

The Interrelations of Competency Expectations in Connection with Career-Starter Skilled Workers in the Counties of Northern Hungary

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Received: January 25, 2018; received in revised form: May 21, 2018;
accepted: May 23, 2018

Abstract:

Introduction: Examining the connection between vocational training and the world of work, nowadays it is essential to mention the “gap”, which keeps on growing, between training and the economy due to the quick technological changes.

Purpose: The purpose of the research is scientific investigation of the demand process of competency expectations at workplaces in connection with career-starter skilled workers having completed their vocational training at school, and of young specialists’ qualifications, motivation, and the supply process in three disadvantaged counties in Northern Hungary. Considering the conditions of the training of specialists, we started from the opinion, an axiom drawn up all over Europe, that there is a shortage of specialists in the labor market in quantitative and qualitative respects alike. Digitalization, “Economy 4.0” is basically transforming technological and logistics processes, while professions disappear, or new ones are created. In the field of employment, probably fewer, but more qualified, skilled workers will be needed. All these mean a significant challenge, a need for a change in specialists’ training, in the preparation for a new type of labor force.

Methods: The method of the research was a primary data collection embracing the area of Northern Hungary, self-completed online questionnaires, complemented with focus group interviews. In the framework of a secondary analysis, according to stratified sampling, based on OECD-PISA survey, there will be a comparison of students’ average results on the European scale.

Limitations: The lack of representativeness restricted the research with the employer survey.

Results: The results of the research cast light on the sensitive points of vocational training at schools, on the educational deficit, on the shortcomings of the qualification system, and on the growing gap between training and the labor market.

Conclusions: The conclusions are aimed at the improvement of vocational training, and at broadening the connections with the employers. There is a demand for an incentive system, so that along with big companies, also SMEs will take part in the formal training of professionals within the school system in bigger and bigger proportions. We will further continue our studies in this direction.

Key words: skill, competence, qualification, employer, vocational training.

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1 Introduction

Nowadays, significant changes happen one after the other at an accelerating pace in the world of work, contributing to the growing “gap” between vocational training and the labor market. These changes are a lot more intensive than the initiatives of education or training. Training demand and supply are separated from each other, satisfying the demand in the framework of training in schools takes longer (Benedek, 2013). In the recent years, several studies have dealt with the career choices of students learning a profession in the school system, with the competency stock of young skilled workers, with the qualification expectations at workplaces, with elements influencing one’s career building (Borbély-Pecze, 2014; Molnár, 2016). The employers’ needs and requirements regarding the employees’ skills change continuously, they are influenced by several factors, among others the branch of work, its profile, operation, equipment, mechanization, and the supply of professionals. Skills (competences) mean a significant value of professional knowledge as part of human resources in the development possibilities of economic units, planning, the statistical region, or a sub-region.

The relationship between schools, workplaces and career starters, the “triangle” of vocational training, affects the quantitative and qualitative indicators of training. It is also an issue whether the skill demands of the potential workplaces work their way into training at the appropriate level and to a proper extent (Varga et al., 2017). It cannot be neglected either whether the principles of dual education are a part of the daily practice, or they are just declarations. When new knowledge is acquired, the application level of the adaptive and innovative methods has an influence on the efficiency of training. During practical training, in many cases, doing tasks mechanically in an unsophisticated way is characteristic; tasks improving creativity and problem solving are missing (Lükő, 2015). It also belongs to working up this subject, how much the competency supply of skilled workers differs from the employers’ demands (Vas, 2011) and to what extent the vocational training in the school system establishes a successful career start?

One of the challenges for teachers, vocational trainers, vocational workers, and human resources development professionals is to encourage the future skilled workers to do their best based on their knowledge, skills and competency supply, and to prepare them to apply this knowledge. Another expectation is that the school qualification system meets the perspective demands (Halász, 2008). According to Tamášová (2015, p. 8), the question which needs to be answered is in which areas teachers should be educated, what continuing education should involve. There is a simple answer – education in all current issues for which young people, as the potential new generation of teachers and educators, need to be prepared. This is the European trend.

