

# COACHING AT THE BUILDING SITE: A FEASIBILITY STUDY

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Coaching has become widely used in business and is well described; however, it is rarely used in construction. This is in contrast to the poor performance of interaction at the site that leads to a vast amount of reported cooperation and coordination problems. This paper investigates the feasibility of a coaching approach to site management. The coach is a person who helps and guides another person or group to maximize his/its own capacity. Coaching is arguably useful in many different work situations, for example, problem solving, group work and planning. These assumptions are evaluated through observations at a building site operating with Lean Construction where the managers did not use coaching consciously in their interaction with employees. Twenty-nine participant observations of five of the managers at the building site were carried out at individual and group meetings. Coaching can be used successfully at a building site in certain specific situations. A feeling of security is important for the focus persons at the building site, and this is best achieved in the open air. The way the leader acts towards the employee/focus person is decisive. The manager can develop consciousness and responsibility by asking relevant questions rather than just answering the employee's questions. It would be appropriate to inform about the use of coaching at the beginning of a building project. Situations not suitable for coaching are, for example, those where an order has to be given or where dialogue would work better.

Keywords: building site, coaching, Denmark, lean construction.

## INTRODUCTION

Many failures and defects occur during the design and production phase in Danish construction. They affect productivity in a negative direction. In connection with the building process, there is a need for steps that optimize this process. In order to be concrete about why failures and defects occur, what costs they cause, how they must be handled and what can be done, an investigation was carried out by NCC and BYG-DTU (Apelgren *et al.* 2005). Failures contribute to inefficiency, less work satisfaction, and higher building costs. One stumbling stone relates to failures and defects or weakness in one or more building processes before they become apparent during the execution of a specific operation. There is a range of reasons why this happens. The most important weakness is within communication and cooperation, which comprise 61 percent of all the stumbling stones.

An analysis of the use of coaching in different lines of business concludes that there is a lot of unused organizational potential in Danish enterprises (the coaching analysis of 2005). This potential could be exploited by developing clear guidelines for both the personal and the joint leadership and by increased use of coaching. Coaching can occur where leaders receive a personal coaching course or are educated in coaching,

or if they just use coaching. All kinds of coaching strengthen the leader's own efficiency and his ability to motivate employees.

From the point of view of "stumbling stones" in the Danish construction business, this paper focuses on the question of whether coaching is a tool for managers that can help the building trade to obtain a better and more effective building process. The case chosen was "already" using lean approaches, especially last planner, so the interest in coaching can be seen as a further development of lean.

The paper is structured as follows: the concept of coaching, the feasibility study, case, discussion and conclusion.

## **THE CONCEPT OF COACHING**

The coaching approach is entering management, like many other managerial innovations, in the form of a concept (Bresnen & Marshall 2001, Koch *et al.* 2005). As with other concepts, it represents an understanding of a particular set of problems in organizations and a similar set of solutions. It represents a definition and a set of guidelines. Finally, it usually represents some positive results in a firm. It should be noted that a concept also represents a commodity, something that in a knowledge economy is packaged and sold by consultants and others (Pritchard 2001).

Coaching is a method to find the fastest and most effective way to a goal by means of a person's or group's own potential. The word coaching describes the role of the coach in a developing process for a specific person (Whitmore 1996). Coaching depends on the inspiring and motivating relation between the coach and the focus person, the means used and the communication form (Stelter 2002). The focus person needs instructions, but not from the coach. These instructions must come from himself through stimulation by the coach. Whitmore (1996) proposes understanding coaching as a strategy that helps the focus person – or group – to solve its tasks on the basis of its own abilities and potentials, for the purpose of developing the focus person's – or group's – ability to act independently and in a reflective manner (Alsdorf 2006).

The specific characteristic of coaching is that the communication between the coach and the focus person takes place on the basis of a challenge facing the focus person, where he or she must have help to solve a problem. It is this challenge that is the central point in the dialogue, as well as how the focus person should handle the challenge. The conversation between the coach and the focus person is the basis upon which a coaching process can take place. In order to achieve a usable result from the conversation, it is important that it is well structured. Whitmore (Whitmore 1996) suggests that this can be done in the following seven phases, which the coach must make sure take place during the conversation with the focus person.

