsson at Volvo believes that students contribute to diversity, which has positive effects on the entire group.

“It becomes a good mix of age, gender and ethnicity. We try to always think like that. The diversity aspect is more relevant in production than elsewhere, even historically. There’s certain vernacular used in a purely male environment, and we don’t want that. It isn’t innovative, instead tends to be more group-thinking and, in many cases, inappropriate. This is why it’s important to work on diversity and things

like that in production, it's very clear what effect this has on groups." (Axelsson, 2014)

Patricia Pettersson, AstraZeneca, notes an increased involvement at various levels. She believes that it injects energy to the work group, the students often come up with ideas that haven't been thought of before. In many work groups, internship has become an "energy boost". She says that even if there is extra effort involved, she hears *"it's been such fun" and that employees "are delighted to have had these young people with them"* (Pettersson, 2014).

Summary of short-term benefits to companies

Those interviewed are of the opinion that, during internship, the students contribute to production to some extent. Since the structure of the internships vary, depending on the upper secondary school/course, the skills are also different. Within Peabskolan and SKF, the students do their internships during their second year of study, which should then influence that the companies also feel they have developed skills. Students who carry out their internships in the first year of study lack experience, inter alia, regarding safety and knowledge, thus for obvious reasons they contribute less to production. Students who carry out their internships in the third year of study have more developed skills and thus contribute more.

From the interviews it is clear that the interns enhance the capabilities primarily of their supervisors but also of the other staff. Those interviewed also see an increased commitment among staff. The interviews indicate that staff become more alert and managers also affirm that a certain professional pride is discernible. When staff have to think twice about the work approach and efficiency, this also leads to more innovation.

Long-term benefits

Long-term benefits refer to the benefits the companies get from the apprentices in the longer term. It could involve several different dimensions of competence provision or an improved brand.

Facilitation of future recruitment

The interviews clearly show that the companies primarily operate their private VET schools to facilitate future recruitment. Maria Hernroth, Peab, says that the school is now starting to become a stable recruitment base. Thomas Westerlund, Scania, Björn Axelsson, Volvo, and Per Sjöberg, Sandvik, point out that the main purpose of the schools is to facilitate future recruitment within the respective companies.

Strengthening skills long-term is, according to Sandvik, of the utmost importance to competing on the global market. Prior to GS's inception in 2002, Mattias Andersson, the then CEO/headmaster, explains why a private VET school was founded:

"The investment should be viewed against the background of Sandvik's need to locally guarantee a good long-term recruitment of employees with high technical expertise. GS will also play an important role in the recruitment process for other companies in the region and further afield." (Göranssonska School, 2002)

The securing of skills is something that Peter Elmfeldt, SKF, also considers to be fundamental. Elmfeldt points out that a student who has studied at SKF Technical upper secondary school – who then goes on to higher education and returns – adds more to the company than a student who studied at an ordinary upper secondary school. The insight and knowledge the student gains during the internship at the company is very important, in Elmfeldt's view.

Patricia Pettersson, AstraZeneca, says that future recruitment is the reason that they joined MTG:

“We saw that it was difficult, and of course it’s getting even more difficult, to recruit engineers who can take care of our machinery. Moreover, there are many new products today, new technologies and new types of processes to be instilled. This calls for skills in the technology field which aren’t easily found.” (Pettersson, 2014)

“But if we look at our future strategic perspective, this is a skills supply initiative. We see shorter recruitment times. If we had 15 students here who we thought were great in every way, we should theoretically be able to employ them within six months. If we look at how our students have performed here over the years. If they are fully employable and there’s a need, we see the possibility of employing them.” (Pettersson, 2014)

Reduction of recruitment costs

Reduced recruitment costs is seen as an important reason why companies run private VET schools and take on apprentices. The companies believe that “knowing who you are employing” provides long-term cost savings. Thomas Westerlund, Scania, and Peter Elmfeldt, SKF, both consider that the opportunity to monitor students during the internship increases the quality of recruitment, and thus reduces the cost.

Björn Axelsson, Volvo, says that the cooperation with GTG leads to reduced recruitment costs. The company makes calculations that show this is the case:

“Our private VET school is run in cooperation with Volvo Cars. Long-term, for many years, we have seen the benefits of having a VET school where we are able to influence what is taught in various ways. We are able to lower our recruitment costs and ensure the skills supply.” (Axelsson, 2014)

“Staffing costs calculations even take small figures into account, so we have a business case that is very, very clear. I mean, we do pay a fair amount for our involvement with the school. And that equation is easy to solve when we lower recruitment costs.” (Axelsson, 2014)

Maria Hernroth, Peab, says that recruitment costs have decreased and the school is self-financing. Per Sjöberg, Sandvik, also emphasises the advantages of reduced recruitment costs:

“I would also say that the great benefit lies in the recruitment phase for permanent employment, where a lot of money is saved in recruitment work and training.” (Sjöberg, 2014)

Patricia Pettersson, AstraZeneca, says that the costs of training in the internship periods are incorporated, which provides reduced recruitment costs:

“When you come to the company and are completely new to it, we have a training period of three to six months, depending on your role. We intend to incorporate that into this internship period.” (Pettersson, 2014)

Reduction of risk for recruitment errors

The representatives of the companies believe that it is important to note how students use their skills during the internship, so that from a skills perspective the company does not make a mistake and also

that the person is a good fit for the company. The companies' ability to influence the students during the internship periods decreases the likelihood of employing an unsuitable person.

