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Hungarian Country report

Hamburg model – Evaluation Phase I

Evaluation phase I. – Questionnaires with the students, the enterprises and the lecturers

The first phase of the survey was accomplished in January, 2014. The reason for the alteration from the original timing was that the survey was harmonized with the schedule of the school year. Students started to get involved with practice a few months after the semester has started. After a negotiation with the school it seemed to be reasonable to time the survey to the moment when the students already get to know the companies and the instructors and have the first impressions with the practical training.

Distribution of participants	
Target group	Number of respondents
students	8
enterprises	3
lecturers	6

I. Survey with the students

I/1. Basic Information on the students

8 students completed the questionnaires. The average age of the students is 18,7 year. The youngest student is 17 years old, the oldest is 21. All of the respondents are male. Elementary school is the highest school degree for 6 of them, one of them has a completed vocational school degree in the construction sector, one of them a secondary technical school degree in the construction sector. 4 of them already started but haven't finished a vocational training as a bricklayer, cook and computer technician. 2 of the respondents have been working in the construction sector for more than one year, but they have a vocational degree. One of them worked in other jobs before the training started. None of the respondents was unemployed before the training, most of them were students, and the rest of them were working.

I/2. Professional goals

Answering the closed question about their plans after the completion of the training 6 of them reported that they want to work in the profession that they study, two of them wanted to do further professional training in another vocation. Considering their professional goals in the next 5 years, the open answers mostly fit with the closed question: 3 respondents mentioned to finish the actual vocational training as a goal, 3 of them mentioned to get a stable job, 2 of them wanted to get a degree in an other vocation (cook, salesman), 1 of the respondents wanted to graduate from high school, one of them raised the idea of making an own enterprise in the construction sector.

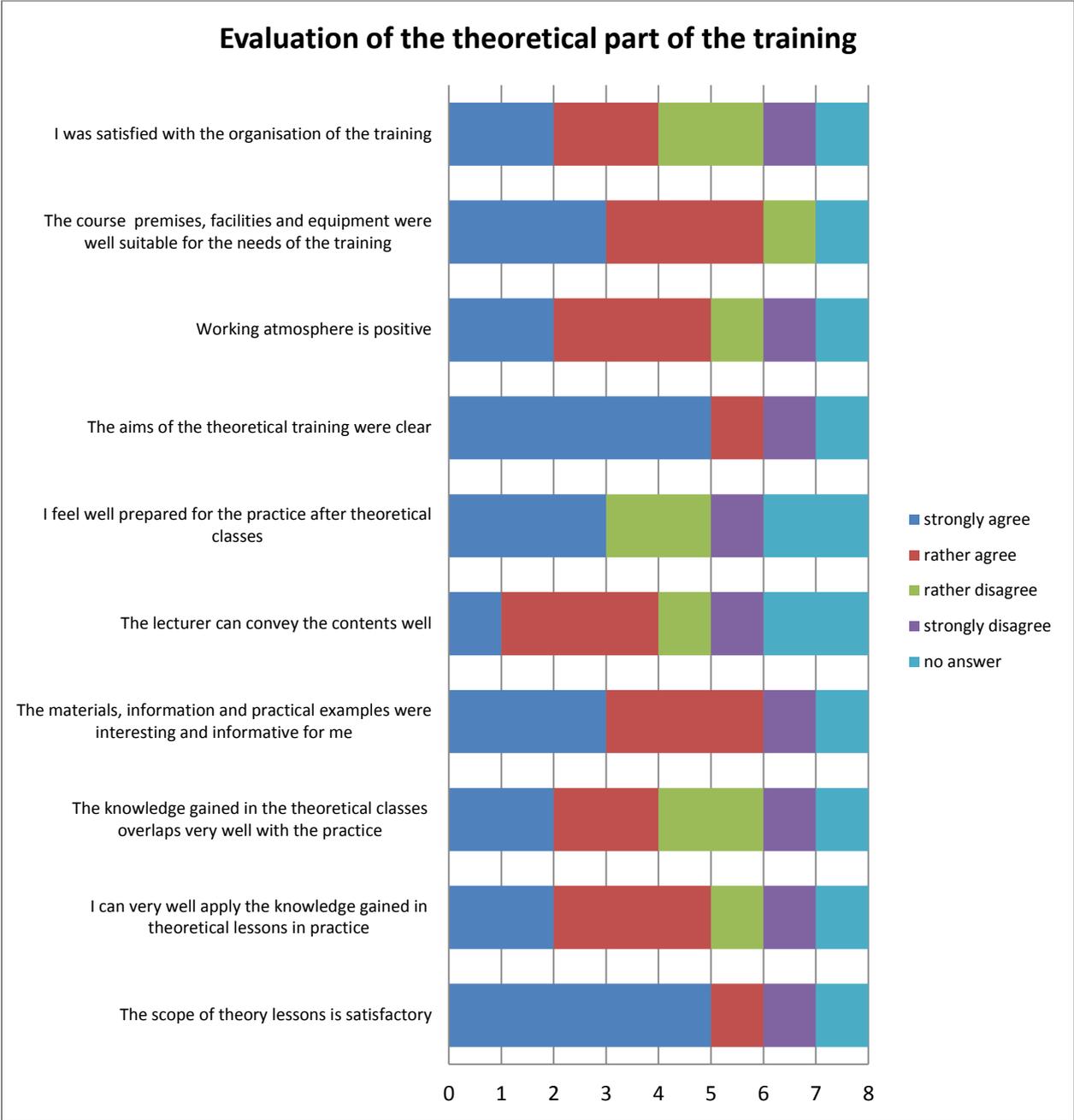


I/3. Evaluation of the training

After the first few month of the theoretical training student opinions were quite divided about the theoretical part. Concerning the organization of the training, 50% of the respondents was strongly or rather satisfied, 37,5% was rather dissatisfied or strongly dissatisfied and 12,5% (one student) didn't answer. 75% of the respondents strongly or rather agreed that the course premises, facilities and equipment were well-suitable for the needs of the training and 62,5% of them thought that the working atmosphere of the theoretical training was positive. The majority, 75% of them found the aims of the theoretical training rather clear. Students felt less prepared for the practice after theoretical classes: only 37,5% of them found himself absolutely prepared, 37,5% of them rather or strongly disagreed with that statement.

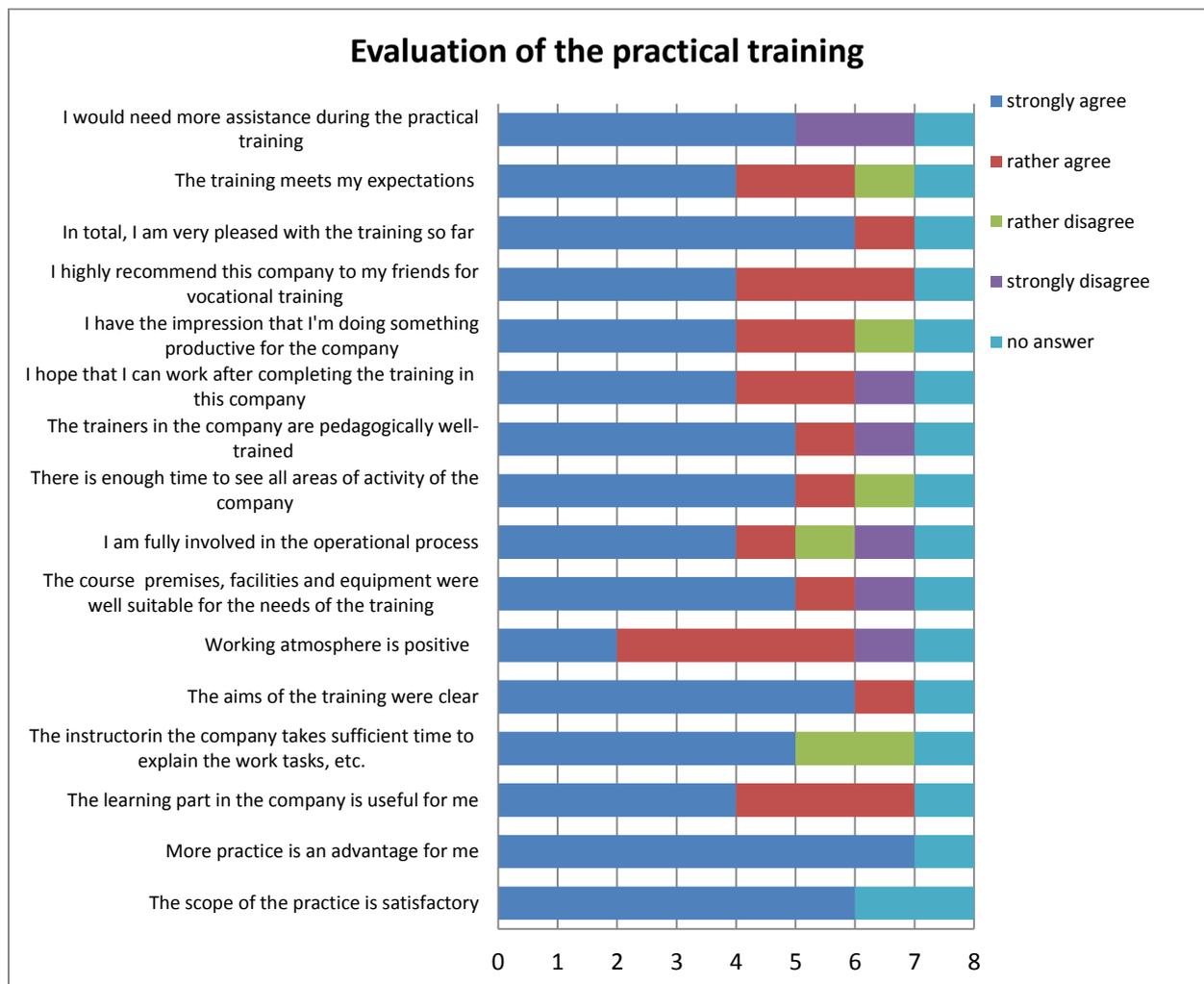
50% of the respondents strongly or rather agreed that the lecturer could convey the content well, 25% rather or strongly disagreed with that. The majority, 75% of the respondents found the materials, information and practical examples interesting and informative. 50% of them saw an overlap between the knowledge at theory and practice, 37,5% of them perceived a lack of an overlap between the two. 62,5% of them found that the knowledge gained in theory classes is well-applicable in practice, and 25% rather or strongly disagreed with that.

Finally, the majority, 62,5% of the respondents found the scope of theory lessons satisfactory.