1. The psychological contract
2. Definition and description of the problems
3. Relations and connections
4. New perspectives
5. The goals
6. The follow up
7. Evaluations

The most essential task is to make the focus person conscious about the given challenge and to take care that the focus person assumes the responsibility of solving the challenge. Consciousness and responsibility are better strengthened by means of questions than by giving an instruction. This is what coaching is all about.

The difference between coaching and a dialogue is that in an ordinary dialogue, the speaker will participate with ideas and suggestions together with the listener. In the coaching situation, the coach will be neutral and it is the focus person who, according to the questions from the coach, enters a dialogue with himself concerning the actual challenge (Alsdorf 2006).

It is difficult for a leader to have to suddenly adapt to coaching his employees, since he has to accept quite a new role that he has not been used to. For example, the leader has been the one with the greatest knowledge, and suddenly he must leave it to the employees themselves to assume responsibility. The act of coaching, rather than solving problems, takes the leader's time. It is therefore important in this process that the leader believes that the employee can learn and develop himself on his own. This is another style of leadership, and the leader must be able to wave goodbye to being the one who knows the most. At the same time, the employee must accept more responsibility to solve problems, make decisions and carry out new tasks. Yet this is an investment that will be worthwhile for the leader and the enterprise over time.

Coaching has an advantage in many situations. The employees will become conscious about common goals, and they will be able to work towards the goals and be more effective. They will take more responsibility for the enterprise and develop their own competences. The leader will have the opportunity to take care of other working tasks, as he has delegated the responsibility and competence for his former working tasks to the worker (Alsdorf 2006).

As with other concepts, coaching contains some more hidden assumptions. One is thus an implicitly given prerogative to management over employees (Nielsen & Nørreklit 2004). In their critical analysis of the concept, Nielsen and Nørreklit point out the built-in contradictions between the managerial discourse of controlling versus the discourse of the employee's self-realization through coaching. Drawing on Giddens (1991), Nielsen and Nørreklit observe that there is resonance between the lack of authority and the prevalence of self-realization in high modernity (present times) and the introduction of coaching. A closer look at the rhetoric, however, reveals that they find strong contradictions in the role of the coach, who is apparently supposed to exercise some kind of authority without having the competence (coaches are not supposed to exercise power). The coach has to realize a compromise between the employee's self-realization and the goals of the enterprise (or in this case the building project).

### **Types of coaching**

There are two types of coaching. One is where there is a coach and a focus person; the other is where the coach coaches a team or group. The difference between group coaching and individual coaching is that the coach's questions to a group are discussed among the members of the team or group. In individual coaching, the focus person reflects on the questions. In group coaching, the leader always puts questions to the whole group, and the group discusses the different problems. The leader can take part in the sub-groups and express his meanings and attitude. This method makes the group work out common goals, which form a kind of action plan that can guide actions. By using coaching, the group utilizes all its resources and becomes conscious and responsible. The leader has the opportunity to coach the whole group and to coach a single member. In coaching a single member, the leader has the opportunity to evaluate how the person functions in the group and how the person feels about, for example, a solved task (Alsdorf 2006).

### **THE FEASIBILITY STUDY**

In order to see if coaching is relevant to use as a tool for the leader in the building process, a qualitative study has been made of situations on-site that might involve coaching techniques.

Two types of situations, man to man and groups, were studied in relation to:

- Frame of the situation - Behaviour of the coach - Characteristics of the situation

Frame for the situation in a man-to-man conversation involves the psychological contract, internal or external coach, conversation characteristics, aims and goals. The frame for group observations comprises composition of the group, degree of autonomy, degree of the group's maturity, coordinator's role, conflicts in the group, decisions made in the group and form of management.

The behaviour of the coach encompasses how the coach acts in different situations such as asking questions, questions to the group, arrangement, consciousness, responsibility, presence, help and support, belief in the focus person's potential, whether he can listen, has the ability to identify himself, how he affects the focus person, if he brings forward expert knowledge, if it is his agenda that is used.