The companies that operate MTG give the students a six-month probationary period after they have completed their course. The companies know which students are employable after three years of internship. Susann Jungåker, headmistress at MTG, explains:

"We try to emulate the way in which the companies work with LEAN, and we have also fine-tuned our two main processes of knowledge development and personal growth. Knowledge development of course pertains to skills, but personal growth is something we also place great emphasis on. This is what influences employability, that one has social abilities. We educate our students to be on time, to take instructions, be part of the social culture of a group and be able to work with safety and responsibility. We place as much value on this as on skills." (Jungåker, 2014)

Patricia Pettersson, AstraZeneca, says that if students are fully employable after the probationary period, the company sees the possibility to employ them on a permanent basis. She explains further:

"Then, of course, there is the knowledge transfer, we also make sure the student learns something, so he or she becomes employable. But I believe they learn how things work at this workplace, what standards apply, how to manage their working hours. We equip them for how to manage a job." (Pettersson, 2014)

Thomas Westerlund, Scania, says that the quality of recruitment increases if you have observed the person during the internship. He also adds that work-based learning provides the company with the opportunity to see several sides of the person:

"Scania is a company that works in the long-term, so from our perspective it's about beginning a process of socialisation in the first instance." (Westerlund, 2014)

Maria Hernroth, Peab, says that the moulding of future employees, along with the social benefits, is the principal reason for running Peabskolan. Peter Elmfeldt says that SKF has run the SKF Technical upper secondary school since 1941 and, despite the fact that the requirement for technical knowledge has increased, the focus has always been to secure the supply of skills. Monitoring students throughout the programme, within SKF's production, generates qualified employees for the company.

Björn Axelsson, Volvo, and Per Sjöberg, Sandvik, say that it is important to know who you are employing. Sandvik attaches relatively great importance on being on time for work, keeping things neat and tidy, being respectful, having good values and taking responsibility.

Increase of talent attraction

Companies and schools work strategically to attract talented students. The representatives interviewed also point out that it is important for companies to retain skills and to entice them to return. Maria Hernroth, Peab, and the only at the construction company to be interviewed, says:

"An image is spread around the community that vocational programmes are something for those who can't do anything else. That it's not an active choice, but rather a second choice, and nothing could be more wrong. The construction profession is very complex. It requires you to really have your wits about you, to be good with figures, have a high consideration for safety and so on." (Hernroth, 2014)

“With the help of the school’s structure, MTG wants to attract talented and ambitious students.” Westerlund, Scania, says that since it was founded in 1941 (when the school was called Scania Industrial School), the focus has been on the school to provide the company with skills and quality. Pettersson, AstraZeneca, does not consider that more students means better quality, but adds that it is difficult to judge, as the “first litter” have yet to complete their three years. Pettersson explains that there is an elaborate strategy for how the school is working for young people and the education system. The focus is therefore on the number of students (15 students in each year) that have been accepted.

Katarina Ivarsson, GS headmistress, says that their students have a good image of the school:

“We clearly see and hear that the youngsters have a very good image of Sandvik when they leave school. They think that Sandvik is a good employer and many would really love to come back. Thus we have successfully trained them in the Sandvik world.” (Ivarsson, 2014)

Per Sjöberg, Sandvik, considers retaining the students to be significant, but also being able to entice those who have chosen to study further to return. Applications have decreased in recent years, but the school has nevertheless kept up with the application pressure.

Björn Axelsson, Volvo, says it is important that students get a good image of the company:

“If the youngsters get a good impression of our company, they can of course be good ambassadors. They can tell others that Volvo is a good workplace with good colleagues.” (Axelsson, 2014)

SKF endeavours to attract talented and ambitious students. They feel, just as AstraZeneca, that quality should take precedence over quantity. The school notes an increased number of applicants to the programme (Elmfeldt, SKF). Ann Malmberg, headmistress at SKF, says:

“This year we only have 65 students, but now we are investing heavily to change our image, from a workshop school to a modern technical school. In other words, the image of the programme is associated with industry, which in turn is viewed very negatively by young people and their parents. According to many, there’s no future in industry. Therefore we have worked quite hard to change that image. We want to convey the possibility of many different occupations within the company, and also various university courses. An industrial company has a vast breadth of various professions, it has everything really.” (Malmberg, 2014)

“The students who have been interested in the courses have come to us, but we have certainly noticed that the number of applicants has decreased. Just this year, we have accomplished a major turnaround; our study and careers counsellor was here this morning and said that we’re on our way up. And it’s precisely this we have worked on, trying to achieve a new, fresh and modern image of what the school can provide.” (Malmberg, 2014)

Increased community commitment

The companies interviewed believe that social responsibility and local interaction are positives and provide long-term benefits.