After the first impressions of the practical training, all respondents agreed that they would need more assistance in practice. The training at least rather met the expectations of 75% of the respondents; only one student was rather dissatisfied. 87,5% was pleased with the training so far, and the same amount of them would recommend the company to their friends for training. 75%-of the respondents rather or strongly agreed that they do something productive for the company, only one student disagreed. 75% of them hope that they can work for the company after the training, only one of them has strong concerns against that. The majority of the students perceived the instructors as pedagogically well-prepared, although one of them strongly disagreed with that. 87,5% of them thought that they had enough time to get an insight into all areas of activities in the company, one

student rather disagreed with that. 67,5% perceived that they are fully involved in the operational process, 25% rather or strongly disagreed with that. Most of the students were satisfied with the premises, equipment and facilities of the practical training only one of them expressed dissatisfaction about that. Most of the students evaluated the working atmosphere positively, and found the aims of the practical training clear. 67,5% of the students found that the instructor takes enough time to explain the work tasks, 25% of the students rather or strongly disagreed with that statement. Most students found the working part at the company useful, the scope of practice satisfactory and the idea of more practice than theory useful.



The only further remark about the practical training was that the practical instructors should maintain more discipline on the practical training.

II. Survey with the enterprises

II/1. Basic information on the enterprises

All the enterprises involved in the dual system of vocational training at Kontiki are small enterprises; the number of employees is between 8-17. The economic sector is construction industry. In all companies there is an assigned person who takes responsibility of the training

(instructor). In all cases they are the respondents of the questionnaires. In most of the companies the responsible person is an employee of the company, a managing/senior skilled worker. Two of the instructors have a pedagogical qualification as trainers. One of them has a vocational certification in the profession.

All of the trainers welcomed the idea of a pedagogical training of the instructor at the company. The preferred hour of the pedagogical training would be between 5-8 hours per week. The respondents did not maximize the total hour of the preferred training. They rather considered its compliance from the point of their weekly workload.

II/2. Motivation of the companies to participate in the program

The most popular motivation behind the participation in the training program among the companies was the desire to help to integrate young people and the aim to support the realization of practical training in companies. One instructor preferred to get qualified personnel in this way. They haven't seen that the dual system of vocational training would be the channel for the company to gain appropriate professionals or specialists and none of them mentioned the inefficiency of a sole-school education among their reasons to support the Hamburg model training.



II/3. Opinion about financial support and funding

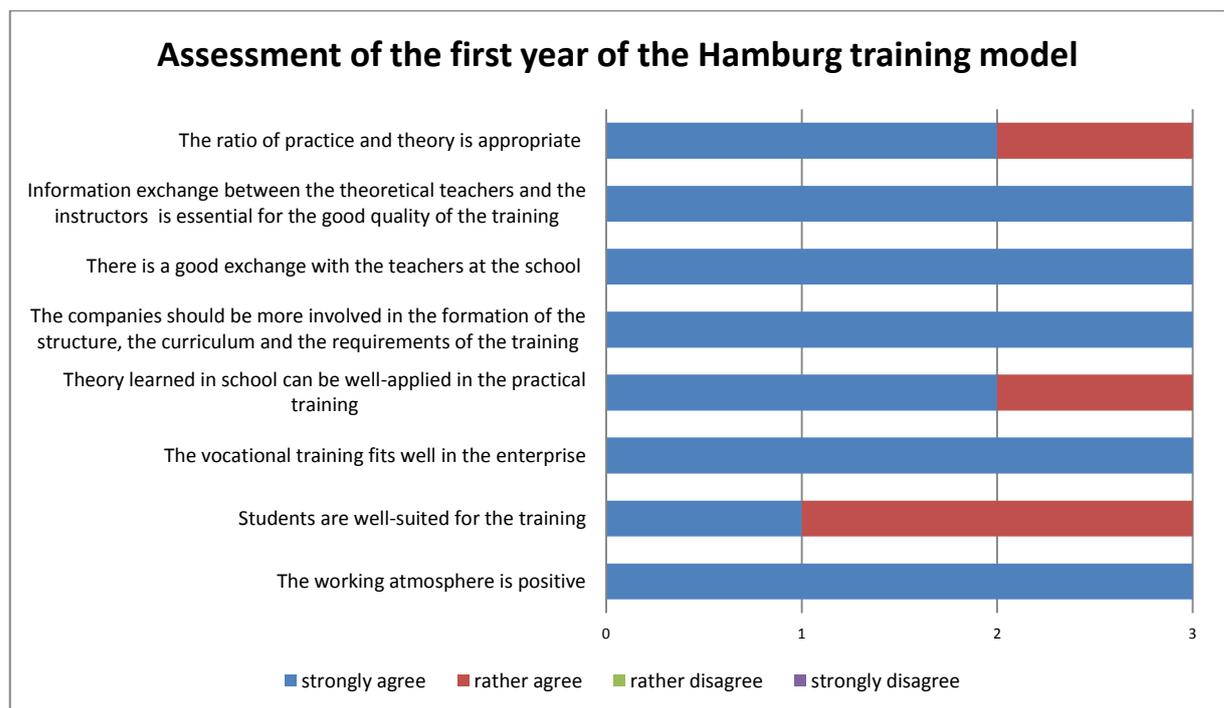
All instructors agreed that for the implementation of this training within the company the state should support the company financially, and the company should support the student as well. Opinions were divided about the appropriate amount of the monthly state support between 40.000 HUF / 130 EUR per student and 10.0000 HUF / 320 EUR per student. There was a wider consensus on the financial education allowance for the students, which should be a form of 'scholarship' according to the instructors, with the amount of 30-40.000 HUF /100- 130 EUR monthly. They also perceived the need for a wider support of the state with

offering practical training centres and giving a discount on tools, on equipment and on material for the schools.

II/4. Assessment of the first year of the training model

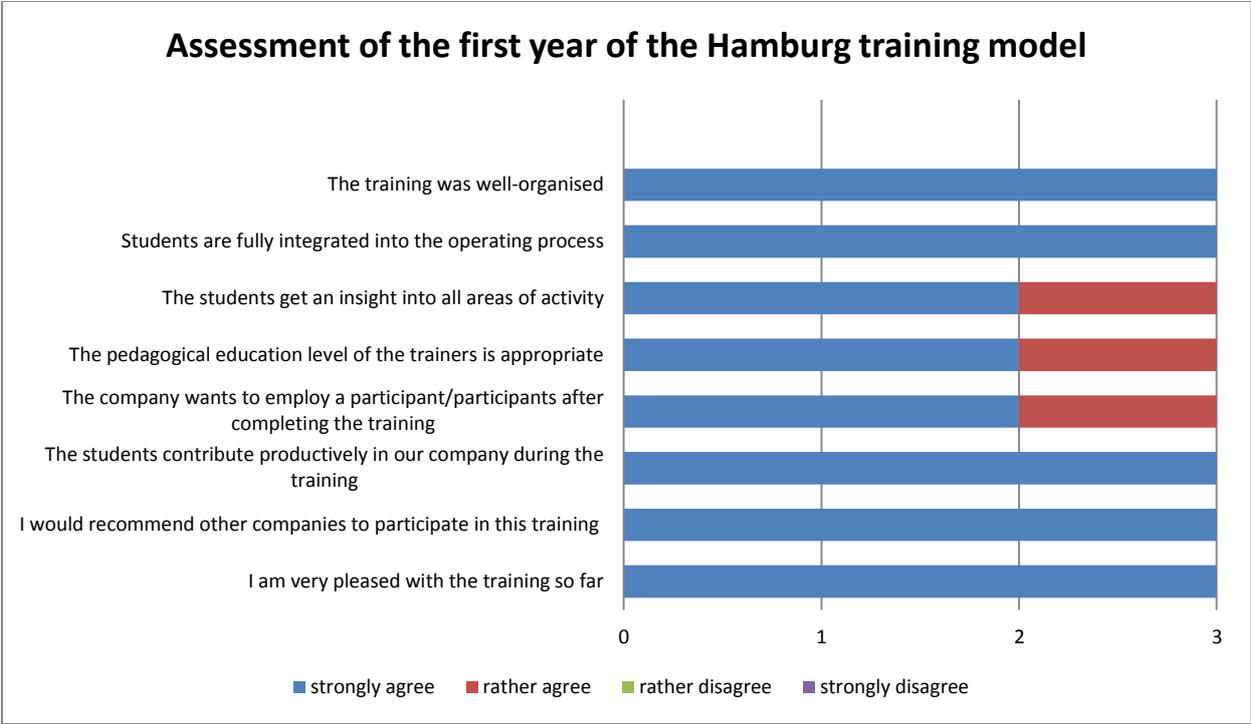
When asking about the assessment of the one year long Hamburg Model training at the beginning of the training period, there was a wide consensus among instructors in most questions. All participants strongly agreed or rather agreed that the ratio of practice and theory is appropriate in the Hamburg Model training of Kontiki. There was a broad consensus that the information exchange between the theoretical teachers at school and the instructors at the company is an essential condition for the good quality of the training. Everybody agreed that the information exchange with the theoretical teachers is good. All respondents strongly agreed that the companies and the practical trainers should be more involved in the formation of the structure, the curriculum and the requirements of the training. There was a broad consensus on the issue that theory learned in school can be well-applied in the practical training and that the vocational training fits well in their enterprise.

100 % of the respondents strongly agreed or rather agreed that students are well-suited for the training. All of them strongly agreed or rather agreed that the original aims of the training were clear and they formed a wide consensus about a positive working atmosphere on the training.

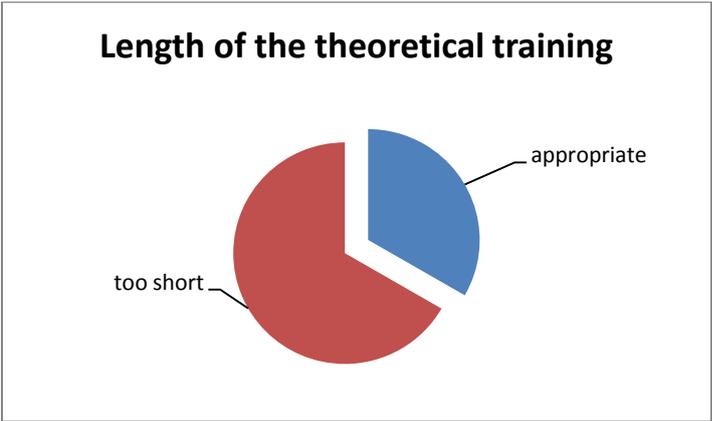


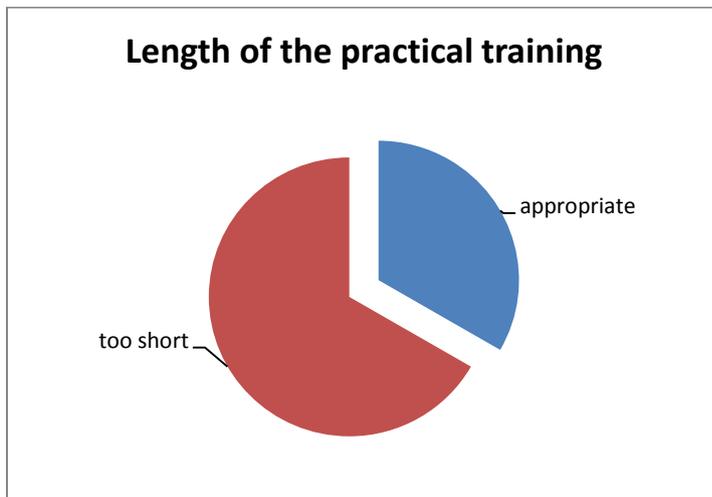
All instructors were satisfied with the organization of the training. They all agreed that participants are fully integrated in the operating process in the company and that the students get an insight into all areas of activity in the company. All of the instructors found their pedagogical education level appropriate for the task of instructing and supervising the students. All of them at least rather agreed that the company wants to employ

participant/participants after completing the training in their company. There was a wide consensus that the students contribute productively to the company already during the training. They would recommend other companies to participate in this professional training and were all in all very pleased with the training so far, which met their expectations.