Characteristics of the situation involve describing who is present and what the issue is. Is there enough time to coach? Which forces are present? Will there be orders or warnings? Can the leader switch over? Can coaching be used in the situation (Alsdorf 2006).

The assumption is then that evaluating across situations will give a picture of the feasibility.

### **METHOD**

The theoretical approach is multidisciplinary, drawing on social psychology, management and construction, production, and management. In order to form the basis for the observations, it was important to find out what coaching really is and to devise a tool that can evaluate an ordinary day at the building site with insight into coaching.

Observations of individuals and groups were used: a total of 29 observations, 16 of groups and 13 of individuals. Below, a selected set of these observations are used as

examples. These include project manager and trade contract manager interaction, a group meeting on weather conditions, and a situation with a bricklayer and the project manager.

Before the start of the observation period, it was planned how it should be carried out, including how the results should be written down. There should be worked out an observation form that should contain the necessary results in the actual situations. The observation form was sectioned in order to contain both individual and group conversations.

As for the individuals, different types of leaders were followed on the building site. The persons analysed the most are the project manager, process managers and the foreman for the concrete crew on the building site. The project manager was followed and analysed 14 times, process managers seven times, and the concrete foreman three times. It must be emphasized that the foreman has a different leadership task than the project manager and the process managers.

The building site that was visited was situated in Ørestaden on Amager (a new building site near Copenhagen Airport). The building site was establishing buildings for habitation; the plan was to build 182 apartments. On this building site, Lean Construction was used as a production planning tool.

Through one month's presence on the building site, persons were followed who "should" have conversations on the building site or in the meeting room. The criteria for the observations were that it should comprise an issue with good material content and not just one or two sentences of small talk. The length should correspond to the content of the conversation. This means that most of the observations were from five minutes to up to 15-20 minutes.

Most of the group observations took place at meetings where more persons were involved. At these meetings, coaching could be a good tool for the leaders. There were different types of meetings that were very relevant to follow. It was considered whether coaching could be used, and if it would be an advantage for these meetings, both for the chairman and the focus persons. There is no doubt that coaching should only be used if it is an advantage for the focus persons and for the leaders. The duration of the meetings was from one-half hour to about one and one-half hours.

In most of the observations, one person was observed as being in the role where he could be the coach and others could be focus persons. The choice of coach in individual conversations was the leader, since it was evident that in the situation he could use coaching as a leadership tool. The choice of coach in group observations was the chairman, as he could formulate the coaching questions.

The different persons were followed at least three times, since during the first observation they were very much focused on what they were doing, because they were being observed. By observing several times, they became used to the situation that there was an observer present.

## **CASE**

This section deals with various aspects of coaching that have been observed and analysed. Focus is on the communication between those the observer sees in the role as coach and focus persons in the daily building process on the site in question. The items analysed are psychological contract, questions, responsibility, transformation of the manager, and use of coaching.

### **Psychological contract.**

According to the coaching theory, it is important that the focus person knows that the leader will coach him. In the observed situations, the different leaders talk to the different persons. They are not consciously using coaching techniques, but if one imagines that the leader should coach in the actual situation, one can raise the question of whether it would apply if they asked the focus person(s) whether the leader might coach them.

### **Individual conversation, the project manager**

With regard to observations where the project manager talked to the skilled workers, it is our evaluation that the project manager could not appropriately make a psychological contract with them. The skilled workers's understanding of the situation was presumably that the project manager was not serious, and they found the situation "strange". It would be more natural if the project manager asked the coaching questions so that the skilled workers could evaluate their own working situation, without knowing that it was a coaching situation that was taking place. There were two situations where the project manager talked to different leaders from the concrete section. Here, it was possible to make a contract with them, as they were able to understand that he was testing a new leadership tool that might help them both to solve problems. As they themselves are leaders, they are more adjusted to the idea of finding new methods for leadership. In a situation, where there were problems with some sheets in front of the building, and the project manager and the contract manager talked together, it would be improper for the project manager to ask the contract manager if he might coach him. The contract manager would probably become irritated, since he is stressed in the situation and angry at coming behind schedule due to some front sheets having the wrong dimensions. But coaching questions could be used and a kind of implied contract could be reached. If the project manager had said beforehand that he was going to use coaching as one of his leadership tools, he would not have to talk to the contract manager about it in the concrete situation.

