

1. Introduction

Dual education has become part of the strategic policies of an increasing number of higher educational institutions in Hungary. This phenomenon is fully consistent with the European Union objective stating that “an educational system is to be created by 2020 that, as a rival to the efficient educational structures of America and the Far East, will, in the long run, empower future employees to acquire key competencies that will enable them to adapt themselves to the global changes of the world economy in a flexible and efficient way.”¹ Dual education allows college and university students to deepen not only their technical but also their theoretical knowledge, to improve their competencies, to gain work experience and to learn about the corporate culture of a given enterprise. An important advantage is that “Such well-prepared workforce leaves the dual education programmes of educational institutions that are capable of entering the labour market instantly and flexibly. Dual education is an efficient set of tools for creating a fresh pool of quality workforce.” [White paper on dual education for students 2015:6] Practical knowledge is imparted at the dual educational partner company that co-operates with the higher educational institution. Today’s businesses have realised the mutual long-term benefits gained from this kind of co-operation set up with higher educational institutions. Such co-operation requires a shared vision from the higher educational institutions and partner companies as well as concerted curricula on which the theoretical and practical educational activities are built. In our paper we will highlight the corporate social responsibility undertaken by businesses by participating in this educational form and describe the findings of our primary research. By an in-depth interview survey conducted in Zala County, we inquired about the motivations for businesses to participate in technical and economic dual education. We will furthermore analyse the experience gained, opinions expressed and recommendations for improvement put forward by businesses.

2. The strengthening role of CSR

The predominant trends and forces of the 21st century confront businesses with new challenges and, at the same time, familiarise them with newer and newer practices and ways of thinking. The holistic approach is one of them: it relies on the development, design and implementation of programmes, processes and activities that fully appreciate the importance and interdependence of the tasks [Kotler–Keller 2012: 29-30]. The main pillars of the holistic approach are as follows,

- The need to build up a long-term relationship that ensures mutual satisfaction. The importance of liaising with all stakeholders so that the company would be profit-making and survive.
- An integrated approach: working out activities and programmes that convey value and are able to co-ordinate all related fields and activities to deliver upon the objective.
- Programmes and initiatives that also focus on the business internally: employing, training and motivating the right employees that are ready to serve customers. It draws attention to the fact that in-company programmes and initiatives are equally if not more important than those external to the company.

1 Source: Council [conclusions](#) of 12 May 2009 on a strategic framework for European cooperation in education and training (ET 2020) (OJ C 119 of 28.5.2009, pp. 2-10)

- Measuring performance: to see the pecuniary and non-pecuniary benefits of the various activities and programmes clearly. Marketing profitability measured by the market share, the proportion of lost customers and customer satisfaction should gain an increased importance.
- Besides all these, the legal, ethical, social and environmental impacts of the activities and programmes must increasingly be taken into consideration. Corporate value creation should not only be limited to financial or economic profitability; it is necessary for corporate profitability to be measured by social and environmental performance too (the 3Ps: people, planet, profit) [Braun 2015].

Based on the aforementioned, the CSR (Corporate Social Responsibility) concept is increasingly spreading and there is an ever growing demand for related programmes. But what do we mean by corporate social responsibility?

We can find many definitions for CSR. Some of them are listed below:

- As defined by ISO (International Organization for Standardization), CSR is “the responsibility of an organization for the impacts of its decision and activities on society and the environment through transparency and ethical behavior that contribute to sustainable development, including health and welfare of society; takes into account the expectation of stakeholders; is in compliance with applicable law and consistent with international norms of behavior and is integrated throughout the organization and practices in its relationship” [Braun 2015: 27].
- “Corporate social responsibility integrates stakeholder values and interests within the business’s operations. The stakeholders of corporate operations are in the centre of corporate social responsibility: those influenced by the company’s operations and those who have or can have an influence on the operations” [Braun 2015: 27].
- “Contrary to general practice to date, a business with social responsibility should no longer be considered a blind flight during which the business’s pilot, ignoring all social consequences, races towards a single objective, profit maximisation, at top speed. The manager aiming for corporate social responsibility will try to counterbalance the total impact of its business’s operations and adjust them so that they would harmonise with the interests of the local, national and global community” [Feák et al 2006: 7].