Most instructors found the length of the theoretical and practical part equally too short. They would extend the whole time period of the training, one of the three instructors found the length of the training appropriate.





III. Survey with the lecturers

III/1. Basic information on the lecturers

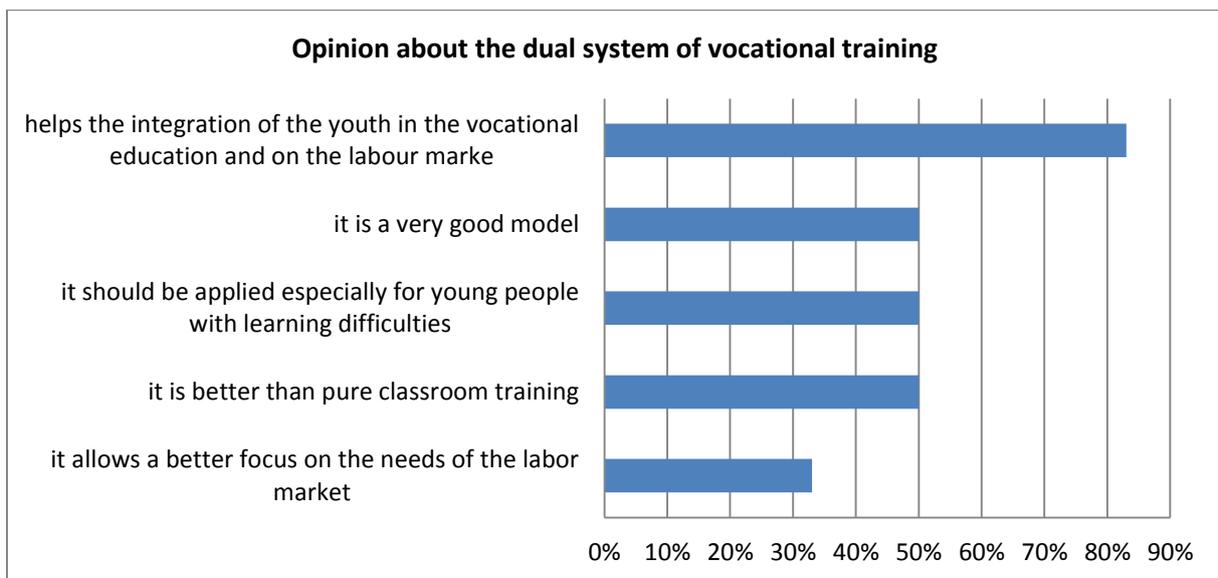
6 lecturers who teach the Hamburg model students completed the questionnaire. We can consider them as experienced lecturers, since the average length of their working practice in vocational education is 5 year. All of them are full-time employees. 4 of them graduated from pedagogical college, two of them gained a vocational degree and a high school degree. One of them has a practical work experience in a company.

III/2. Opinion about financial support and funding

75% of the lecturers agreed that the state should financially support those companies who participate in the education program. The amount of preferred support varied between 50000-100000 HUF / 160- 320 EURO per student. 25% of the lecturers rather preferred the option of a financial education allowance for the students instead of the companies. Four lecturers supported the idea of a financial education allowance for students supplementary to the company support. They appointed the optimal amount of the student support between 10000- 30000 HUF / 30 -100 EUR per student. When talking about additional forms of support one of the respondents mentioned the support with equipment and tools. An additional idea was a 'success award' if a student graduates from vocational training. That could raise students' motivation further.

III/3. Opinion about the dual system of vocational training

83% of the respondents emphasized that the dual system of vocational training helps the integration of the youth in the vocational education and on the labour market, 50% of the lecturers mentioned that it is a very good model, 50% of them highlighted that it is better than pure classroom training, 50% of them agreed that it should be applied especially for young people with learning difficulties, 33% mentioned that it allows a better focus on the needs of the labour market. None of the lecturers considered that it could reduce unemployment.



III/4. Ideas, plans for the future

Concerning the ideas, plans for the future about vocational education, lecturers mentioned that the companies have an interest in training skilful students for the company. Thereby it would be required that they put financial and other resources into the education. Some lecturers argued that the legislation should be changed to offer a sufficient framework for the dual training. E.g.: companies should be bound by regulation to employ students.

III/5 Assessment of the first year of the training model

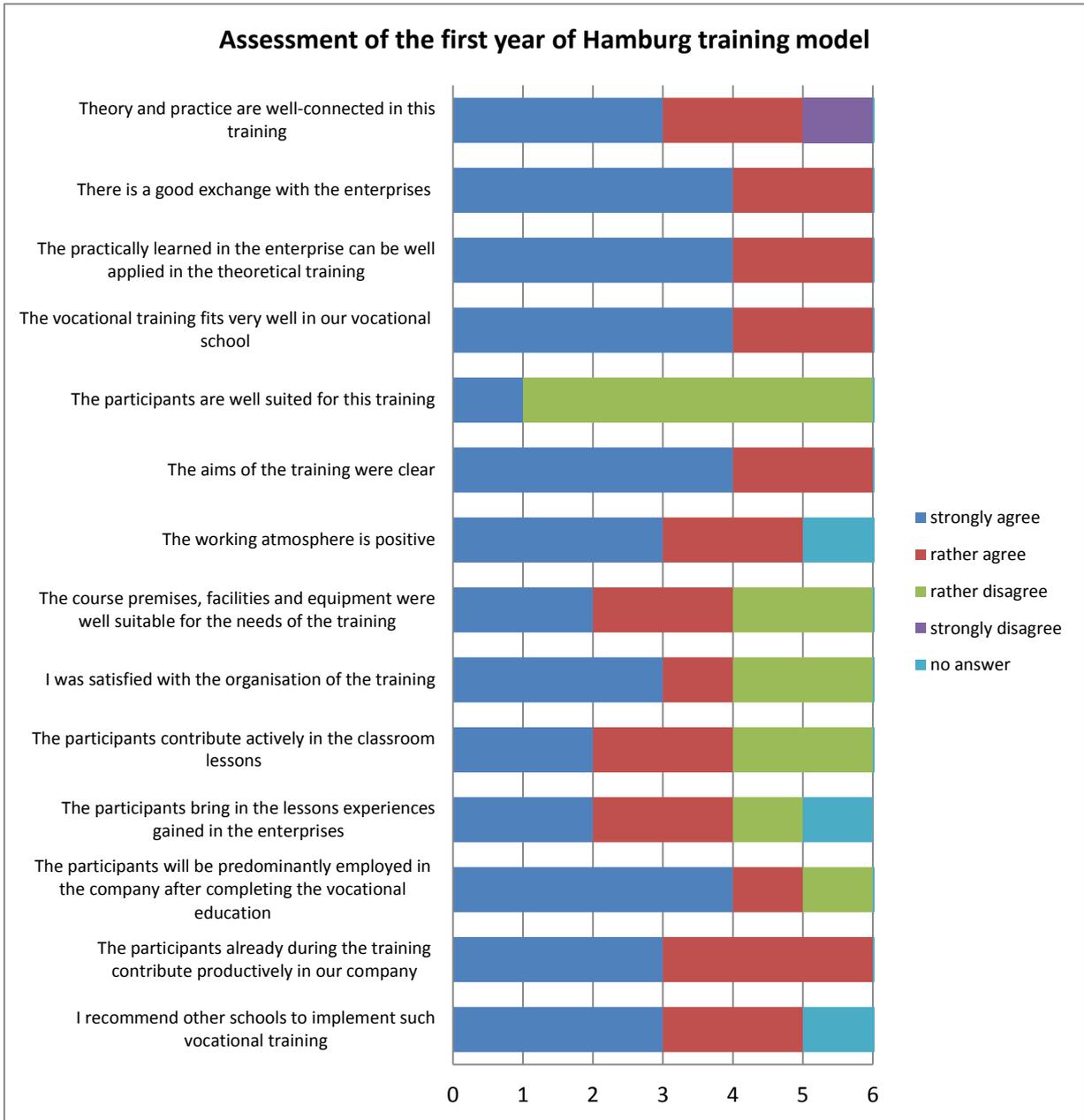
Four lecturers found both the length of the theoretical training and the practical training in the model appropriate. One teacher claimed that the practical training should be longer and the theoretical education shorter. One of them did not give an answer to this question.

Five of the lecturers agreed that theory and practice are well-connected in this training. One of them strongly disagreed with that statement. He was the one, who formulated the opinion that the practical training should follow more the theoretical curriculum, and perceived a significant gap between the timing of the two. From a lecturer's perspective it was a disadvantage of the practical training that it does not cover the theoretical curriculum. Although the interviews highlighted some other aspects of the working practice that explained the diversion of the timing (see the Report on Phase II.)

There was a full consensus among the theoretical lecturers that the exchange with the enterprises is good and the practically learned knowledge can be well applied in the theoretical training. They all agreed that the vocational training fits very well in the vocational school. Lecturers were rather critical concerning the suitability of the students for the training. The vast majority, five of them rather disagreed that the participants are well suited for this training. According to most lecturers the aims of the training were clear and the working atmosphere was positive. Four of them considered the course premises, facilities and equipment well suitable for the needs of the training and two of them were

dissatisfied with it. We see the same division concerning the organisation of the training: four lecturers were strongly or rather satisfied with it, two of them did not find it satisfactory. Lecturers were divided whether the students contribute actively in the classroom lessons. Four of them strongly or rather agreed and two of them rather disagreed with that statement. Four teachers strongly or rather agreed that the participants bring in the lessons experiences gained in the enterprises, one of them rather disagreed, one of them did not answer to that question.

There was a wide consensus that the students will be predominantly employed in the company after completing the vocational education, only one of them had doubts about that. All teachers considered the students' work during the training productive for the company. All of them would recommend other schools to implement such vocational training.



Hamburg model – Evaluation Phase II

Evaluation phase II. – Guided interviews

The guided interviews with the target groups: trainees, enterprise representatives and lecturers were set in the middle of the training period in March and April 2015 to experience interim results in terms of the learning process, the motivation, the goals, the expectations, etc. The following study summarizes the key findings of the interviews.

I. Interviews with the trainees

I./a. Evaluation of the training in general

We conducted all together 3 interviews with trainees who participate in two vocational courses: bricklayer-tiler and painter.