Per Sjöberg, Sandvik, says that to some extent they work on a local level with the Employment Service, but the company is in control of its own skills supply. GS is actively trying to attract females to the

engineering profession. This is done through summer school, girls' evenings and focus on recruiting female technology teachers. The school also has a headmistress, Katarina Ivarsson, who considers female role models to be important in such a "male-dominated industry". Per Sjöberg says that Sandvik has a long commitment to taking responsibility. Among other things, the school has on several occasions accepted unaccompanied refugees who are not really eligible.

For Volvo and SKF, the efforts with the private VET schools are long-term, and both companies stress the importance of social responsibility. Volvo likes to recruit young people with different backgrounds and, in addition to their VET school, they work with the long-term unemployed (Axelsson, 2014). Peter Elmfeldt, SKF, says there is a strong focus on local cooperation. Headmistress Ann Malmberg at SKF Technical upper secondary school spends a lot of time on working with partnerships and networking:

"I want our regional technical college to invest in a girls' week next year. I believe that with the resources we have, we can accomplish quite a lot there. We can show the diversity and breadth within the technology professions, depending on what a person is interested in. There's a lot that probably has never been thought about."
(Malmberg, 2014)

Maria Hernroth, Peab, says that there is a lot of momentum in being a community builder and Peabskolan, in many ways, has a very idealistic basis. She explains that the willingness to take responsibility for youths is an extremely serious reason for running the school:

"All the major companies are engaged in some sort of activity of this nature, and this is where we get the chance to combine social benefit with something that benefits the company. Peab is a company driven by its values and is still owned by our founders." (Hernroth, 2014)

Peabskolan is the only one of the upper secondary schools interviewed that actively accepts ineligible students. GY2011 has meant that the school no longer has the opportunity to interview the students it accepts. Hernroth says that, although most students consider themselves to be in the right course, the result is that more people than before are "lost and not in the right place". Peab believes that there must be a way in, even for those who do not have upper secondary school competence.

Patricia Pettersson, AstraZeneca, believes that participation in MTG provides better cooperation with the municipality and the Employment Service. Although the school has a primary focus on facilitating the provision of skills, the effort has many side effects that create more favourable conditions for young people and opens doors to the industry. Something that benefits all of Sweden. Thomas Westerlund, Scania, sees it as an important sign for Scania to be committed to Södertälje, to contribute to the education system and recruit people locally.

Stronger brand

The companies place a great deal of importance on a good image, both externally and internally. Outwardly they want to have a good image of the company, within the group the operation of the VET schools sends a signal that each factory is thinking long term.

Volvo and SKF clarify, however, that although the branding is important, it is not decisive. Scania also believes that Corporate Social Responsibility/CSR improves the image. Especially since it takes place in Södertälje (Westerlund, 2014). Pettersson, AstraZeneca, says that image creation is important because they are a for-profit company. Within the company in Södertälje, Patricia Pettersson says AstraZeneca should be quite proud to be running a private VET school. This is unique within the group, and other

parts of AstraZeneca are fascinated by the commitment. Pettersson believes that it is also a way to promote themselves internally.

Maria Hernroth, Peab, is of the opinion:

“It proved afterwards to be of great significance to the brand. The company (PEAB) has learned a lot from Peabskolan about sustainability, diversity and skills development.” (Hernroth, 2014)

“It (the school) opens a lot of doors. We have had Queen Silvia here, as well as bishops and study visits from England, France, Korea and Germany. We never dreamed this would happen when we started the school.” (Hernroth, 2014)

Per Sjöberg says that other companies and industry organisations are impressed by what Sandvik is doing:

“We don’t have any numbers on it, but I’m absolutely convinced that it means a great deal. When we focus on the way we work with our upper secondary schools, we are met with the utmost respect from industry organisations and companies. They are impressed, and that definitely strengthens us, in several ways. The community involvement in itself means that our customers and suppliers perceive us as professional, also in the long term.” (Sjöberg, 2014)

Overall benefits

The interviews conducted affirm a long-term effort to secure the supply of skills in the long term and to provide overall benefits such as increased productivity, growth, knowledge and profitability. It should be noted that the assessments are largely made by the companies themselves.

Maria Hernroth, Peab, says that the company does not measure variables, but argues that a good student very quickly also contributes to the process and with new knowledge. She believes that if the company does not think strategically now – and focus on the supply of skills – there will be fewer opportunities in the future.

Pettersson, AstraZeneca, says that the company relies on work-based learning and recruitment costs. The investment in the school pays off in the long term through reduced training periods and increased profitability and productivity.