Mastering socially responsible corporate behaviour is a multistage process. This statement is underlined by the manager of the global consulting and standards firm, AccountAbility, who enlists the following main stages:

1. *Aversion*: in this stage the company rejects or denies the dangers inherent in its behaviour and will not assume responsibilities.
2. *Co-operation*: in order to demonstrate socially responsible behaviour towards stakeholders the related activities are gradually integrated in the organisation’s operations.
3. *Personal Social Responsibility*: in which leadership roles are supplemented with the elements of socially responsible thinking and management.
4. Responsible management becomes part of the corporate objective functions *as a strategic solution*.
5. *Undertaking sectoral and civil roles*: responsible management is expanded to factors external to the organisation [Angyal 2009: 143-144].

Businesses committed to CSR can choose from a rich set of tools. The programmes and deeds can have a beneficial influence on the economy, society and environment. Internal CSR tools



are gaining outstanding significance, such as the way in which employees are treated and the work environment is set up. To cite an example, Zwack Unicum Nyrt., focuses on the following areas as part of its corporate social responsibility programmes (Figure 1):

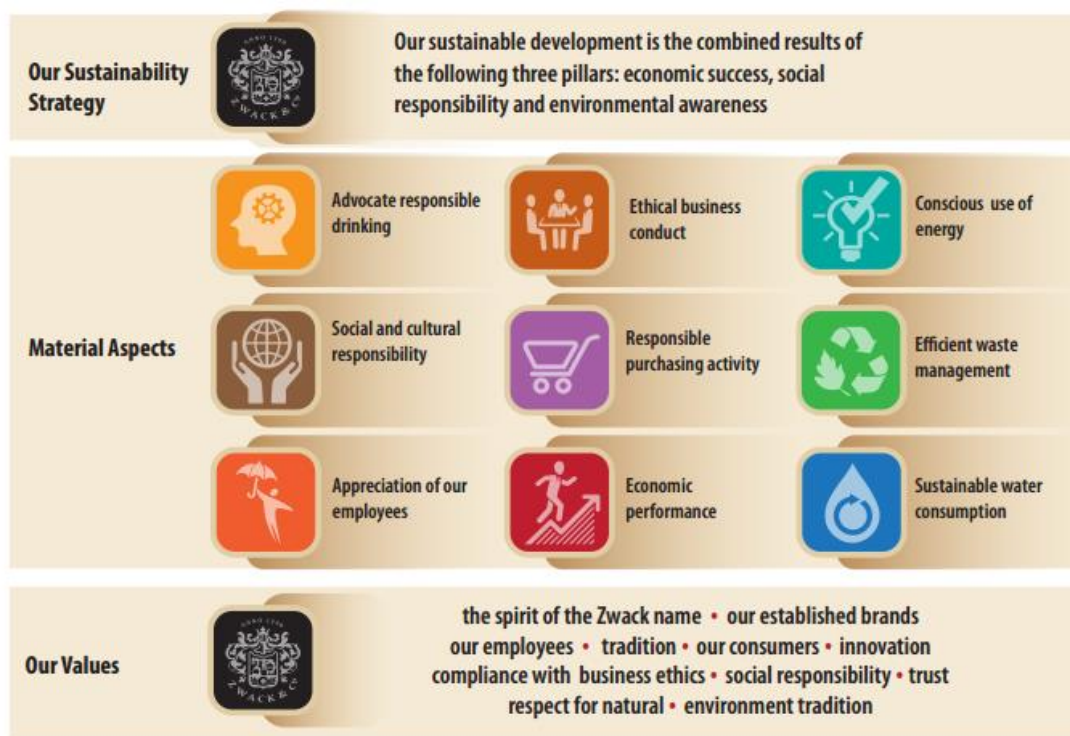


Figure 1: CSR focus areas at Zwack Unicum Nyrt.