All Hamburg model students work for the company that does the reconstruction of a storage building called 'ATTraktár' and of the main school building. The storage building used to be a hangar of an enterprise. Right now it is under construction, and they complete it for the purposes of the vocational courses: they build vocational training rooms and workshops for the students and a rehearsal room and stage for the artiste students. The vocational students are **intensively involved in the construction works** of the venue. Besides that they do **reconstruction work in the school building, such as painting walls, masonry**. Later on (typically in second year) students accompany the instructor to other working sites as well:

'When I will be upper year student, I can go with the trainer to paint a real house. As a first year student I reconstruct the building of the vocational training facilities – that is real work too.' (painter student)

All of the interviewees are first year vocational school students participating in the Hamburg Model program. Unlike in other, conventional vocational trainings they are working **together at the company with second and third year students** of the same profession. The Hamburg Model students considered that structure as a **positive feature of the training**, because they could **ask for help** from the more educated students who answer their questions and **assist them** to do their task properly. On the other hand they **get a wider insight into the working procedure** than if they studied separately. Sometimes they even experimented with more complicated tasks during the year:

'If I don't know something, older students tell it. It is very good that we learn together with them. They help us how to do this, how to do that. I even tried a senior task once, glazing and wallpapering. The students showed me how to do it.' (painter student)

They mentioned **plastering, cleaning surfaces, preparing surfaces, using the ladder, securing the fellow-worker on the ladder –as main tasks** that they realized at the company during the year:

'Sometimes we have to walk with the ladder on 10 m high pillars. We have to bring down the iron tubes. Two of us work in the heights at the same time. One of us is holding the ladder, the other one has the hammer – 5 kg, and the bricklayers have to prepare the surface for whitewashing.'

Students emphasized a further positive aspect of the Hamburg Model-based vocational training at Tanext School: students studying a profession in the construction industry can **get**

an insight into the other building industry professions. They are going to be more skilled that way. Moreover there is **flexibility across the different training courses.** If a student does not like a vocation he/she can switch to another one during the training. Such flexibility does not exist in the conventional vocational training system of Hungary.

All of the interviewees finished elementary school and continued directly after that in the Kontiki vocational school department. One of them went to an elementary school for children with special needs. When reporting about the school choice, they told that they could find open places to apply for much later than in other schools. Some of the students missed all other application procedures due to family problems or moving to a different city. It was a big advantage for them that they could still apply for an admission into Kontiki at the end of the summer, when other school applications were already closed. In comparison with the elementary school they preferred Kontiki. They highlighted the humanistic approach towards students and the great amount of care. For example one of the students was a victim of bullying in his former school environment. He emphasized that such things could never happen in Kontiki, because the school makes efforts against it. The students referred to the social workers and the restorative circles that aim to solve conflicts with dialogues and to create a school climate where students feel safe:

'This is a better school than the one I attended before. I mean friendships. Many kids hated me in the elementary school. Some of them bullied me. It could never happen here. The school doesn't let them to do that. We even saw a video what they do with kids who do that. People talk things through and reconcile people. Not like in elementary school that you are being stood in the corner if you made something wrong.' (painter student)

When asking them about deficiencies of the training, all of them mentioned the **scholarship as a possible motivating factor** that they haven't received yet. The state public administration is responsible for that delay- according to their best knowledge. Although they told that the school offered the possibility of a prepayment if a student is in need. Some of them told that they *'did not want to ask for prepayment, because the school has to prepay it and we do not want to punish the school because of the state's failure'*.

I/b. Choosing the school and the profession

Main motives behind the school choice were the **lack of tuition fee**, the **location of the school** – that it is not far and that it is not in a disreputable neighborhood and **'demanded professions' available on the course list.** An important positive aspect, what students highlighted concerning the entrance exam that *'the teachers were not interested in what I know from the curriculum but how I am as a person'*. For most of the students the **vocation was not a sufficiently informed and conscious career choice.** They wanted to choose a vocation in the building industry but the **limits of the supply of vocations determined the decision.**

Information and awareness-raising were those areas of the training where students articulated the **need for improvement**. They **did not get enough information** about the profession itself: what it means to be a bricklayer or a painter in practice. They formulated the need for **strengthening the career and study orientation by awareness raising conversations and a visit to the constructions**. These would be very useful and help students to make a sufficient decision about the vocation choice. That opinion was reinforced by the instructors from the enterprises as well (see in chapter II.).

I/c. Evaluation of the support and supervision in the company

Students **evaluated the amount of support and supervision in the practice positively**. **One assigned person is responsible for the students in each vocation, but the two instructors are assisting each other** – sometimes the bricklayer instructor supervises the group of the painters and vice versa. **Both instructors are skilled in both professions** and can assign tasks and supervise tasks equally. They are responsible for all together about 10 bricklayer and 6 painter students, although each student (including the Hamburg model students) have a different schedule coming to the construction. In the students view **the number of students at one time is ideal**. The instructors are not very overloaded, although one student mentions that a bit more attention to the students would be favorable. Students highlighted the **professionalism, good explanatory skills and patience of the instructors**. **Personal relationship** between the students and the instructors is of great importance. Some students told that the main motivation for them to come to the practice was that they didn't want to disappoint the instructor; they wanted to match his expectations. One of the students mentioned that the instructors **should be 'more strict' with the demotivated students** who do not come to work regularly. Some students did not come to practice or are destructive when they are present - he finds it demotivating for the work ethic of the whole group:

'Some students say that they will not go there to mess up themselves. That is, how their attitude is. And if they come once in a while, it is even worse. It happened once that they intentionally ruined the wall that we fixed, another time they kicked everything apart. They are destructive.'

The students also mentioned that the instructors at the enterprise **made several efforts to motivate the absent students**. E.g. they even hold a class about work ethic and about the perspectives if they drop out of school: *'they told us what kinds of perspectives are open for us if we do not finish any school and we do not get a profession. You can be either a garbage man or a homeless. Everyone participated on that. But it did not have any impact. The same people came to work on the following day and the same people stay away.'* (bricklayer student)

Students articulated the need for **more advice and counseling about entering the job market and job seeking**. Although – in the opinion of the teachers and instructors – it is part

of the education, but not the task of the first year. I find it yet promising that first year students are already aware of that need. Most students interviewed want to find a job in the profession they study now, although their plans for the future are not very clear and well-elaborated yet.

Additional practice-related difficulties mentioned by the students were the cold temperature in the constructions during the winter, and the **'unsuitability' of some students for the chosen profession**. E.g.: some painter students are afraid of heights, which make cooperation with each other more difficult:

'Everything is good in the practical training; except, when I was going up to the pillars with a fellow student, who is afraid of heights. We are always so worried for them and if they fall down from the heights.' (painter student)

I/d. Link between theoretical and practical units

Students **started practical education a few months after the start of the first semester**. The practical and theoretical training takes place on specific days of the week. **Students preferred the dominance of practice**, according to their opinion **the ratio of theory and practice is sufficient**. In their interpretation there is **a lack of connection between the theoretical and practical training**. They find it difficult to understand 'pure theory' - described in the books. They would find it **easier to learn theory if it was more connected to practice**. Sometimes they lack the practical aspects of theory, the illustration of the equipment and material.

'In my opinion what we study in theory we should try it out in practice, demonstrating it with the equipment and tools - it would help understanding a lot'(bricklayer student)

The conditions of the building that the students build determine the working phases: students are **allowed to practice those working phases of painting and bricklaying what is needed in the building**. E.g.: *'we cannot practice flooring yet, because there is no surface to floor at the moment'*. (bricklayer student) The students' opinion about that condition is ambivalent. On one hand they find it **more difficult to link theory and practice due to the gap between the structure of the theoretical curriculum and the real needs of work** in the building. But on the other hand they **find it more realistic** that the way how they learn **practice is closer to a real construction procedure** than if it mechanically followed the theoretical curriculum.

They raise the idea of making practical and theoretical education at the venue of the constructions: **the theoretical part should be integrated into practice** - if that happened the teachers could illustrate more theory with the tools. Some efforts were made on that. The instructors established a 'lecture-corner' in the building that is under construction, where they often **demonstrated some theory for the working processes before the students started to do it in practice**. The students found that **very useful and well-functioning**.

I/e. Expectations and goals from the training

Students **did not have clear expectations** from the training. They were rather looking for guidance from the instructors and the teachers. They were mostly **accustomed to failure**, and lack of an experience about **acceptance, enough time and space for studying and allowance of making mistakes** in their previous education path. These were those features of the first year of the Hamburg model-based education that students really **appreciated** and that can be considered as a **retain capacity of the students** for the next year.

I/f. Would you participate in the program again? Would you recommend participating to others?

All the interviewees would choose the same school again, and the same program, although they would prefer the **widening of the supply of construction industry professions** in the school. They would be motivated to join another profession in the building industry.

II. Interviews with the representatives of the enterprises

We conducted **two interviews with the representatives of two enterprises**, who are **responsible for the practical training and instruction of the Hamburg model students in bricklaying-tiling and painting**. The interviews **covered the total number of instructors** in the program. Both companies work on the reconstruction of the building of 'ATT-raktár', and the main school building. Final year students also accompany the instructors to other working sites. Both enterprises are **small enterprises with 8-17 employees**.

II/a. Involvement of the students into the operational process

There are about ten students in each profession. Hamburg Model students study together with the rest of the students (2nd and 3rd year students), they have a different weekly time schedule. About **4 students work at the same time** by each company. The students **work with a vocational training contract**. The bricklayer instructor's opinion matched the students that **working together with upper year students is an advantage**. Although they got different tasks, older students helped the first year students. Answering the question 'what kind of work the students do at the company' – the bricklayer instructor said: *'everything from A to Z. **Masonry, concrete work, everything that a bricklayer-tiler has to do. And, what is important. Not like traditional teaching that I show it once. I show it 30 times and finally they get it.**'*

There were a few students who have (minor) mental disability. It is very difficult to make them understanding the processes. The instructor has to show it many times until it is settled. Both companies did reconstruction work in buildings used by the Kontiki School. They reconstructed the building that hosts the educational facilities (workshops, storages,

rehearsal room for the artistes) of the practical training. It means that they did **real work** for the labor market **but in a 'safe environment'** – as the bricklayer instructor phrased. In his opinion it is an important element of the dual vocational training. The students experienced that they build something that is going to be used. Sometimes they boasted about it that *'I did that concrete surface over there'*.

Upper year students already accompany the instructors to other constructions as well. In those situations **when they work for other clients not the school most of the work is done by the instructor, but the students assist him:** *'they cut material, they give the equipment, and they measure'* (bricklayer instructor). The bricklayer instructor found it very important that the students have to be put to *'deep water'*, where they perceive that they have to **match expectations** and demonstrate their knowledge. But this has to be made **gradually**. First **they work in the reconstructions of the school**, where *'they know that I am, - as instructor - responsible for what they do. If you bring first year students to a client they will fail. But if you strengthen them in the safe environment where it is allowed to make mistakes, they will already know what to do when they get to other clients. You should not protect them of these experiences, because wherever they go they will meet expectations..'*

Furthermore when more students work together at one company it is a **'demo for a work organization'**. *Students take roles. Some are skillful in certain things, others in other things. They share the work based on their skills and capabilities. That's how it is going to be at the real workplace as well'*.