2 Methods

In the framework of an empirical research, we studied the motivation of career starter skilled workers and the expectations of the labor market in three counties of Northern Hungary having characteristically disadvantageous indicators. The challenges of vocational training at schools will be interpreted. In the study, we applied the questionnaire method using our own questionnaire with closed and open questions, based on the available data from the Hungarian Chamber of Commerce and Industry, and the Hungarian Chamber of Agriculture. The exploration of interrelations was carried out in the framework of an empirical research as part of a study involving several dimensions of vocational training. N=107 vocational trainers’ and N=126 employers’

opinions were cross-checked. The online questionnaire survey was complemented with N=21 focus group interviews. The proportion of the completed questionnaires received from the vocational training institutions in the educational system was 67%, which meets the requirements for representativeness. Whereas those from the workplaces do not – only 126 out of 150 requested employers answered. During the secondary study, in a European outlook according to the stratified sampling, in the framework of the National Student Performance Assessment Program, the average results of 15-year-old students are compared.

The initial assumption of the research is that most young people do not choose vocational training on the basis of a conscious career building. Those who got into this type of training as a residuum, are on a forced path. Another assumption connected to this is that the students are not properly motivated in connection with their profession, the professional vocation of the career starter skilled workers is missing. The subject of the research is the prior idea that the managers of schools and workplaces judge the skills considered most important differently in connection with career starter skilled workers. It is also an assumption that the managers at workplaces are more critical as for the quality of initial vocational training in schools in connection with the career starter skilled workers' academic and practical preparedness than those in education. The first circle of questions in the study is aimed at the choice of career – we wanted to know what the characteristic tendencies are, how the opinions of the representatives of schools and workplaces correspond with or differ from each other.

2.1 The informal system of connections determines the choice of career

In the studied issue, seven characteristic questions were worked up based on the opinions of schools and employers.

Table 1

<i>Attributes of ways of establishing contact in the students' choice of career</i>		
<u><i>The way of establishing contact</i></u>	<u><i>Schools'</i></u> <u><i>opinion</i></u>	<u><i>Employers'</i></u> <u><i>opinion</i></u>
With the help of acquaintances, friends, relatives	4.43	4.23
Through online advertisements	3.79	3.48
Through print advertisement	3.22	3.24
Based on participation at job fairs	3.21	3.32
By taking up trainee positions	2.79	2.55
With the help of career centers	1.79	2.22
Via personal consultancy firms	1.72	1.91

Source: Own editing based on research

As shown in Table 1, the representatives of schools and workplaces indicated their opinion about the characteristics of young people trying to find a job on a five-point scale. The two sides agreed on the order on the first two places. The acquaintances, friends, relatives (schools: 4.43; employers: 4.23), i.e. the informal connection network, got on the first place in job seeking. Secondly, there was also an agreement between the two sides that online advertisements have a significant influence on this young age group

(schools – 3.79; employers – 3.48). It is noteworthy that job fairs organized for students are on the 3rd – 4th place in the field of interest.

It is obvious that the traditional institutional solutions which require significant financial and organizational resources are not the most effective on their own in the choice of career. After this comes the choice of a workplace based on accepting a trainee position (schools – 2.79; employers – 2.55), and finding a job with the help of career centers (schools – 1.97; employers – 2.22). The least characteristic for all is the choice of working possibility with the help of personal consultancy firms (schools – 1.72; employers – 1.91). The recently mentioned examples show that the new forms of choosing a career help students in higher education to find a job more frequently than those with secondary qualification. The analysis of the choice of career of students in vocational training was followed by a study on the commitment towards training, and the motivational factors.