Source: Zwack Sustainability Report [2015]

One of the greatest challenges in today's global world of business is the management of corporate social responsibility. Amongst the global economic conditions, culture, the business and consumer environment, stakeholders and their related problems are local, which means that all business communities are to pose questions and find answers to such questions themselves and transform their business operations accordingly. The success-oriented enterprises of the 21st century will adopt the responsibility centred business model [Braun 2015]. These ideas are confirmed by several research findings, for example,

- the findings gleaned by the Deloitte Company from its research conducted on CSR managers of Bulgarian, Czech, Kosovar, Latvian, Lithuanian, Hungarian, Romanian, Serbian, Slovakian and Slovenian companies in 2013 confirm that one-third of the respondents believes that responsible corporate management will reach the level of maturity at which addressing social and environmental issues will become part of business models. 75% of the CSR managers hold that consumers expect to be able to choose from socially and environmentally conscious products and services on the market (<http://profit7.hu/magazin-1/tegyen-a-kornyezeteert-a-vasarloi-meghalaljak>).
- These statements are corroborated by the questionnaire survey conducted in 2011 at the spring job fair of the Corvinus University of Budapest and the University of Miskolc which shows that year after year the social and environmental responsibility undertaken by prospective employers is gaining ever growing importance for potential employees. 47% of the respondents marked socially responsible behaviour as typically important.

The above-mentioned surveys also wanted to identify the most preferred areas of CSR. *Table 1* describes respondents' expectations based on the findings of the survey made at the Corvinus University of Budapest and the University of Miskolc.

CSR programmes ranked by potential employees in order of importance

Table 1

Ranking	CSR programmes (based on the findings of the survey in 2010)	Ranking	CSR programmes (based on the findings of the survey in 2011)
1.	Support for training and education	1.	CSR related to nutrition, wellness and healthy lifestyle
2.	Reduction of the ecological footprint	2.	Reduction of the ecological footprint
3.	Attitude formation towards protecting the environment and animals	3.	Support for training and education

Source: own compilation based on the survey at the Corvinus University of Budapest and the University of Miskolc [2011]²

The survey conducted by the Deloitte Company in 2013 revealed that respondents identified the following challenges as the most pressing ones: mitigating the negative impacts on the natural environment, *supporting education* and reducing unemployment. Respondents find these areas of utmost significance and therefore pointed out that they would actively have to participate in solving these problems in future too (<http://profit7.hu/magazin-1/tegyen-a-kornyezeteert-a-vasarloi-meghalaljak>).

So respondents can identify themselves with the CSR programmes targeted at the above-listed objectives most. It can be seen that *supporting training and education* plays a major role among respondents' expectations as evidenced by both research findings.

The scope of businesses is expanding that, in answer to the above-described trends and challenges, build responsible thinking in their business strategy more and more intensively and put the efficient management of economic, social and environmental challenges in the focus in order to realise sustainable development. Supporting training and education enjoys a high priority in their CSR strategies, and within this, the need to get involved in dual education is a novel component. The opportunity to participate in dual education not only at secondary but also at tertiary level has existed in Hungarian higher education for some years.

The following diagrams illustrate how dual education and related information is presented on the websites of specific companies. We can find information regarding dual education under corporate social responsibility as illustrated in *Figure 2*, while other companies specify them under career programmes.

² <http://www.cons.hu/index.php?menu=hirek&id=661>,
<http://www.nestle.hu/media/pressreleases/Frissdiplomasfelmeres>.



Figure 2: The description of dual education on the website of Unitrade Kft

Source: <http://www.unirade.hu/community-relations/>

3. A dual education as a new dimension of corporate social responsibility

The introduction of dual education in Hungary has been called for partly by the strengthening approach to and expectations regarding social responsibility and partly by the shortcomings of the educational structure, which are the following,

- Domestic businesses – most typically automotive businesses – specifically require professionals graduating from practice-oriented programmes.
- Today’s two-tier system does not provide enough space for practical training due to its structure (which especially holds true for students of university BSc courses).
- The number of teachers with practical experience working in higher education is extremely low.
- It is problematic for students to gain soft skills in the educational institutions in addition to well-grounded professional knowledge, which skills are typically required by businesses (leadership skills, co-operative skills, corporate culture etc.) [Szigeti 2015].