Getting used to work on the school buildings was in accordance with the clients' needs as well, who – in the opinion of an instructor – do not want to teach students. Clients need students for work. If 2-3 absolutely inexperienced students go to a client, then those students are rather a burden for the company who wants the work to be accomplished. Second year students who already have some work experience and routine in a secure working environment can be useful in a less safe working environment as well.

The painting instructor highlighted another aspect of the same question: *'you have to teach them gradually. The point is not to drop them into the deep water but rather accommodate them slowly. The point of the training is not that the students get to a workplace, but first that they get used to work - to develop passion for the profession.'*

II/b. Students motivation and integration to the labor market

In the instructors opinion both the painter and the bricklayer-tiler profession are difficult, because the labor market opportunities are uncertain. These professions are demanded in the labor market. Nevertheless, these students are **disadvantaged** with those parts of the professions that **require counting**. However, according to their opinion these **disadvantages can be bridged during the dual vocational training**. They placed an emphasis to the **motivation of the students**. *'Who takes the training seriously will find a job'*- as they say. The instructors emphasized that **many students do not have a 'real motivation'** towards the chosen profession. They are not interested in it. They come to the course because the parents force that they should learn a profession, or because they feel good in the company of other students. According to the opinion of the instructors, **about the half of the**

Hamburg model students are motivated, the other half is *'only drifting'*. Although one of the instructors mentioned that counter examples also exist and **it is possible to make originally demotivated students motivated** with the proper pedagogical means: *'It happens that someone is drifting for a year and suddenly he realizes the importance of the profession and starts to work'*.

When asking about the means for motivating, instructors said it is very important that the **student 'knows what he gets to know'**. These students usually have a very low self-esteem and don't believe that they gain what they get to learn. *'He is very skillful and knows something but he still claims that he doesn't know.'*- That negative self-esteem is fed by the previous negative educational experiences. It can be a **serious obstacle of learning and burden of motivation**. Students are not motivated to try out a difficult task, e.g.: cutting YTONG Blocks because they anticipate failure. These **situations can be turning points** where the instructors have to help and facilitate a situation where the **student gets an experience that he can do it**. Bad experiences and patterns can be overwritten very slowly by time and gain a lot of patience.

The painter instructor would put **higher emphasis on learning a foreign language**. Knowing English or German language opens the labor market chances towards the neighboring countries and **significantly raises the chances of getting a job**.

II./c. Assistance of professional orientation

Instructors also highlighted the **importance of awareness-raising at the beginning of the training**. The lack of a conscious career choice was affirmed by the fact that only about one third of the first year students who started the training participated regularly on the courses. The two third of them left the classes when they realized what bricklaying or painting means in practice. A few of them were not well suited for these professions - either their 'body condition' or their personality did not make them suitable for the profession according to the instructors.

II/d. General evaluation of the program

The instructors agreed that the **early start and the overweight of practical education is a good model**, because these students are **much more receptive for practice than for theory**. The main obstacle concerning the practical training is the **motivation and readiness of students to be present at work**.

II/e. Evaluation of the supervision

The instructors confirmed that one, assigned instructor is responsible for the students. As the bricklayer instructor phrased, *'the system and order of work has to be well-elaborated and followed. The main point is that when the student arrives, he has to know what his task is: there are phases that have to be automatisms, like washing the equipment, cleaning the venue – these have to be routinized.'*

The other important aspect of supervision stressed by the instructors was the **clear assignment of tasks**. Tasks have to be assigned previously: students have to know what their task is on the next day. The instructors confirmed what some students also mentioned that keeping discipline is an area that could be improved:

'Some slight changes are needed concerning discipline. If we work, then we work. Flexibility is not allowed there. If we work, or if I explain the tasks, working atmosphere should approach the standards of a real working environment. Nobody is allowed to chat about off-topics'.

A further aspect of supervision that was mentioned is the **personal relationship** between the instructor and the students. Most students come from difficult family environment. Principally the social workers accompany the education process and take care for the students' mental health. But in some cases the **students choose the instructor as a 'trusted person'**. Instructors thought that they have to **accept that role** to a certain degree. That was **part of their task as instructors, including the consultation with the social workers** about the students. The social workers also helped the instructors to achieve the students' presence on practical lessons.

As the painter instructor said: *'they can improve in our personal relationship. I am sometimes a substitute father for them. I take that role although it is important to keep the three step distance'*- he also spoke about the **difficulty of keeping the emotional distance** and boundaries as instructors.

II/f. Link between theory and practice

The instructors emphasized that the **conditions of the practical education facility determine the curriculum of the practical training: they can practice only those tasks that match the needs of the construction: concrete work, masonry, plastering**, - they do what is just needed on the site. **They have a limited scope on that. It is consistent with the learning curriculum** in their opinion but **it requires a different learning structure than 'textbook version'**. From the instructors perspective **it is not a deficiency, rather an advantage, because the students can see how a construction process is built up in a 'real-life situation'**. They see all working processes. Nothing is left out but they **get to know it in a structure that is different from the theoretical scenario**. The topics are also different in theory and in practice: operation order, materials, health and safety are issues of theoretical classes. Practice is more focused on technics and the usage of the tools.

On the school's initiative a **conscious effort was made** by instructors and lecturers **to harmonize theory and practice**. The instructors and the theoretical lecturers negotiated about the curriculum. The theoretical lecturer came to the construction for a visit. But as the bricklayer instructor mentioned **it was difficult to give constructive advices for each other**. The theoretical lecturer **is used to the traditional educational system**, where he is responsible for his own subject. They gave advices and feedbacks very reluctantly for each other, because they did not want to challenge the other teacher's competence.

Nevertheless, the main area that should be harmonized according to the instructor is **the 'language use'**. Sometimes it happened that the students got confused, when they used different terms for the same tasks/objects in theory and in practice. Furthermore instructors agreed that steps have to be made within reasonable boundaries **to approach the timing of topics in theory and practice.**

An additional negative circumstance regarding the link between theory and practice was that many students **only attended the practical courses and hardly participated on the theoretical lessons.** There were some students who **always came to the practice, even instead of the theoretical class.** The instructors tried to make it clear that it is useless that way, because they won't get a degree without theory. The bricklayer instructor even accompanied a student to the theoretical lesson, but on the next day he came to practice instead of theory again. In the instructors' opinion **these students underline the legitimacy of the Hamburg Model and show how determining the students' practical orientation is.** It would be a mistake to lose those students who do not attend the theoretical lessons. According to the instructors an optimal construction would be **to integrate the theory into practice and make the theoretical education in the practical facilities.** They already have an experience about that scenario: when one of the instructors substituted the theoretical lecturer he made the theory class on the construction. They **established a classroom with a blackboard** and he demonstrated the theoretical lesson with the help of the equipment and material, which was *'very handy'*. This seemed to be very effective and well- for the students.

II/g. Goals of the training and their clarity

One instructor mentioned that although the students had an idea about the training **but did not see through the whole learning procedure,** which is a **deficiency,** because most students did not know what a bricklayer or painter job consists of. They **realized that it did not match their expectations only when facing the working procedure:**

'The new fellows thought that they want to be bricklayers, but they did not have a clue what it means. When they started, some of them could handle it. Others started to realize that they do not want to be messy every day. They do not want to pack and clean every day, etc. I told them that if you will be a bricklayer-tiler, that will be your job for your whole life. You have to tell them at the very beginning: you will shovel, you will do concrete work, you will do masonry. It works like that every day. You should not complain every day. You have to like at least to a certain degree what you do. If you can not like it, you should not do it.'

– In his opinion these **questions should be clarified in the very beginning, before a student chooses a profession.** He has to be 'introduced' into a day of a bricklayer and the working process. **Kontiki is more flexible than other schools** from the point that students can switch to another profession if they realize that they do not match.

II/h. Expectations about the students and the school

The instructors said that if they had to decide it now, **they would join the training program again**. As a main expectation they want to reach that **all students are present both on the practical and theoretical classes**. They would like to make the students **well-prepared to the final exam and compensate their disadvantages to make them suitable for the labor market**. Their expectations from the school are to 1. give more information about the professions to the students and put extra efforts into awareness-raising and 2. support the students' presence with all available resources.

III. Interviews with the lecturers

We conducted three interviews with teachers. One of them was the theoretical lecturer of painters and teaches construction fundamentals, environment, health and safety subjects since 2014, the other ones were a social worker, responsible for competence development (among other tasks) and an English teacher – both of them has been teaching in the school for four years.

III./a. General evaluation of the program

The social worker mentioned the students' attitude as a key topic that determines the success of the program, the theoretical lecturer **put the focus on the gap between the theoretical and practical education**: *'Theory has a specific scenario. The students perceived it as a problem that they did not know a topic in theory but they already have to do it in practice. I tried to calm them down that by the end of the training it will all come together. It is very difficult to make them understand'*.

In their opinion the **selected professions** of the Hamburg Model in Hungary are **good choices**. Bricklayer-tiler and painter are professions where skilled labor force is needed. Foreign working opportunities are also open. But there is a great selection of professionals. **Only those professionals are needed who are 'well-skilled'**. Gaining a paper is not enough in itself. That's an additional circumstance why motivation is very essential. The lack of motivation is a great deficiency of the students of the school. Very few of them is ready to learn. The theoretical lecturer does not believe in liberal atmosphere when working with that group of students, because they do not appreciate partnership. **He considered the vocational training contract a very good idea if the school complies with it. It has to be monitored and kept much more serious** in his opinion. A further motivating factor is **the scholarship for the students. Creating a framework, 'run the game' within that framework and keep the boundaries** are the most important factors that could initiate a change in students' attitudes in the opinion of the English teacher. As an example, the theoretical lecturer mentioned the need for **being strict about late arrivals**. At the beginning the students arrived at 11 am to morning classes instead of 9. The theoretical lecturer achieved that now those who arrive come in time.

'Personal tone and being open for their interest is also a tool for building trust and make them cooperative. When they are very disoriented in the class I initiate a conversation about their own topics like alcohol, girls, parties and they become motivated. We need to build the professional issues of the lecture around these topics to make them present.' – as the theoretical lecturer phrased.

Additional resources for the teachers are the **few motivated and cooperative students who can function as 'pull factors' for the others. Teaching methods are very different with the students of this program than in other schools.** Most students are 'functionally illiterates' – they have inadequate reading and writing skills. The lecturers had to **simplify the curriculum and make it very 'pure'**. To match the students capabilities they **did not use the textbook much, rather the lecturer's note** that contained the 'thick description' of the textbook with only those terminologies that were necessary. They tried to **build more on conversation than on reading and writing.**

III./b. Link between theory and practice

The theoretical lecturer agreed that **more practice is needed than theory. He found the emphasis of theoretical education a good model. He also agreed to start practice at the beginning.**

The opinion of the theoretical lecturer about harmonizing the curriculum of theory and practice was more negative than the instructors': **theory and practice could not be harmonized because the practice is bond by the given conditions of the constructions. Developing theory and practice in parallel is not a realistic expectation.** Students do completely different task than in theory. Otherwise, **the theoretical training could benefit a lot from what students already learned in practice,** students use their practical knowledge in theory lessons. For most of them theory is very difficult without practice – **practice is a great aid for them,** it is much easier to understand theory when they already tried out a task in practice.