### **Group conversation, The Foreman to the concrete crew**

If the concrete foreman should use coaching at the meeting about weather conditions where he was observed, it would be a good idea for him to say that he would be coaching the skilled workers. Just as in the situation with the individual conversation, the men would think it was strange, because in the situation he was acting in a tough manner. He said directly that he did not want to hear that they were talking about weather conditions and wanted to stop work as soon it rains a little. Therefore, it would be best, if the concrete foreman used the coaching questions without mentioning it to the men.

## **QUESTIONS**

What characterizes coaching is that the coach addresses questions to the focus person. These questions must give a basis for creative thinking. This means that the focus person should be able to reflect over the questions before he gives an answer. In group coaching, the coach addresses the questions to the whole group, so that they can discuss the question together and find common solutions.

### **Individual conversation, the process manager**

In the individual conversations, the process manager does not use so many questions. In a situation where the process manager talked to the bricklayer, it was the bricklayer

who asked the process manager how the wall should be built. In order for the bricklayer to assume more responsibility for this wall, the process manager could have asked the bricklayer how he would build it and how tall it should be etc. The process manager himself came with some answers as to how it could be done. In another situation, the process manager and the concrete foreman talked about hoisting windows into the building. The foreman was very pressed for time in the assembly of elements because of failures in the elements. The process manager asked many questions, which opened for challenges: for instance, how can we solve the challenge? Is it a possibility that the crane driver can stay a little longer? These questions are both open and closed, but give the possibility for creative thinking at the same time as the concrete foreman assumes the responsibility.

#### **Individual conversation, the Foreman for the concrete crew**

The concrete foreman does not ask the focus persons many questions. In a situation where the concrete foreman went around on the building site and talked to the different focus persons about the different challenges, the foreman did not ask questions, but he told the different focus persons how the different solutions must be. For example, a temporary staircase had to be removed, and the foreman came with a solution as to how it could be done. The concrete worker does not come with his own opinion about how it could be done; he does the work as the concrete foreman tells him to.

### **RESPONSIBILITY**

When a person takes the responsibility for his own actions and ideas, it leads to improved performance (Alsdorf 2006).

#### **Individual conversation, The Forman for the concrete crew**

In the situation that was observed, the focus persons were not themselves responsible for the challenges. In the first situation where the foreman walked around and talked to the different focus persons, they asked him how the task should be done. In this way, it is the foreman who takes the responsibility for solving the task. In this observation, it would be an advantage for the foreman and the skilled workers, if they themselves could find the solution and take the responsibility without asking the foreman.

### **TRANSFORMATION OF THE MANAGER**

When a leader uses coaching, he must assume a new and different role than the one he has been accustomed to. He is the one asking instead of giving the answers. He must accept that the focus person assumes the responsibility that he has had himself. He must wave goodbye to being the one who knows the most. (see also Nielsen & Nørreklit on the change of authority).

#### **Individual/group conversations, the project manager**

The project manager is one of the leaders who would not find it difficult to switch to coach, since his manner is very polite and attentive, and in many situations he already asks many questions. There are other situations where the project manager must be conscious about asking more questions in order to challenge the focus persons. In the meeting with foremen, the project manager listened and then he asked into the heart of the matter and followed the conversation afterwards.

### **The process manager**

The process manager, like the project manager, is one of the leaders who would not have difficulty switching to using coaching. The process manager already uses coaching questions, unconsciously however. He should be more in the background and listen to the focus persons and ask more. He should also find out in which situations coaching is effective, as there are some situations where coaching does not apply.

### **Foreman for the concrete crew**

It would be very difficult for the concrete foreman to change his management style so that he asked questions instead of answering the questions from the group. This must be seen in light of the fact that the foreman has many years of experience in construction. The group takes advantage of this experience when they ask for possible solutions. It would be just as difficult for the group to change so that they are challenged with questions instead of receiving answers.