“Dual vocational training programmes preparing participants to pursue state accredited trades has transformed into an institutionalised system banking on traditions dating back to the Middle Ages. Until the beginning of the last century, apprentices were trained only in handicrafts and commerce, then as a result of industrialisation this practice gradually invaded the manufacturing industry, and starting from the 20th century this form of supplying fresh workforce became widespread in every economic and employment branch.

Dual education is directly based on the training system adopted by medieval guilds and craft unions – from apprenticeship to masters’ training. The first schools were religious schools and industrial Sunday schools. This is where the system of vocational schools originated from at the end of the 19th century, then before the beginning of the 20th century specialist further training trade schools came into existence. In parallel to the network of primary schools mushrooming after the introduction of compulsory school attendance, the dual education system preparing participants for state accredited trades as well as the structure of general and professional education at secondary and tertiary levels developed further [Szabó 1997: 4]. This therefore proves that the roots of dual education date back to old times. This type of education is widespread all over Europe. In Hungary the German dual education model with great traditions is the better known alternative [Cs. Simon 2012]. The Danish Production School model is less widespread and known, but right in the Zala region and in the neighbourhood of Pécs there are actively operating institutions following this model even today” [Balázsné et al 2015: 32].

The demand on students participating in dual education is twofold: on the one hand, they participate in academic education similarly to those following the purely bachelor course, and on the other hand, they spend a dual practice period in corporate environment, which is a full-time burden on their time. In this structure students acquire the skills required by their workplaces during their college/university years (e.g. leadership skills, communication practice, project management skills), get to know the corporate culture and socialise with their fellow employees. This ensures that a competitive employee should enter the labour market when emerging from the dual education system that is able to perform valuable work right away – without having to spend a training period in the company for several months or even years, and without extra costs.

The Hungarian government passed a decision on the introduction of dual education in economic higher education in 2015. Since then, several activities have been realised to improve this type of education. As a result, the internet website www.dualisdiploma.hu has been launched where all the vital information about the dual education framework can be found. Furthermore, the dual education programme has been developed as follows,

- instruction is given for 48 weeks per school-year,
- students spend 26 weeks at the educational institution, and
- 22 weeks at the company,
- semester 7 is a 15-week corporate practice period.

Under special agreements made with companies, students are allowed to complete their dual practice requirements at times differing from the times defined for dual practice periods in the programme of the college or university. The Act on National Higher Education defines the minimum amount payable to students, which „is 15% of the minimum wage upon start and will increase in proportion to time to reach the wages realisable as a new hire at the company who holds the degree and professional qualification obtainable as part of the dual education programme in the last quarter” [Information material on dual education at BBS ZCBA, 2015].

The demand for practice-oriented education is hence becoming ever more intensive and several opportunities are available for such training programme nowadays since higher educational institutions respond to this demand in several ways. In the following summary diagram we will illustrate the currently available multi-tier system that facilitates training programmes of a more practice oriented nature:



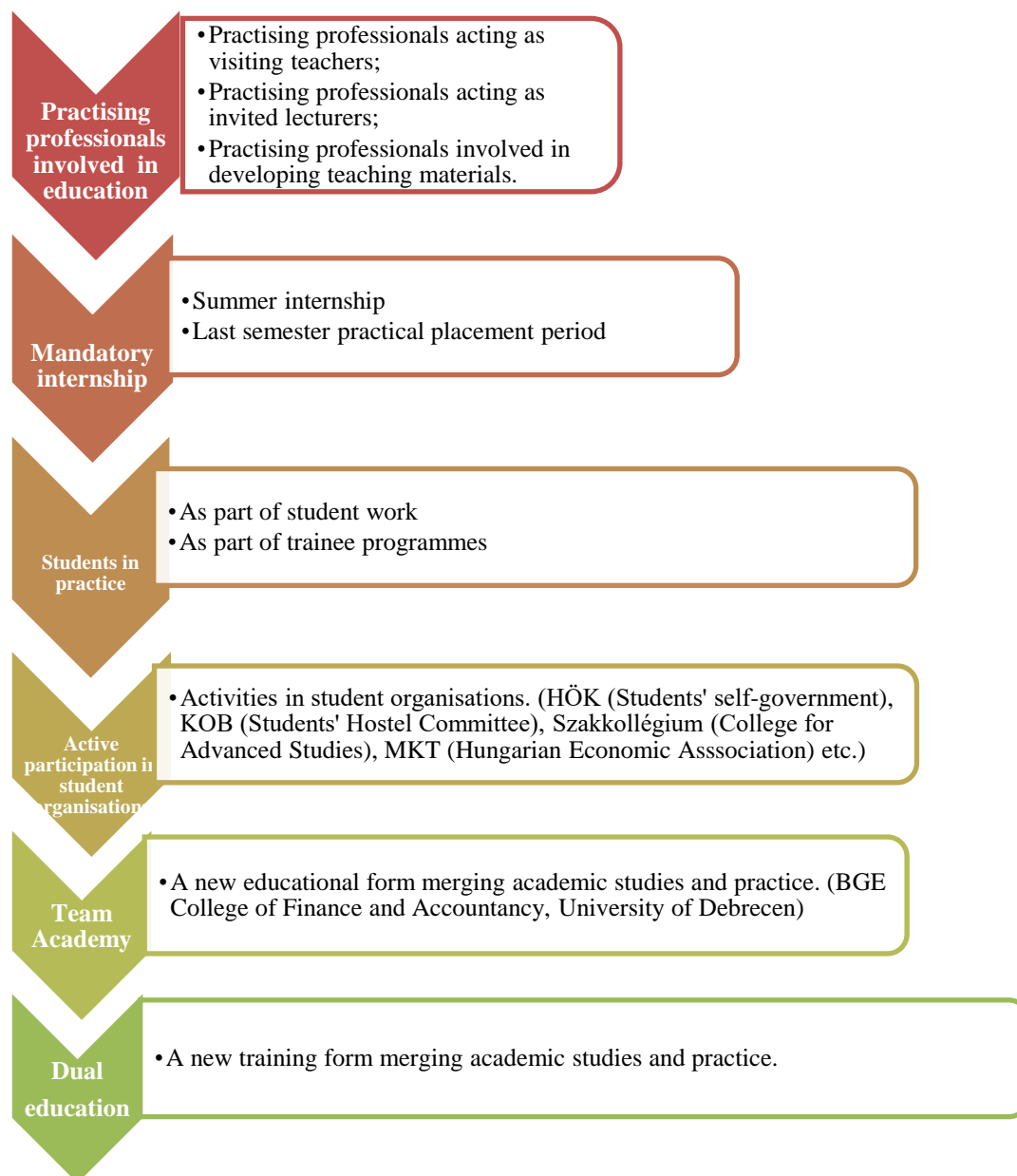


Figure 3: The stages of practice-oriented training programmes in higher education

Source: own compilation

In the higher education of Zala County, dual education was launched in engineer training in 2012 as part of the mechatronics engineer training programme in Zalaegerszeg. Then in 2014, The Zalaegerszeg College of Business Administration of the Budapest Business School started its dual education programme as a pioneering initiative in the economist training programme,³ which is already an accredited course with effect from September 2015.

³ The dual education programme has been developed in the scope of the project entitled “TÁMOP [Social Renewal Operational Programme]-4.1.1.C-12/1/KONV-2012-0010 NyME - BGF - PTE - ZFOK - PTC – Co-operation in Research and Education in the Mechatronics Engineering Network.

4. Businesses' attitude to dual education as evidenced by an in-depth interview survey

The in-depth interview survey was conducted with representatives of dual educational partner businesses in Zala County in 2015 as one of the pillars of the project entitled "Research on the dual education practice period".⁴ In this paper we present only a part of the multi-target survey on the experience and impressions gathered by surveyed businesses regarding dual education. The main parameters of the research are shown in *Figure 4*.