The evaluation of the **exchange between school and company is positive.** The theoretical lecturer said that both the instructor and the lecturer **knew how the other is proceeding with the curriculum. They shared information with each other.**

III./c. Choosing the school and the profession

Just like the instructors, he lecturer and the teachers thought that **the students choose the profession rather 'accidentally' than consciously.** Students don't see the '*dark sides of a profession*' – **they have an idealized picture of the professions** in construction industry:

'It is shows a lot that when I asked them none of the students mentioned that he wants to be a bricklayer or a painter. They want plenty of other things to learn or do that are not realistic scenarios.' (theoretical lecturer)

For many of the students the school is the only medium for socialization:

'Even if the students live in a family it seems to be like if they were living alone. They don't speak about the parents at all.' (theoretical lecturer)

- the family does not provide a structure and regularity in their lives. The school has a very difficult task if it does not match with the families expectations. E.g.: the question of punctuality with time exemplifies that dilemma. Students arrive to the classes and to the construction often at 11 am, which is unacceptable in the realm of construction industry.

III./d. The sufficiency of school units to meet the learning needs

The lecturer mentioned the **lack of appropriate amount of equipment and tools** in theoretical education. Sometimes he brought his own equipment for demonstration to help understanding – it was **much easier for the students to understand things when they saw** it. He also told that the school was **developing the equipment supply continuously**. The instructors' idea to **integrate the theory into practice** and make the theoretical education in the practical facilities **could be a solution for the supply of equipment as well**:

'Buying more equipment (e.g.: for the decoration painting) would be a great financial investment, but it would be necessary to make the theoretical training more useful. The students could hold the tools in their hands and try out how to use them. Many times they learn it in paper, but when they meet the equipment on the construction they don't know what it is. They cannot recall it from their theoretical studies, because they did not try it out on the theory lesson – it is a big mistake I think.' (theoretical lecturer)

They felt more need for **visual tools for demonstration**, since these students are **more receptive for visual experience than for verbal**. E.g.: **videos of the working process** or about **the demonstration of equipment and material** – e.g.: alums, coloring matters. Especially the chemical processes could be demonstrated much more effectively via visuality. The lecturer mentioned that these videos are very expensive. He hoped that the international partnership might provide some opportunities in that respect (e.g.: **subtitling videos that are available in the model program of other countries**).

A further aspect that would assist the theoretical training would be **physical stability of the training rooms**. The size of the school building and the structure of the various educational units did not make it possible to **have a fixed room** for the theoretical lessons. They had to go here and there. For that special group of students **stability would be an aid to take it more seriously and assist presence on the classes**.

The theoretical lecturer became uncertain from time to time if it worth to continue teaching with these group of students or not. If he had to decide it now, he would not join the training program again. On one hand it was a great challenge but **the ratio of failures is much higher** and he **experienced a very few obvious results**. Sometimes it felt hopeless to raise willingness to learn. The school could **help efficiency with being stricter with the**

vocational training contract and make it compulsory for the students to be present on the classes and sanctioning the absences.

IV. SWOT analysis based on the interviews

Strengths	Weaknesses
the training is flexible for individual needs (e.g.: opportunity to switch for another profession during the training period)	some students lack motivation and do not visit the classes regularly (especially theory)
dominance of practice the ratio of theory and practice is sufficient students are receptive for practice	students lack information about the profession at the beginning of the training
there are ,real' working conditions on the constructions	The choice of the profession is not conscious and thorough
students participate fully in construction work: there is an opportunity to try out all working phases in practice	lack of correspondence in the structure, timing and language use of theory and practice
the working contract	some equipment on the theoretical lectures are missing
students work together with more skilled, upper year students	the venue of the theoretical lectures is changing (due to the high number of students and the limits of the building)
the working environment is secure	
there is a good exchange and relationship between instructors and theoretical lecturers	
personal relationship between the instructors and the students inspire the students	
the instructors and lecturers are flexible and motivated. Ready to improve the training further	
Opportunities	Threats
strengthening the career and study orientation by awareness raising and informing at the beginning conversations about career choice and visits to the constructions	the professions chosen are not suitable for some students
to be more strict and consistent about frameworks	some students drop out
to monitor the working contract and comply with it	

to integrate theory into practical education (do theory lessons on the practical working facility)	
develop the equipment supply of the theoretical lectures further	demotivated students get the certificate without a proper/ thorough knowledge of the profession
methodological development, using more visual material in theory. e.g.: videos	
to offer more profession choices in the construction industry	

Hamburg model – Evaluation Phase III

Evaluation phase III. – Questionnaires with the students, the enterprises and the lecturers

The third phase of the survey was accomplished in June, 2014. As we mentioned in the interview analysis phase, there were problems with some students' presence in the school, especially at the end of the school year. That's the reason why only 5 of them completed the questionnaire at the last phase. I could not reach the rest of the students in June to fulfill the questionnaire. The most active students fulfilled the final round of the questionnaires. They visited the theoretical and practical courses regularly and had the most realistic picture of the courses. Although it would have been good to capture the opinion of those students as well who missed the classes.

Distribution of participants	
Target group	Number of respondents
students	5
enterprises	2
lecturers	5

I. Survey with the students

I./1. Basic Information on the students

5 Students completed the questionnaires. The average age of the students is 17,2 year (the youngest one is 16, the oldest one is 18). Based on the willingness of attending the classes and fulfilling the questionnaires we can make the conclusion that those students who were motivated during the first training year were rather the younger students. Elementary school is the highest school degree for all of them, none of them has a completed vocational school degree. For three of them the present training is the first vocational course they've started. Two of them started a previous vocational training before but they quit. Their age, the lack

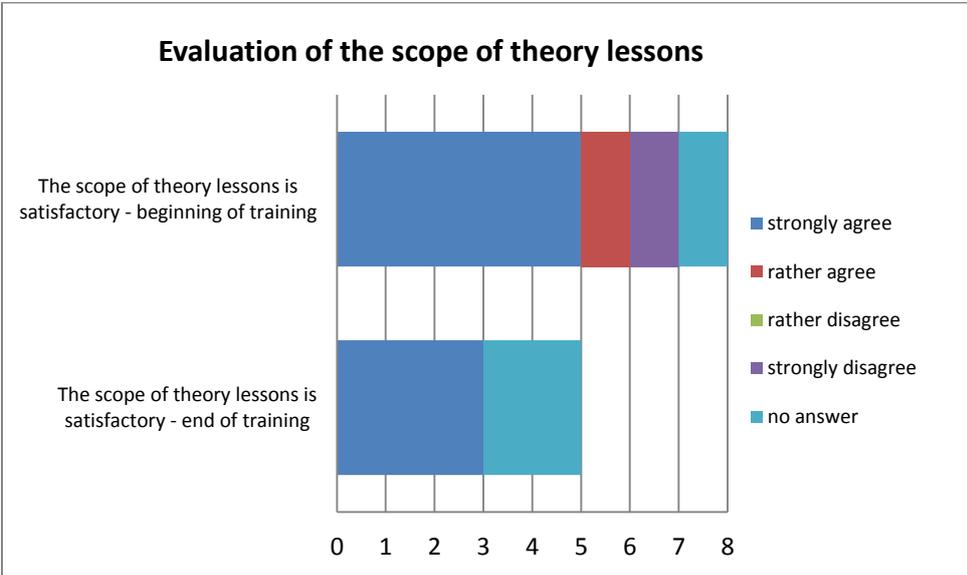
of professional experience and the hope for getting the first vocational degree can be motivating factors for attending the bricklayer-tiler or painter classes.

1/2. Professional goals

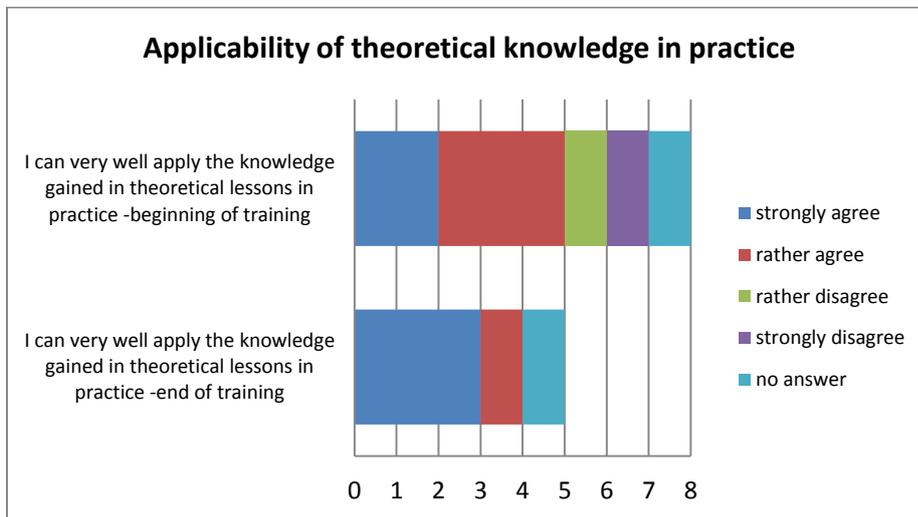
It is remarkable compared to the first round of questionnaires that while in the first round many students wanted to get a degree in another profession (not the one they are studying now) – in the second round of questionnaires they have not articulated that intention. On the contrary, all of them reinforced that they want to work in the profession that they have been studying: *‘get the degree and be able to work in the profession’* (student answer). In my opinion this change meant that on one hand they became more realistic concerning their professional goals on the other hand they got engaged a bit more, started to ‘plan with’ and think about the professions they are studying now.

1/3. Evaluation of the training

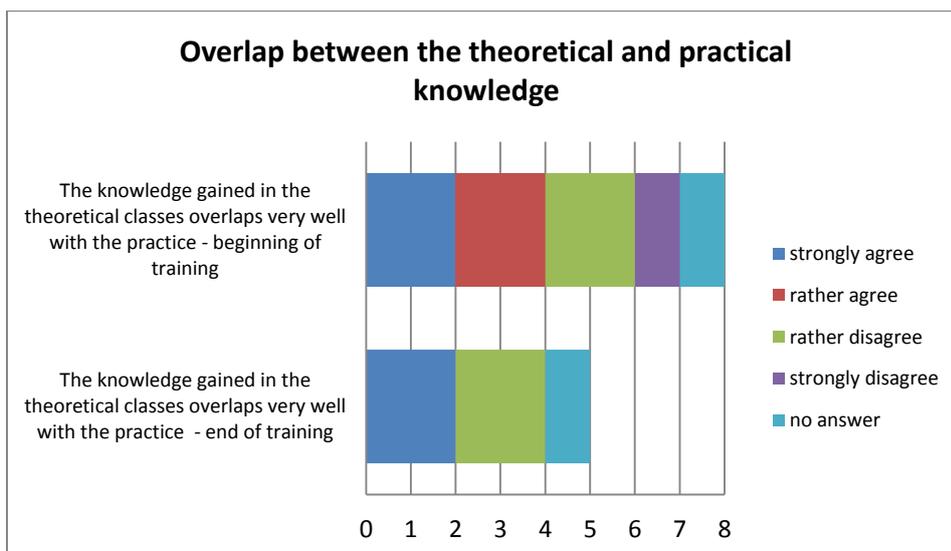
After the first year of the theoretical training the respondents’ opinion was all in all more positive about the theoretical part than after the beginning of the training. While at the beginning one of them was very dissatisfied with the scope of theory lessons now all of them found it very satisfactory.