Elmfeldt, SKF, sees increased productivity, growth, knowledge and profitability in the long term, but points out that the school focuses more on attracting better students than “counting pennies”. He also believes that today’s growing problem with the education system makes it even more important to find the right skills. Jan Johansson, GTG, and Björn Axelsson, Volvo, explain that the long-term benefits can be measured by reduced costs:

“Long term, it (the investment) is recouped, in that it’s an important factor for us to retain production here in western Sweden.” (Johansson, 2014)

“The short-term benefits, job satisfaction and so on, are more unquantifiable. The long-term are also more quantifiable, allocation of costs, skills and such.” (Axelsson, 2014)

Sandvik believes that students get into production relatively quickly (as explained above) and are very good as temporary summer employees. Per Sjöberg, Sandvik, explains that the improved supply of skills increases profitability:

“Any attempt to calculate the benefit involves a great deal of assessment, but these internship periods pay off very well. We have very proficient temporary staff for all the holiday periods who come and contribute to production.” (Sjöberg, 2014)

“I would say that this is not something we have been able to measure or see the effects of. But all the testimonials from production workers prove that there is an incredible effect in being able to employ those who come from these two schools. They come in quickly and have very high basic skills that can be built on. We believe that this drives profitability, quite simply because we get sharper operators. Hopefully, the same applies to the civil engineers who come back after their studies. They already know Sandvik a little, they know what is involved in production and can contribute their theoretical knowledge in a practical way. We say that we are training practical theorists and theoretical practices.” (Sjöberg, 2014)

Summary of long-term benefits to companies

There is a clear consensus in the interviews that the long-term benefit is the reason for running a private VET school and taking on interns for work-based learning. Of the long-term advantages, the future supply of skills appears as the most important reason.

The companies point out that the running of the private VET schools, and monitoring the students during the course, facilitates future recruitment, reduces the risk of recruitment errors and reduces the cost of recruitment. AstraZeneca and Volvo say that you take recruitment costs into account and then recoup that investment in the long term.

The companies see the importance of attracting capable students to the vocational courses. This is to ensure long term competence. But something that was emphasised is that companies prefer quality to quantity. So, fewer but more capable students.

For a company to demonstrate community commitment is important to an extent. The companies have a desire to be community builders, to benefit young people and to open the doors to the industry.

The interviewees agree that work-based learning improves the company image and is viewed as a long-term advantage. The companies consider it to be important for their image externally, and also internally where it makes them unique.

The companies interviewed agree they can see overall advantages in the long term, such as increased productivity, growth, knowledge and profitability. It should be noted that these are to a large extent estimates. AstraZeneca and Volvo stress, however, that the VET schools provide increased profitability in the long term.

Direct costs

The companies' direct costs of taking on apprentices can be directly attributed to current practice, such as increased salary costs.

Time-loss and strenuous for staff

Setting time aside as a supervisor (and other staff) to provide students with good training is seen by the companies as the most significant cost. The economy and the economic crisis has affected the

companies' ability to make the time. The companies interviewed do not see any psychological strain on supervisors.

Katarina Ivarsson says that Sandvik has found it difficult to spare the supervisors for the internships. GS has tried to cut down the time spent by supervisors on the internships, and she says that tough demands on companies make it difficult to provide students with a good internship. Per Sjöberg, Sandvik, confirms to some extent what Ivarsson describes, but also believes that the internship periods are mainly positive:

"Yes, to some extent comments like that are sometimes heard. That it takes effort, it takes resources. But I would say that for every one time that comment is heard, nine more are heard about the resources it provides instead. I would say that it's largely positive on the whole." (Sjöberg, 2014)

Johansson, GTG, also says that the economy affects whether students carry out internships. Axelsson, Volvo, agrees that current times may have some influence, but that most within the company do not see it as a problem:

"If you are committed, you don't find it particularly demanding, most think it's okay. But if you're going to do it with commitment and quality, you must also set aside time for it." (Axelsson, 2014)

Scania and AstraZeneca (internships at MTG) consider the time aspect to be the biggest difficulty in taking on the interns. The amount of time that needs to be set aside to teach an apprentice varies a great deal, it depends on the level of knowledge required as well as when during the course a student does his internship. Westerlund believes that the supervisors are used to having apprentices. One way to make it easier for Scania's supervisor is to pair up students, so that they can work together and help each other. Pettersson, AstraZeneca, also sees that during certain periods it can be difficult to set aside the time:

"The company has no extra resources, so sometimes when there is a lot to do, an internship can start at a time when that department has another priority. It's important not to take on a student if you don't have the time. So from that perspective, it can be difficult if we are very busy. The attitude of the employees to being a supervisor isn't something I have found to be difficult, but you also have to be realistic in order to make things work." (Pettersson, 2014)

Elmfeldt, SKF, says that taking on interns can be time-consuming, while the cost does not have a hugely negative impact. The time factor is not considered to be a significant issue within Peab either:

"In total, it provides more time than it takes. However, start-up meetings are very important, as is that time is set aside for them. The work has to be planned, so that students understand what to do. As supervisors, we should also reflect, evaluate and document the knowledge development. With proper planning, however, we're not talking about many hours." (Hernroth, 2014)

Increase of wage costs during internship

None of the interviewed companies pay apprentices a salary during the internship period. This variable is therefore not considered to be of any influence at all.

On the other hand, companies often pay an incentive to encourage students to complete the full course. The incentives are not considered a significant cost. Most companies offer students summer jobs and then, of course, they are paid. The cost of summer temps is something that would be incurred whether the company ran a VET school or not. (Johansson 2014 and Ivarsson, 2014).

Increase of wage costs for supervision

It is mostly the companies that choose the supervisors. None of those interviewed say they pay any extra salary to the appointed supervisor. The increased responsibility often generates higher pay in the long term, on the other hand, as the supervisor's skills increase, but this should be seen as an advantage for the companies.