## **THE APPLICABILITY OF COACHING**

Various factors make it impossible to use coaching. It has therefore been evaluated whether there are situations where it would be impossible to use coaching and also whether there are observations that showed that coaching could not be used at all.

### **Individual conversation, the Foreman for the concrete crew**

In the situations observed with the foreman, coaching could well be used. There are still some circumstances that should not be present if coaching were to be used, but coaching could solve the challenges. In the situations where the foreman instructed the men on how to solve the challenges, he would not be able to use coaching. He would have to ask how they themselves would solve the problems, and if he were not satisfied, they could find a solution in common. When the foreman controls the different focus persons, it implies that they notice that possibly the foreman does not trust them, thus making coaching difficult to use. If the foreman were to make the men feel responsibility for meeting the challenges, it would not be necessary to control them.

### **Group conversation, the project manager**

In a conversation where the focus persons wanted the project manager to pay the loss when production was stopped because a grenade had to be exploded on neighbouring land, it would be difficult for the project manager to use coaching, since the purpose would be to defend why he does not want to pay and to formulate questions that would make them understand his situation. That would be a manipulation of the focus persons.

### **Foreman for the concrete crew**

The way the foreman acted at the meeting about weather conditions makes it impossible to use coaching, since you cannot first threaten the focus persons and then use coaching. But to meet the challenge, it would be obvious to use coaching. If the foreman had asked about this challenge and started a conversation with the group about a solution, he would not need to act harshly toward the men.

## **DISCUSSION**

One of the most important issues in coaching theory is that the focus person feels confident in the situation with the coach. For the craftsman, confidence can best be created on the building site, which is his workplace where he feels confident. A comfortable office is actually less appropriate. For group conversations, it would be convenient for them to take place in quiet surroundings, so that the focus persons can hear each other.

At the building site, it can be stated that the leader can help the focus persons in making them conscious about the challenges, which is very fertile for both. It can be the leader's/ coach's duty to support the focus persons so that they become conscious about the challenges and make them take responsibility.

If the concrete foreman asked about the challenges, the employees themselves could think out how they could meet the challenges. Most of them have worked on the building site for many years and therefore have experience as to how the challenges must be solved. This would also mean that the employees/focus persons would take responsibility. Moreover, the foreman would then be able to solve other tasks instead of controlling.

That the focus persons themselves can express their opinions about a challenge potentially implies that they will take more responsibility, as it is their own solution and not the leaders way of solving the challenge. It can be evaluated that on the building site questions are not used in all situations and that the leaders instead answer questions from employees/focus persons. That is the way they support the employees today, and not the way the employees/focus persons see the world with goals and barriers for the actual challenge. In answering questions, the leaders give themselves a pat on the back, and in this way the focus person does not personally have the responsibility for meeting the challenge.

The theory demands that a psychological contract be established before coaching can commence. This can be a little difficult in practice, when the challenge is relevant for the work but not the personnel. When a psychological contract has to be made, it makes a huge difference who the coach is. It is also important how long they have to cooperate. In the case where it is a craftsman, it is our evaluation that it would be improper to say that you are going to coach the person. It would be optimal if from the beginning at one of the first meetings the leader states that he will use coaching in his leadership style, and when new persons enter he can mention it briefly. It would be possible to make a psychological contract at some meetings.

In situations where the leader has to give an order or a warning to the focus person, coaching would be inappropriate to use. If an order has to be given – for instance when a craftsman works without his helmet and the leader on the site must tell him that he must put on his helmet – it can be done in various ways: either by saying that he must put on the helmet at once, which makes the craftsman feel uncomfortable; or by saying it in a coaching tone, which means that the craftsman is asked quietly and will not cause the craftsman to feel uncomfortable. It is still an order or a warning, but there is a difference in how the focus person feels when the order or warning has been given. The focus person can also be acquainted with the fact that orders or warnings are given and would think it strange if questions about their meaning were asked in the situation. This must also be seen in the light that in some cases it is necessary to perform a task that is not especially exciting, and therefore an order can be necessary.