2.2 *The characteristics of the professional vocation of career starter skilled workers*

In Table 2, the results of the research focused on the shortcomings of competency development are shown. Within this, the issue was narrowed down to the sensitive points of vocational training at schools.

Table 2

<i>What do you consider the biggest problem of vocational training in the school system?</i>		
	<u>Schools'</u> <u>opinion</u>	<u>Employers'</u> <u>opinion</u>
The lack of professional commitment with career starters.	4.30	4.24
Vocational training is not attractive.	3.57	4.13
The practical knowledge of career starters is incomplete.	3.09	4.14
The professional knowledge of career starters is outdated.	2.95	3.74

Source: Own editing based on research

Schools and employers, using a five-point scale, evaluated how significant they find each given competency. One of the most important statements of the research is that career starter skilled workers do not really have professional vocation, they are uninterested. The two groups had a very similar opinion (schools – 4.30; employers – 4.24). With the other issues, their opinions differ. The professional preparedness of those who completed school training was judged unfavorably more significantly by the employers (schools – 2.95; employers – 3.74). Both answer groups found this the smallest problem, even if the values were different. The practical knowledge of those having finished school is insufficient, also here the employers were more critical – by more than one grade on the scale (schools – 3.09; employers – 4.14). As for practical knowledge, the schools did not really consider it a problem, however, employers found this issue the second most critical problem. There is also a significant difference when stating that, according to school leavers, it is not attractive to take part in vocational training (schools – 3.57; employers – 4.13). This is the second biggest problem for the

schools, but only the third one for the employers. It partly answers the question why school leavers do not want to stay in their profession. After acquiring their professional qualifications, a significant number of students does not take up a job in accordance with their qualification.

Schools reported that there is a need for the profession they teach, but more than 20% of school leavers do not establish themselves in the profession they learnt. The exploration of the reasons needs further analysis. The following part demonstrates well that commitment to the profession and motivation are related to the employers' expectations in connection with young professionals.

2.3 The most important expectations in connection with career starter skilled workers – working discipline, professional practical preparedness, problem solving skills

On the basis of the opinions of the representatives of training institutions and employers, in this section, the most important skills of career starter professionals are discussed.

Table 3

Important skills in connection with career starter skilled workers

	<u><i>Schools' opinion</i></u>	<u><i>Employers' opinion</i></u>
Working discipline	4.81	4.72
Professional preparedness	4.69	4.54
Problem solving skills	4.55	4.54
Working independently	4.52	4.60
IT knowledge	3.74	3.57
Organizational skills	3.59	3.97
Foreign language knowledge	3.50	3.13

Source: Own editing based on research

In Table 3, also on a five-point scale, we tried to find the answer to the question regarding the abilities and skills considered more or less important by the responders from schools and employers. Interestingly, both groups find working discipline most significant almost to the same extent (schools – 4.81; employers – 4.72). A high value was given to the importance of professional practical preparedness (schools – 4.69; employers – 4.54). Schools found this the second most important, while they put problem solving skills on the third place. Considering this latter issue, employers' opinions show a similarity (schools – 4.55; employers – 4.54).

Noteworthy, schools assign a high value to working independently – it is on the fifth place in the order of importance. However, according to the employers, this is of an even higher importance and consider it the second most important expectation (schools – 4.52; employers – 4.60). Problem solving skills and a cooperative ability are considered similarly important by the training institutions and the employers. It gives food for thought, though, that foreign language knowledge was the competency evaluated as the least important (schools – 3.50; employers – 3.13). IT knowledge is considered quite important (schools – 3.74; employers – 3.57). In the evaluation of organizational skills, there is a bigger difference, employers find this a lot more important than schools do (schools – 3.59; employers – 3.97). The level of application of these skills in practice has a determinant significance in the evaluation of the work of young career starters.

2.4 Managers at workplaces are more critical, they rate the career starter skilled workers' preparedness as medium

Table 4 shows how vocational trainers and representatives of workplaces evaluate the efficiency of theoretical and practical training, how vocational training grounds career.