"In the best of worlds this is supposed to impact their salary anyway. We have an individual salary setting and if you take on the role of a supervisor, it's a typical salary criterion. They should be compensated in that way." (Sjöberg, 2014)

Patricia Pettersson, AstraZeneca, says that it is of course time that costs (as explained above). *"There is no salary supplement, instead the opportunity to be a supervisor is a career development."*(Pettersson, 2014)

Increase of costs for tools and equipment

The cost of tools and materials is not something that significantly affects the companies. Sandvik sees no increased costs for tools and materials (Sjöberg, 2014). AstraZeneca has a budget for the operations to work (Pettersson, 2014). Peter Elmfeldt, SKF, says that the company does provide materials and facilities, but it is not seen as a significant cost. Scania and Peab are in agreement:

"Given that there are a few hundred of us, that a few more need trousers and sweatshirts is not something that we see as a significant cost." (Westerlund, 2014)

"Peab sponsors Peabskolan by providing tool boxes and if the students complete the three years, they can keep theirs. They also get the work clothes and protective equipment, that's it!" (Hernroth, 2014)

Increase of administrative costs

The companies interviewed believe there may be an increased cost of administration and recruitment. This refers to scenarios where it is time-consuming for existing staff to take care of the administrative tasks, or if the company needs additional staff to meet the need.

According to Per Sjöberg, Sandvik, there is some cost involved. The time allocated for the two schools (Göranssonska School and Wilhelm Haglund's upper secondary school in Gimo) is almost a full-time job. Axelsson, Volvo, views the cost of administration as negligible.

Thomas Westerlund, Scania, Peter Elmfeldt, SKF, and Patricia Pettersson, AstraZeneca, consider that there are administrative costs but these are budgeted for and not significant.

Peab sees no increase in administrative costs. The construction sector has always had apprentices. Maria Hernroth says that if they did not have Peabskolan they would instead have taken on students from elsewhere, thereby necessitating the same administration.

Increase of safety costs

The company representatives say that the cost of safety and protective clothing has very little impact, if any at all.

Axelsson, Volvo, says the costs are incorporated and they may be “a couple of SEK thousand” but nothing of any impact. Westerlund, Scania, says that safety costs have only marginally increased. Elmfeldt, SKF, says that a significant safety approach permeates SKF’s courses, but does not view safety as a significant cost: “I don’t see the costs increasing, as safety must be embedded in everything we do.” (Elmfeldt, 2014)

Pettersson, AstraZeneca, does not see an increased cost for safety as it is included in the programme. She says that students are trained in health and safety and environment across the three years. When they are on their internship, they must also learn about the existing safety rules and regulations.

Per Sjöberg, Sandvik, says that the safety aspect makes it difficult to find meaningful data. The safety aspect is time consuming and needs to be carried out at a slower pace, but he emphasises that the costs are not significant:

“Like many other industrial companies, safety is certainly a priority at Sandvik. The legislation on work and work environment is almost a little too nervous, making fewer and fewer jobs possible for the students. It gets a bit limited.” (Sjöberg, 2014)

“We devote more time to health and safety training, but on the other hand, it’s such an important part of the job that I don’t see any problem with that. Neither is it any great cost.” (Sjöberg, 2014)

Hernroth, Peab, says that the safety aspect is one reason why students do not carry out their internships until the second year of study. But she does not see safety as a major cost:

“This is how we see it: in an industry where people are still dying on the job every year, because it’s so dangerous, you need to know about work environment and safety from the beginning. You need to complete the important basic courses, you need knowledge about tools. Our students therefore learn this in the first year. Obviously there is a cost associated with the protective equipment, helmets and safety shoes, etc. But nothing beyond that.” (Hernroth, 2014)

Summary of direct cost to companies

It is clear from the interviews that the biggest cost to the companies is the time it takes to teach an apprentice. The economy and the economic crisis also affect the opportunity to devote the necessary time. The companies do not see any psychological strain on the supervisors. Rather, those interviewed say the internship is seen as positive.

As the apprentices do not receive a salary during their internships, no additional salary costs are generated. In contrast, the students are paid for summer jobs. However, these are costs that would be incurred even if the company employed other staff.

As the supervisors do not receive a salary supplement, the companies do not see an increased cost for supervision. The increased skills involved in being a supervisor may, however, generate a higher salary. Any skills increase should, however, be viewed as an advantage.

The companies see insignificant costs for tools and equipment. Some companies believe that there may be a certain administration cost, while other companies argue that these costs would also have been incurred if they had recruited in another way.

The companies do not feel that the costs for safety have any effect, rather, safety is a matter that permeates the entire operation. Sandvik points out that the safety aspect has made it more difficult

to find meaningful tasks for the interns, but, on the other hand, that there are no significant associated costs.

Indirect costs

Indirect costs are costs that are not directly related to the internship itself and which the companies thus cannot calculate.

Reduction of productivity among staff

The representatives of the companies see no clear reduction in productivity, either for supervisors or other employees.