At the beginning two of the students thought that they can not apply the knowledge gained in theory classes in practice, by the end of the year most of them strongly agreed with the well-applicability of theory classes in practice.

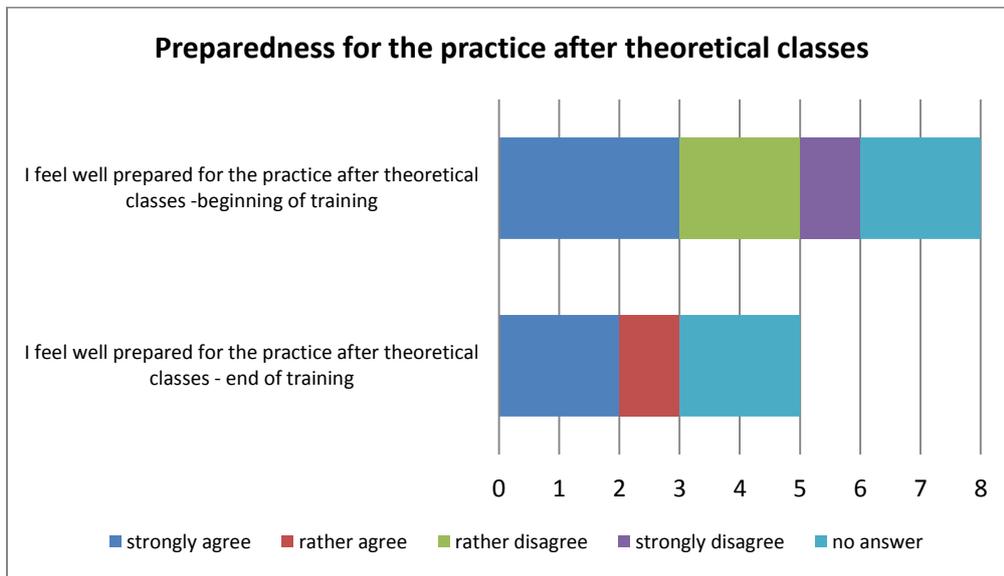


Two of the students agreed that there is an overlap between the knowledge in theory and in practice and two of them rather disagreed with that - which opinion matches with the answers in the first phase of questionnaires and with the conclusions of the interviews as well. The lack of connection between theory and practice was the most criticized part of the training program by students, instructors and lecturers equally.



All respondents strongly or rather agreed that the materials, information and practical examples were interesting and informative. All the respondents evaluated the lecturers positively and agreed that they could convey the content well – which is a slight positive change compared to the answers at the beginning of the training period.

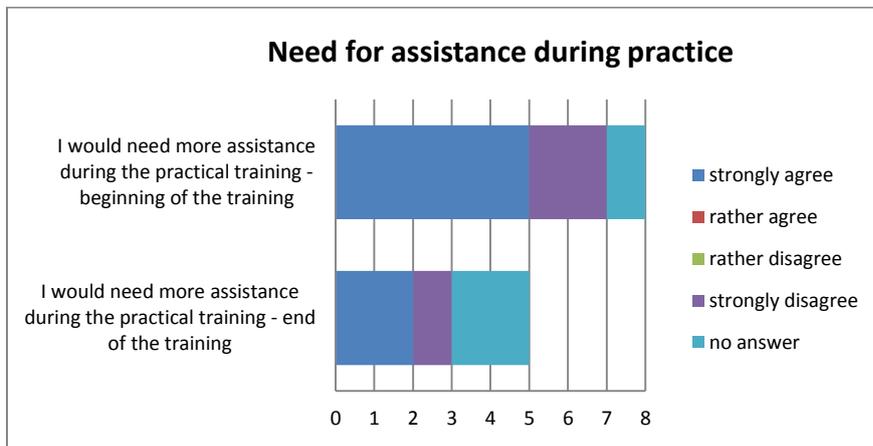
A great improvement compared to the beginning of the course was that while at the beginning 37,5% of the students found themselves rather or strongly unprepared for the practice after the theoretical classes, at the end of the year all those students who responded at least ‘rather agreed’ that they are prepared for practice after theory. One of them even gave a written remark: *‘on the theory lesson the teacher explains it very well and it got stuck in my mind’*.



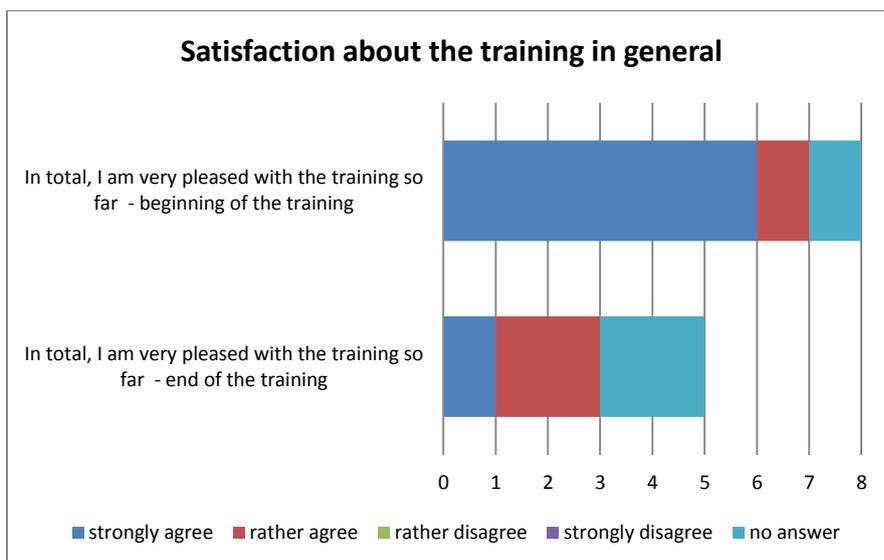
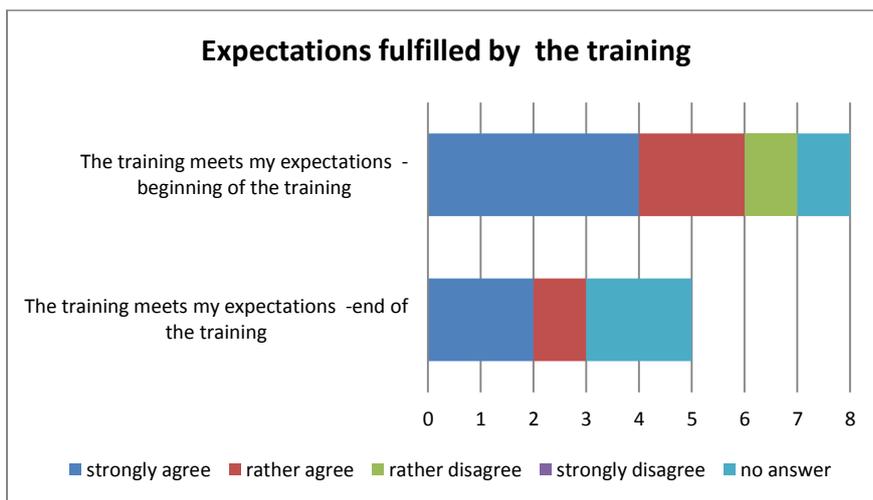
There was a slight improvement concerning the clarification of the aims of the theoretical training as well: while at the beginning 75% of the students found the aims of the theoretical training rather clear, at the end all respondents found it at least rather clear. The satisfaction with the organization of the theoretical training also improved: at the beginning some students were dissatisfied with the organization of the theoretical part, by the end of the year all respondents were very satisfied or rather satisfied with that.

Important information is that by the end of the year all respondents found the theoretical training rather too long. Although all respondents agreed that the 1 year of the training is satisfactory. Most of them were satisfied with the structure of the training about $\frac{1}{4}$ at school and $\frac{3}{4}$ in the company, although one of the respondents found it rather dissatisfying. It is very promising that after the one year long training all respondents felt well prepared to start working on the job market. They were rather divided in the question if they recommended the training for their friends or not. One of them even explained that *'I would not recommend it to my friend only because he is not enough prepared and responsible for this training'*.

Concerning the practical training, one student evaluated the amount of assistance satisfying, but the rest of the students who responded still reported a greater need for more assistance in practice – which opinion was mentioned in the first questionnaires and interviews as well as an area that could be improved further:



All in all we could not perceive a significant change in the students' satisfaction about the training from the beginning until the end. All students reported at the beginning and at the end of the training that the learning part at the company is useful for them. At the beginning one of them expressed dissatisfaction about meeting his expectations, by the end the training met the expectations of all students who responded and most of them were at least satisfied with the training in general.



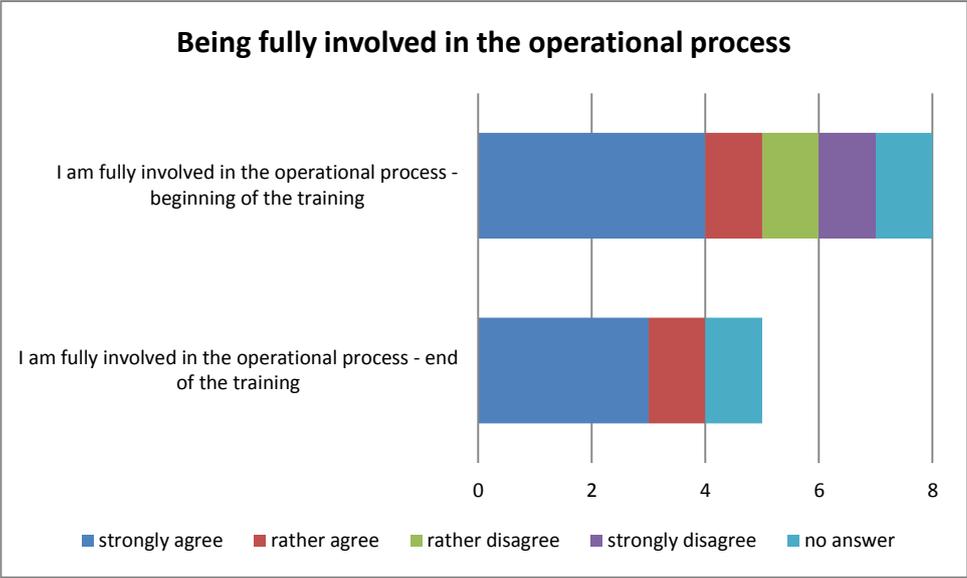
Concerning productivity, at the end of the year there was a wider consensus among the students who responded that they are doing productive work for the company than at the beginning of the practical training – that opinion matches with the interviews where both students and instructors reported that students are becoming more and more productive and start to do more work for other working sites besides the school buildings during their training.