Table 4

<i>The theoretical, practical and career grounding character of vocational training</i>		
	<u><i>Schools' opinion</i></u>	<u><i>Employers' opinion</i></u>
Practical preparedness of career starters	3.86	3.43
Theoretical preparedness of career starters	3.78	3.26
The career grounding character of vocational training	3.74	3.20

Source: Own editing based on research

Based on the answers to the questions, it can be seen that the opinions of the employers about the future skilled workers are more critical than the schools' opinions. While schools evaluate it as a good medium level, the companies' opinion differs from this by half a grade, and they consider the preparedness of school leavers obviously medium. It is visible e.g. in the question how school system training can ground the successful career start, and the career itself (schools – 3.74; employers – 3.20).

During the vocational training at schools, practice oriented training is in the foreground, less attention is given to theoretical training, and the character of the training grounding the career. It means a problem especially in the context that most young people learning in this kind of educational institution come from an environment lacking or hardly providing any stimuli, and they lack the basics of common academic knowledge and positive life style patterns to follow.

2.5 Within secondary education, vocational training in the school system has a lower social prestige

Focus group interviews complemented the questionnaire survey in three counties – in groups of 6 in Nógrád County, 7 in Heves County and 8 in Borsod-Abaúj-Zemplén County. It was expressed that among those going on with their education within secondary education, the most important objective is to take the general final exam and vocational training has a lot lower prestige. It shows great uncertainty that in 70% of the cases, and this is a general standpoint, it is only defined in the final period what vocational training the student selects.

There is no awareness in choosing a profession, young people get into vocational training because they cannot find anything better. For most of the young people coming from disadvantageous conditions, grown up in an environment lacking stimuli, obtaining vocational qualification means an opportunity for emergence. The lack of knowledge about local labor market needs hinders perspective planning. Choosing a career at the age of 14 is considered too early. Young people have very little experience of their own. The structure of vocational training does not help later corrections either. In the new structure of vocational training, there is no interoperability. In the course of training,

students cannot change to another professional field, in the worst case, they drop out from training. In a better case, they start again and learn a different profession.

3 Average reading comprehension, mathematics and science results of the Hungarian youth in European comparison

We complement the above study by an international comparison of the competency survey results also concerning Hungarian students.

The OECD-PISA survey in the fields of reading comprehension, mathematics and sciences is carried out every three years among 15-year old students of the developed countries since 2000. The following comparison tells a lot about what basics the Hungarian youth in secondary education have in the fields of reading comprehension, mathematics and sciences, and where we are in a European comparison. The results are shown in Table 5.

Estonia, Germany, Denmark and Poland are the most successful in all the three measured areas. In the improvement of the Polish students' achievement, probably, an important role is played by the educational reform introducing the 9-year primary school in 1999. The Swedish youth achieve good average results constantly, and in the last three years further improvements have taken place. Austria and Germany show good skill levels in mathematics and sciences. Among the countries discussed, at the bottom of the table you can find Hungary, Slovakia and Romania with deteriorating results.

In Hungary, in connection with the shortcomings of education, the reasons need a separate analysis. The negative tendency calls the attention to a more successful acquisition of the basics of education during the general education, and in the field of vocational training, beyond the knowledge of the profession at skills level, to the challenges of meeting the demands of the higher level skills of the digital world.