Björn Axelsson, Volvo, says that productivity is not reduced. Per Sjöberg says that any reduction in productivity is marginal. "In that case, it's at the absolute start of the internship and it's not noticeable." (Sjöberg, 2014) Maria Hernroth does not note any reduced productivity among supervisors and/or other employees. Peter Elmfeldt, SKF, says that, as an HR manager, it is difficult for him to know whether productivity is reduced, but it is not something that has reached him: "This isn't something that seeps through to me and that has an effect on the cost." (Elmfeldt, 2014)

Thomas Westerlund, Scania, explains that if there is not enough manpower, productivity is reduced. He further says that since an internship is a calculated activity, it does not impact negatively.

Patricia Pettersson, AstraZeneca, sees no reduction in productivity, either in the short or long term. She says that since AstraZeneca strives to be a good workplace for all employees it rather contributes to increased productivity:

"I see that this can actually cause an increase, both in the short and the long term. Employees in our company feel it's 'great that we as a large global company invest in our own VET school'. Young people coming to us and that we are doing something useful is a positive thing, for our own skills supply and also for the upper secondary students. It increases faith in the future. So in my opinion, our investment is connected to our strategy. Our aim is to be a fantastic workplace for everyone who works here." (Pettersson, 2014)

Increase of cost due to interns' mistakes

Those interviewed do not note any increased costs due to mistakes made by apprentices. The preparatory work at AstraZeneca is considered to be the most important (Pettersson, 2014). Neither SKF, Volvo, Sandvik, Peab nor Scania experience any increased costs:

SKF:

"It is part of our values that people are allowed to make mistakes. It takes a lot before we pick on a student if something goes wrong." (Elmfeldt, 2014)

Volvo:

"No, after all, we have working environment regulations, AFSAR, which very clearly controls what may and may not be done. In a business like ours, it's difficult to be involved in enough critical steps for quality to be impacted." (Axelsson, 2014)

Sandvik:

"It has even happened to new employees, so I wouldn't say that. It's basically negligible." (Sjöberg, 2014)

Peab:

"It has never been discussed as a problem in the nearly nine years I have been here. And we have insurance." (Hernroth, 2014)

Scania:

"Students won't be put in a situation where they could make mistakes when under supervision." (Westerlund, 2014)

Summary of indirect costs to companies

Indirect costs do not have a significant impact on the companies. The companies see no significant reduction in productivity, either among the supervisors or other staff.

The companies do also not see any increased costs as a result of mistakes. This is due to the VET schools, in cooperation with the companies, having clearly formulated safety training. This begins even before students join a production or construction.

Summary of benefits and costs of work-based learning

Even though it is not an easy task to summarize the results of all these interviews, it should be clear that a fairly clear pattern can be seen in the benefits and costs for a company to take on apprentices and to operate VET school. In table 2 we try to summarize the result by grading the respondents' judgements on a 1-10 scale, where 1 means no effect at all, while 10 indicates that the benefit or cost to the company is considered to be very important. Admittedly, it is difficult to grade people's opinions into a scale, but given that the respondents as well as we have had the opportunity to double-check our interpretations, we think the table gives a good picture at least of the ranking of the studied aspects.

Table 2: Summary of benefits and costs of work-based learning and internships

			AZ	Peab	Scania	Sandvik	SKF	Volvo	Ranking
Benefits	Short-term	Contribution to production	3	3	3	3	3	3	11
		Increase of supervisors' skills	4	4	4	3	4	4	5
		Increase of other staffs' skills	3	3	3	3	3	3	9
		Increase of engagement among staff	3	3	3	3	3	3	9
	Long-term	Facilitation of future recruitment	5	5	5	5	5	5	1
		Reduction of recruitment costs	10	9	9	9	9	10	2
		Reduction of risk for recruitment errors	9	10	9	9	9	9	3
		Increase of talent attraction	5	7	5	6	6	6	8
		Increase of community commitment	6	9	7	7	6	6	6
		Stronger brand	8	8	8	7	6	6	4
Overall benefits	6	6	6	7	6	7	7		
Costs	Direct	Time-loss and strenuous for staff	6	4	6	7	5	6	1
		Increase of wage costs during internship	1	1	1	1	1	1	8
		Increase of wage costs for supervision	1	1	1	2	1	1	7
		Increase of costs for tools and equipment	3	2	3	1	3	2	4
		Increase of administrative costs	4	3	4	4	4	2	2
		Increase of safety costs	2	4	2	4	2	3	3
	Indirect	Reduction of productivity among staff	1	1	3	2	2	1	5
		Increase of cost due to interns' mistakes	1	1	1	2	2	1	6
		Summary benefits - costs	+	+	+	+	+	+	

5 = Very important



3 = Affects



1=Affects not at all

First of all, the table shows that it is the long-term benefits and direct costs that affect the companies the most. Secondly, these long-term benefits primarily arise due to improved recruitment, reduced recruitment cost and a lower risk of recruitment error. Also an increase in talent attraction can be identified. To improve the supply of skills is the most important effect on companies from taking on interns in programs of vocational training. This strong result confirm previous research both in Sweden and internationally. It is noticeable, however, that in our case these benefits all are considered more important than the contribution to production by the interns. Thirdly, there also seems to be fairly significant and positive effects on the skills of supervisors and other staffs, as well as of the companies' brand and community commitment. In fact all questions that we asked concerning potential benefits seem to be given positive responses.