Coaching cannot eliminate a situation where something is unpleasant but necessary and must be carried out.

From the analyses, it can be seen that coaching can be used as a tool for leaders in most situations. It will be a change for the various leaders to adjust their leadership style in order to use coaching. In our opinion, it would not be difficult for the leader on this building site. In terms of the necessary personal growth of the actual managers, this is evidently differentiated over a number of different manager profiles. In the present case, the three managers would need more or less training for the transformation. The project manager would probably be able to occupy a coaching role, whereas the foreman would need more training in order to be ready.

## **CONCLUSION**

To ask questions instead of answering, so that the focus person does not receive supporting answers but rather supporting and challenging questions, is a transformation in construction. It is another way to support, which in the long run will give the foremen and the skilled workers more responsibility for their working tasks. It is a way for direct failures and defects to be avoided, as problems are handled with a broader and more profound range of experiences and the solution is arrived at by all those involved.

There are situations where coaching is difficult or improper to use, but it can be done. It just demands more leadership qualifications. Clearly, we do not claim to cover a comprehensive set of situations with our restricted sample. The following are situations where coaching cannot be used:

- Where questions of fault arise between the coach and the focus person.
- Where the leader must give instructions about a concrete task that has to be carried out.
- If dialogue is better, so that everyone can contribute on the basis of his or her experiences, also the coach.
- If the focus person has claims on the coach.
- If the leader threatens the focus person.
- If a direct order has to be given.

Site managers that want to use coaching have to learn to ask processing questions rather than creating situations where questions are directed towards them on issues where the building workers are possibly skilled.

The analysis shows that the way the persons involved are supported today on the actual building site is that the leaders answer questions instead of asking them of the persons involved. The analysis also shows that the leaders must come with supporting and consciousness-widening questions instead of supporting answers. This will in the long run give the involved persons more responsibility for their own work tasks and also provide a way to avoid direct failures and defects, since the problem belongs to all the persons involved and their experiences have led to a common solution.

Our main evaluation of the feasibility is thus that coaching can be used on a building site, but with modifications. Coaching is a tool for the leaders on the building site, but it should only be used in situations where it will be useful; in other situations, other leadership tools must be used. Coaching can be used correctly as a leadership tool when adapted to the situation.

## REFERENCES

- Alsdorf M. (2006) *Coaching i byggebranchen (coaching in the building sector)*. Master Thesis. Technical University of Denmark. Lyngby.
- Anderson, D.L. (2005) *Coaching that counts: Harnessing the power of leadership coaching to deliver strategic value*. Oxford: Butterworth-Heinemann.
- Apelgren S., Richter A. and Koch C (2005) *Snublesten i byggeriet (stumbling stones in construction)*. BYG·DTU. Technical University of Denmark. Lyngby.
- Construction Executive (2006) *Construction Executive Coaching – a Service from CE*  
<http://www.constructionexecutives.com/aboutus/Detailed/254.shtml>
- Fifield W (2004) *Remodeling Lives - Business coach helps construction contractors build successful companies - and lives*. Costco Connection, February, 2004.
- Logan, D. (2004) *The Coaching Revolution: How Visionary Managers are Using Coaching to Empower People and Unlock Their Full Potential*. Avon, MA.: Adams Media Corporation.
- Nielsen A.E. and Nørreklit H.(2004) Management Coaching – et drømmeværktøj (a dream tool). *Informatik og Erhvervsøkonomi*, 20 årgang, 151-178
- Prichard C. (2001) Knowing Managing, Selling Management; An Analysis of Commodification in Management and Organization Studies. Paper for the ‘*Creation and Dissemination of Management Knowledge*’ Stream, *Critical Management Studies Conference*, UMIST, Manchester.
- Stelter, R. (2002): *Coaching og udvikling*. Danish Psychologist Publishing.
- Whitmore, J. (1996): *Coaching for performance: Growing people, performance and purpose*. 3ed. London: Nicholas Brealey Publishing.