Table 5

OECD-PISA average results of 15-year old students

<u>Countries</u>	<u>Reading</u>			<u>Mathematics</u>			<u>Sciences</u>		
	<u>2009</u>	<u>2012</u>	<u>2015</u>	<u>2009</u>	<u>2012</u>	<u>2015</u>	<u>2009</u>	<u>2012</u>	<u>2015</u>
OECD average	493	496	493	496	494	490	501	501	493
Austria	470	490	485	496	506	497	494	506	495
Czech Republic	478	493	487	493	499	492	500	508	493
Denmark	495	496	500	503	500	511	499	498	502
Estonia	501	516	519	512	521	520	528	541	534
Poland	500	518	506	495	518	504	508	526	501
Hungary	494	488	470	490	477	477	503	494	477
Germany	497	508	509	513	514	506	520	524	509
Romania	424	438	434	427	445	444	428	439	435
Sweden	497	483	500	494	478	494	495	485	493
Slovakia	477	463	453	497	482	475	490	471	461

Source: Own editing based on www.oecd.org

4 Conclusion

During the interpretation of the research results, one can perceive the critical points of vocational training. The lack of wide basics should be highlighted among them. Several factors play a role in this, like the shortcomings of primary school education, the decrease of compulsory educational age to 16 years of age, the proportion of early dropouts is constantly above 10% during the education, and also there are not enough lessons for competency development due to the reduced number of lessons. The shortcoming of practical training is that the conditions to completely work up the Professional and Exam Requirements are not insufficient. In the recent years, the preparedness of career starters has not improved as much as expected. Due to the dynamic economic and technological changes, the difference between skill demand and supply have shown a growing tendency. During the research, an opinion was markedly worded, that is when vocational training is planned, the issue which should be put into the foreground is not the professions in demand, but the development of skills in demand. The challenges of the digital world will probably speed up this process significantly. Based on the results of the research, we highlight four task circles:

1. Young people do not choose vocational training on the basis of conscious career building. Most of the youth follow the example of their family members or friends. This could also be favorable, if the decision was part of a conscious career building, but it is not. The focus group interviews obviously show that mostly the students with weaker results choose vocational training. For many of them, getting into professional training is only the matter of “drift”; they choose a profession on the basis of “lack of a better”. Career building should be made more conscious for the future skilled workers as early as the primary school years. Within professions high in demand, the proportion of students learning a profession after the final exam reaches 25%, and this tendency should continue, which expectedly will be forced by technological processes as well.
2. The process of becoming a skilled worker is characterized by motivation deficit, the incentive systems do not work properly. The research stated a motivation deficit among those taking part in professional training and a lack of commitment towards the lifestyle of skilled workers as a significant problem, which we have to struggle with to improve the efficiency of supply with future professionals. This is a serious issue which can only be treated as a symptom by the educational and training system on its own, it can be handled in a comprehensive way, in its complexity, in social and economic relations, which needs further research. This issue also shows that professional qualification is only one of the factors of employability. Among others, modern financial and moral incentives are needed, and also the social prestige of skilled workers as a “status” should be improved. For the future, it seems appropriate to bring back the earlier practice which is giving grants to all students based on their educational results, and not just to students learning a profession in high demand, which is the situation now.
3. Working discipline is not an evidence, but it is worded as a highlighted objective. A lot is told about the climate of professional training when the representatives of schools and employers consider a skill like working discipline the most important, which should be obvious in the daily practice, as an objective to be achieved. This is a sign of serious discipline problems teachers and instructors have to face during the training. This situation casts light on a serious training problem, which is also a

task to be tackled – people working in the field of professional training do not get special pedagogical, psychological, restorative, nor innovative methodological knowledge with the help of which they could improve the quality of training. It is to be considered when improving the training and further training system of the vocational training of professionals.

4. Experience in Northern Hungary shows that vocational training schools concentrate on practice oriented training. Their success is influenced by two conditions – on one hand, they struggle between various expectations often eliminating each other, e.g. placing centralization into the foreground disadvantageously affects the local demands for decentralization when the proportions and directions of the training are defined. On the other hand, it is more difficult to learn a profession if the students gain practice limited only to certain tasks at workplaces in the framework of dual training, but they do not take part in professional training including a complex and extensive professional exam requirement level. If there is a lack of workplaces which are able to provide an opportunity to extensively learn the professional basics, it would be expedient to build more than earlier on training in the apprentice workshops.

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