When it comes to the costs of taking on interns, trainees or apprentices, it is the cost of time-loss and strenuous for staff that affect the companies the most. However these cost are on our scale on level of the lowest benefits and just half of the most significant benefits. Small, but noticeable costs can also

be noticed concerning tools and equipment, administration and safety. The other costs we asked about are insignificant. In Sweden there is no wage costs during internship.

Our perhaps most importantly result, however, are that the identified benefits clearly seem to outweigh the cost. Hence, the companies themselves believe that there are substantial gains to be made from taking on interns and participating in programs involving work-based training.

For example Westerlund at Scania, notes: "The school is the proof of that, otherwise we would probably shut it down." Hernroth, Peab, does not even view the costs as worth noticing:

"We very rarely have discussions about costs, it's not an issue. They are more about investments. Building a new school is expensive, but once it's up and running, then there is no cost issue. The gain is clear to everyone." (Hernroth, 2014)

Two of our companies, Volvo and AstraZeneca, calculate the net effects and conclude themselves that in the long term the advantages are justified through reduced recruitment costs. The other companies (Scania, SKF, Peab and Sandvik) estimate that the long-term advantages and benefits outweigh the direct costs.

Conclusion

Our overall conclusion from this study of company-run VET schools is that there are significant net benefits to the companies themselves, primarily through lower recruitment costs but also through positive effects on the skills of supervisors and other staff, as well as of the companies' brand and community commitment. These long-term benefits clearly outweigh the short-term cost of time-loss and strenuous for staff to supervise the trainees.

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Interviews

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Elmfelt, Peter; HR Manager, SKF, Gothenburg. Interview conducted over telephone, 10 October, 2014.

Hernroth, Maria; Competence Manager, Peab & CEO, Peabskolan AB. Interview conducted on Peabskolan, Solna, Sweden, 9 June, 2014

Ivarsson, Katarina; Rector, Göranssonsska school. Interview conducted on Göranssonsska School, Sandviken. 23 June, 2014.

Johansson, Jan; Rector, Gothenburg technical college. Interview conducted at the Gothenburg technical college, Gothenburg, 12 June, 2014.

Jungåker, Susann; Rector, Mälardalen Technical upper secondary school. Interview conducted at Mälardalen Technical High School, Sodertälje. 26 June, 2014.

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Appendix

Appendix 1: Firms

Frågor att ställa vid intervjuer med företagen

(Företagsnamn)

- Kontaktuppgifter
- Bakgrund?
 - Position i företaget?
 - Hur länge jobbat inom företaget?
 - Hur många anställda har företaget
 - I vilken typ av bransch verkar företaget

Bakgrund

Bakgrund till att starta företagsgymnasium

- Varför starta ett företagsgymnasium?
- Hur involverad är företaget i gymnasiet?
- Var finns det aktiva engagemanget inom företaget?
- Finns det ett aktivt engagemang från företagsledning sett till det arbetsförlagda lärandet?

Utbildningsplanen, vad är unikt jämfört med andra skolor?

- Hur har företaget påverkat utbildningsplanen?

Ansökningsprocessen

- Hur kan företaget påverka ansökningsprocessen/hur elever söker?
- Hur ser företaget på eventuella obehöriga elever?

Arbetsplatsförlagda lärandet, praktiken

- Hur många praktikanter tar ni emot vid varje praktikperiod?
- Hur lång praktik har varje praktikant sammanlagt?
- Vem väljer arbetsuppgifterna under praktiken?
- Hur lång praktik har varje enskild praktikant sammanlagt?
- Vem väljer ut arbetsuppgifterna?
- Hur struktureras, i förhand, för praktikanter på arbetsplatsen?
- Är det lätt att hitta meningsfulla uppgifter?
- Kan man påverka vilka praktikanter man tar emot?
- Är det lätt att få handledare att ställa upp?
- Kan företaget påverka praktikens upplägg?

Handledning under det arbetsplatsförlagda lärandet (utvecklade svar)

- Hur väljs handledare ut?
- Hur utbildas handledare?
- Vad är handledarnas främsta uppgift?
- Får handledarna ökade ledaregenskaper?
- Ökar handledarnas egen kompetens?
- Blir handledarna mer innovativa?
- Är det tidskrävande att vara handledare?
- Hur ser företaget på att det kan vara psykiskt krävande att vara handledare?

Förtjänster och kostnader avseende det arbetsplatsförlagda lärandet (utvecklade svar)

Förtjänster kort sikt

- Har praktikanter utvecklade färdigheter redan vid start?
- Ger praktikanterna ett ökat engagemang bland personalen?
 - Ökat engagemang på grund av intresserade och motiverade arbetare?
- Förbättrar praktikanterna personalens kompetens? På vilket sätt?
- Andra förtjänster

- Får företaget en ökad produktivitet?
- Får företaget en ökad tillväxt?
- Får företaget en ökad lönsamhet?
- Ger praktikanterna företaget ny kunskap?