Concerning students’ opinion about working opportunities, while at the beginning of the practical training 75% of them hoped that they can work for the company after the training, at the end of the training all respondents hoped that they would be employed by the company.

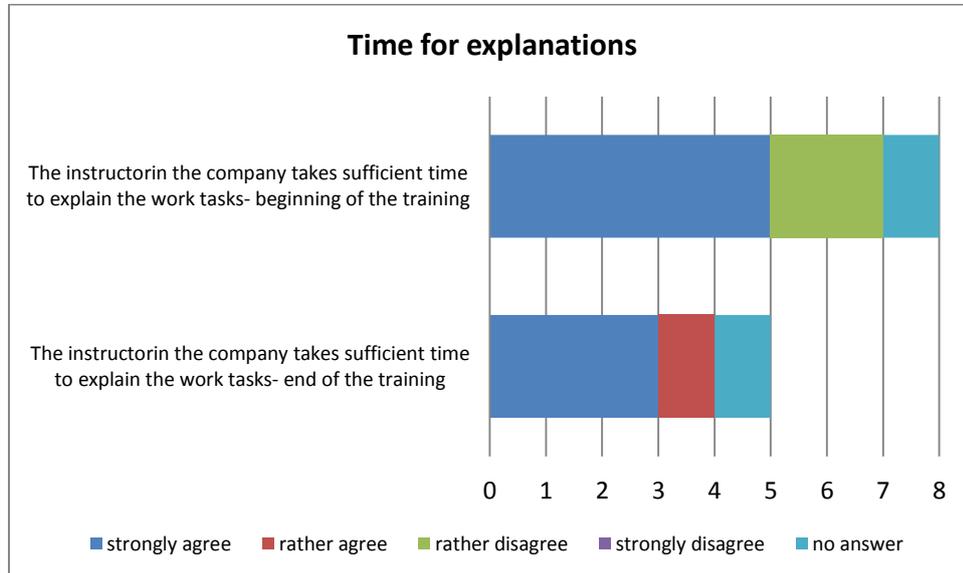
The opinion about pedagogically well-preparedness of the instructors did not change. The majority of the students perceived that they are well-prepared. It is the same about getting an insight into all areas of activities in the company – most students strongly agreed with that at the beginning of the practical training and they had the same opinion by the end.

More students felt being fully involved in the operational process than at the beginning of the training. While only 67,5% of the respondents perceived that at the beginning, all of the respondents agreed with that by the end of the year.



Most of the students found the aims of the practical training clear both at the beginning and at the end of the training period.

While at the beginning 67,5% of the students found that the instructor takes enough time to explain the work tasks, 25% of the students rather or strongly disagreed with that statement, at the end of the year all respondents rather agreed or strongly agreed that the instructor takes enough time with explanations.



Most students found the scope of practice satisfactory as well as the idea of more practice than theory useful at the beginning and at the end of the training equally.

II. Survey with the enterprises

II/1. Assessment of the first year of the training model

When asking about the assessment of the Hamburg Model training at the end of the training period, the instructors' opinion was very much in line with what they have reported at the beginning of the practical training in all questions.

There was a consensus that the information exchange between the theoretical teachers at school and the instructors at the company is an essential condition for the good quality of the training. Both of them agreed that the information exchange with the theoretical teachers is good. They strongly agreed that the companies and the practical trainers should be more involved in the formation of the structure, the curriculum and the requirements of the training. They were a bit more sceptical about the issue whether theory learned in school can be well-applied in the practical training, but both of them rather agreed with that. In their interpretation the vocational training fits well in their enterprise.

They rather agreed or strongly agreed that students are well-suited for the training. Both of them strongly agreed that the original aims of the training were clear.

Both of them expressed a slight critic about the organization of the training but they still found it rather well organized. The criticism might refer to the connection between theory

and practice. They all agreed that participants are fully integrated in the operating process in the company and that the students get an insight into all areas of activity in the company. Both instructors found their pedagogical education level appropriate for the task of instructing and supervising the students. Instructors were more convinced that their company wants to employ a participant/participants after completing the training than in the beginning (they rather agreed at that time and they absolutely agreed at the end of the training). There was a wide consensus that the students contribute productively to the company already during the training. They would have recommended other companies to participate in this professional training and were all in all very pleased with the training so far, which met their expectations.

One of them rather disagreed the other instructor strongly disagreed with the statement: 'It was useful to participate in such a pilot but such training structure in Hungary is not adequate now'. - Both of them found the Hamburg Model-based vocational education a realistic scenario for Hungary in the near future.

Contrary to some instructors' opinion at the beginning about the ratio of theory and practice, by the end of the training year both instructors strongly agreed that the ratio of practice and theory is appropriate.

III. Survey with the lecturers

III/1 Assessment of the first year of the training model

The majority, four lecturers found the ratio of theory and practice appropriate at the end of the training period. One lecturer had strong concerns against it.

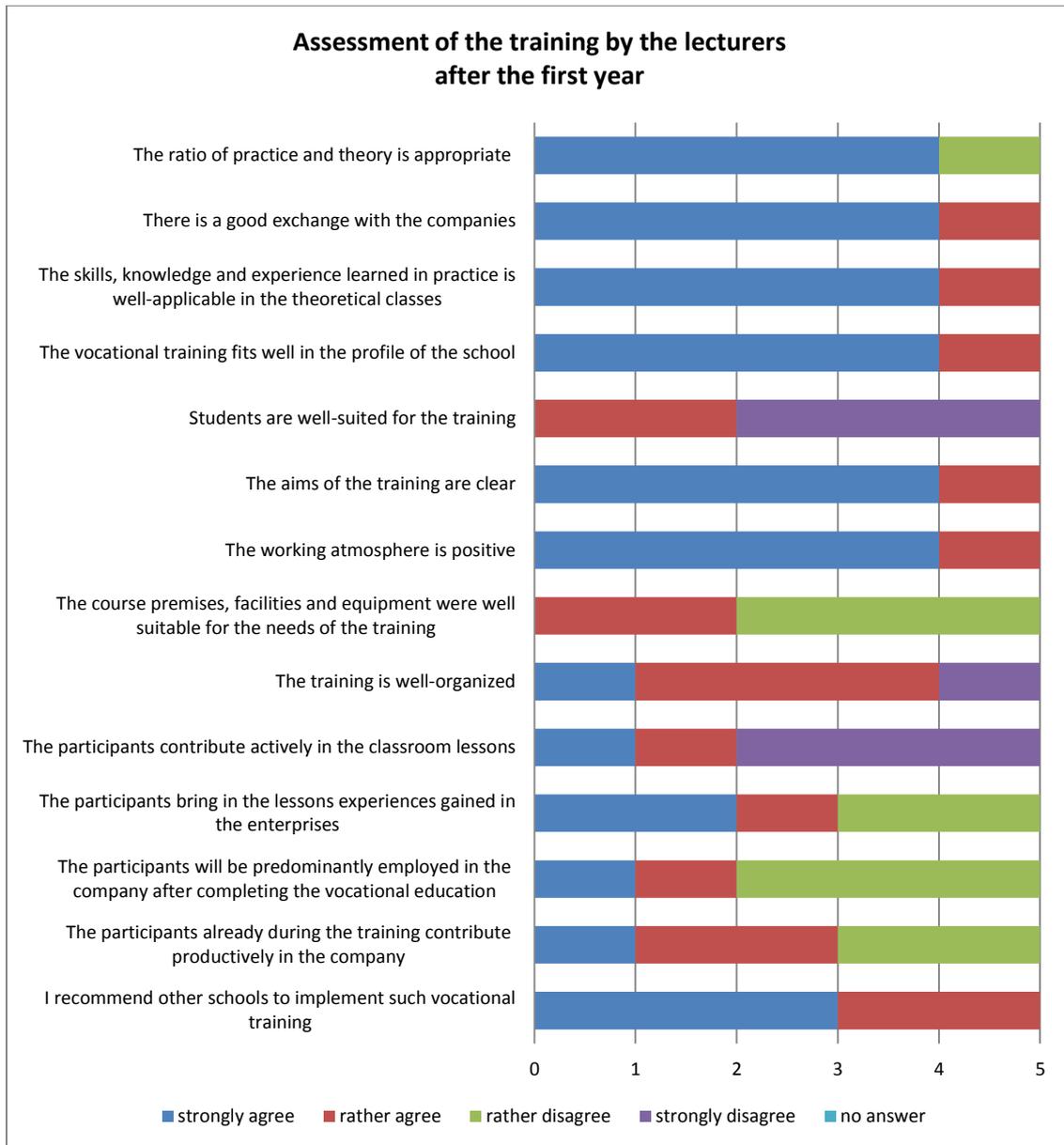
Just like at the beginning of the training, there was a full consensus among the theoretical lecturers that the exchange with the enterprises is good and the practically learned skills, experiences and knowledge can be well applied in the theoretical training. Their opinion hasn't changed since the beginning of the training: all of them still agreed that the vocational training fits very well in the vocational school. Lecturers were still critical concerning the suitability of the students for the training: at the end of the training still three teachers thought that the participants are not well-suited for this training and only two of them agreed about the students' suitability.

According to most teachers the aims of the training were clear and the working atmosphere was positive - just like at the beginning of the training.

The lecturers' opinion was divided about the course premises, facilities and equipment: the majority of them found it rather unsuitable for the needs of the training and two teachers found them suitable. Most of them found the training at least rather well organised; only one respondent disagreed strongly with that statement.

Lecturers were divided concerning the students active contribution in the classroom lessons. Three of them strongly disagreed that students actively contributed in the classroom lessons, and two of them agreed about contribution. Most respondents agreed that the participants bring experiences in the lessons that they gained at the enterprises, but two of them disagreed with that statement.

Compared to the opinions at the beginning of the training, a smaller amount of teachers thought that the students will be predominantly employed in the company after completing the vocational education: while at the beginning most teachers agreed with that statement, at the end of the training three of them had doubts about that and only two of them agreed. A similar set-back was experienced about the opinion on the students' productivity at the company: while at the beginning all teachers considered the students work productive for the company at the end of the training two teachers has doubts about that. All of the teachers would recommend other schools to implement the Hamburg Model-based vocational training.



The first year of the training matched the expectations of 3 of the 5 respondents. All of them were rather satisfied how the training was proceeded and all of them agreed that that 1/3 theory –3/4 practice division is a good structure. Finally the vast majority of the lecturers found the model as an adequate answer to the challenges of the Hungarian vocational educational system. Most of the lecturers believed that the implementation of the Hamburg Model into the Hungarian vocational training system is a realistic goal.

Structural expectations of the training and chances of implementation