Förtjänster lång sikt

- Underlättar praktiken framtida rekrytering?
- Minskar företagets rekryteringskostnader?
- Andra förtjänster
 - Minskar sannolikheten att anställa en olämplig person?
 - Ger praktiken en bättre samverkan med arbetsmarknaden?
 - Ger praktiken en förbättrad image för företaget?
 - Utvecklas företagsgymnasiet/får fler elever

Direkta kostnader

- Är det tidsödande att lära upp en praktikant?
 - Hur mycket tid avsätts för att lära upp en praktikant?
- Ger det ökade lönekostnader att ta emot praktikanter (lön under praktik)?
- Ger det ökade kostnader för handledning?
- Ger det ökade kostnader för verktyg och material?
- Ger det ökade kostnader för administration?
- Ger det ökade kostnader vad gäller säkerhet?

Indirekta kostnader

- Ger praktiken sänkt produktivitet bland anställda?
- Hur ser ni på misstag som praktikanter gör, ger det ökade kostnader?

Företagens skäl att ta emot praktikanter

- **Skälet att ta emot praktikanter (öppen fråga)**
 - Underlätta rekrytering?
 - Öka innovationsförmågan?
 - Öka effektiviteten?
 - Öka vinsten?
 - Öka produktiviteten?
 - Samhällsengagemang?
 - Bättre samverkan med skolväsende?
 - Förbättra imagen?
 -

Sammanfattande om det arbetsplatsförlagda lärandet

- Är arbetsuppgifterna under praktiken relevanta för en framtida anställning?
 - Ge gärna exempel på arbetsuppgifter som i framtiden kan vara relevanta för företaget
- Är eleverna väl förberedda för praktiken?
- Påverkar detta företagets dagliga drift? (på vilket sätt)
- Är det betungande att ta hänsyn till skolplanen?
- Vad anser ni är svårast att tillgodose vad gäller praktiken?
- Hur ser ni på tidskrävande aktiviteter såsom administration, handledning och så vidare?
 - Vad är mest tidskrävande vad gäller det arbetsplatsförlagda lärandet
- Hur ser ni på säkerhetsaspekten?

Sammanfattande om praktiken

- Upplever företaget att förtjänsten att ta emot praktikanter överstiger kostnaderna?
- Fördelar och nackdelar med att ta emot praktikanter från det egna företagsgymnasiet?
- Hur fungerar samarbetet mellan företag och företagsgymnasium?
- Efter avslutad utbildning, hur många går ut i arbete i det "egna" företaget?
- Utvärderas resultaten av det arbetsplatsförlagda lärandet?
 - Stämmer de överens med företagets kort- och långsiktiga mål?

Sammanfattningsvis

- Något att tillägga?
- Något att förtydliga?

Appendix 2: Företagsgymnasier

Frågor att ställa vid intervju med företagsgymnasiet

- (Namn på gymnasium)
- kontaktuppgifter
- Position i företagsgymnasiet?
- Hur länge jobbat på företagsgymnasiet?
- Bakgrund? (relevant för arbetsplatsförlagt lärande)

Bakgrund

Bakgrund företagsgymnasier

- Varför startades ett företagsgymnasium? (Säkra kompetensförsörjningen? Annan anledning?)
- Hur länge har gymnasiet funnits?
- Hur många elever går på skolan?

Utbildningens upplägg

- Hur ser utbildningarnas kursplan ut?
- Vad anser ni är unikt i upplägget jämfört med andra skolor?
- Läser man andra ämnen än vad man gör på "traditionella" utbildningar?
- Tar skolan emot elever som saknar behörighet?
- Hur ser ni introduktionsprogram? Hur söker man dit?

Samverkan

- Vad är de största fördelarna med samverkan mellan skola och företag?
- Anser skolan att det finns det ett aktivt engagemang från företagsledning sett till det arbetsförlagda lärandet? Hur ser ni på det?
- Hur fungerar samarbetet mellan rektor/ansvarig och aktiva representanter på företag?

Arbetsplatsförlagt lärande

Upplägg

- Är det till bara det företag som finansierar/driver gymnasiet som det arbetsplatsförlagda lärandet genomförs?
- Hur väljs arbetsuppgifter ut under det arbetsplatsförlagda lärandet? Av vem/vilka?
- Vem samordnar praktiken?
 - Finns en speciell samordnare på företaget eller planeras/löses det arbetsplatsförlagda lärandet i första hand av lärare/elever?
- Hur väl förberedda är elever när de går ut i det arbetsförlagda lärandet?

Handledning

- Hur väljs handledarna på företagen ut? Kan företagsgymnasierna påverka?
- Hur kan företagsgymnasierna påverka handledningen?

Sammanfattande om det arbetsplatsförlagda lärandet

Hur utvärderas resultaten vad gäller det arbetsförlagda lärandet?

- Efter avslutad utbildning. Hur många går ut i det "egna" företaget?
- Vet man hur många som får jobb inom det man utbildar sig till?
- Utvärderas resultaten av det arbetsplatsförlagda lärandet?

- Stämmer de överens med skolans kort och långsiktiga mål?

Sammanfattningsvis

- Något att tillägga?
- Förtydligas?