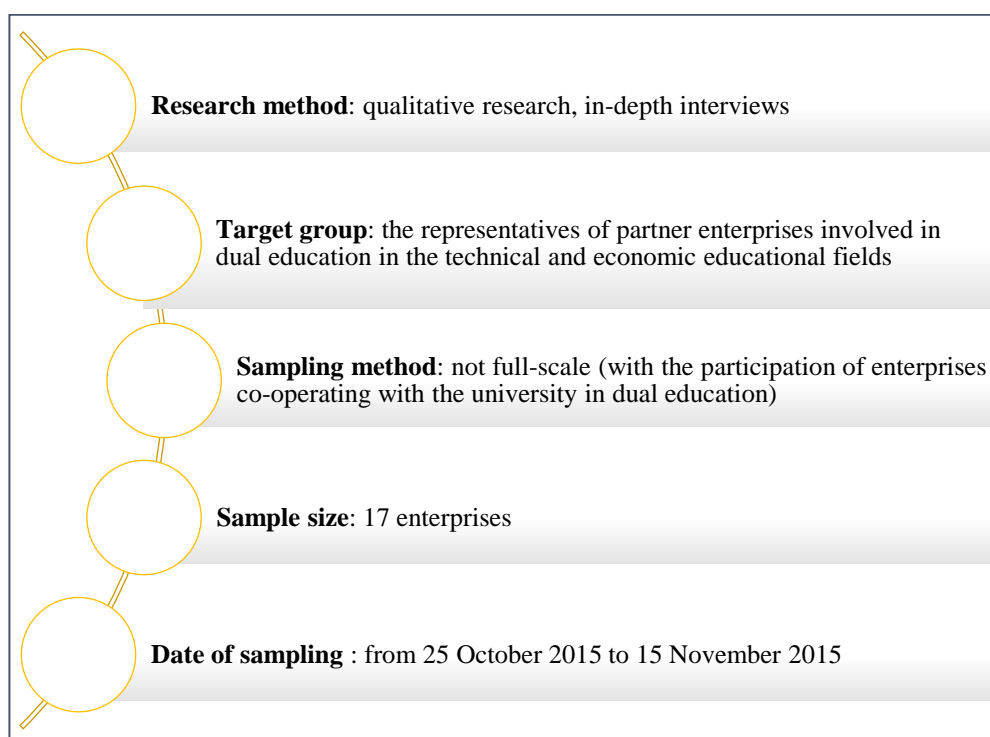


Figure 4: Particulars of the primary research

Source: own compilation based on research by in-depth interviews

The research was conducted by qualitative data collection methods, with in-depth interviews among them. Qualitative research is best for understanding, unveiling and grasping the situation. It allows for a deeper analysis of respondents' way of thinking, how they formulate opinions and what their habits and attitudes are like. In harmony with the research method, the findings are presented in a descriptive way.

The managers, contact persons or mentors of the following companies participated in the survey:

- Bak és Vidéke Savings Bank
- 3 B Hungária Kft.
- Elanders Hungary Kft.
- Europtec Kft.
- Észak-zalai Víz- és Csatornamű Zrt.

⁴ Project identification no. "TÁMOP [Social Renewal Operational Programme]-4.1.1.F-14/1/Konv-2015-0011 "Strengthening the social and economic role of higher education in the West-Pannon region based on experience gained from dual education": Balázsné et al [2015].

- Flextronics International Kft.
- Forest Hungary Kft.
- Metal-System Kft.
- Mould Tech Mérnöki Iroda Kft.
- Mayor’s Office of Zalaegerszeg
- Prosperus Consulting Kft.
- Pylon-94 Kft.
- Technology Centre
- Zalaco Sütőipari Zrt.
- Zala County Hospital – IT department
- Zalaszáám Kft.

We asked dual businesses why they considered the participation of the business in dual education important. Businesses marked their responses on a 5-level Likert scale (1 = not important at all; ...; 5 = very important). The results are presented in the following diagram:

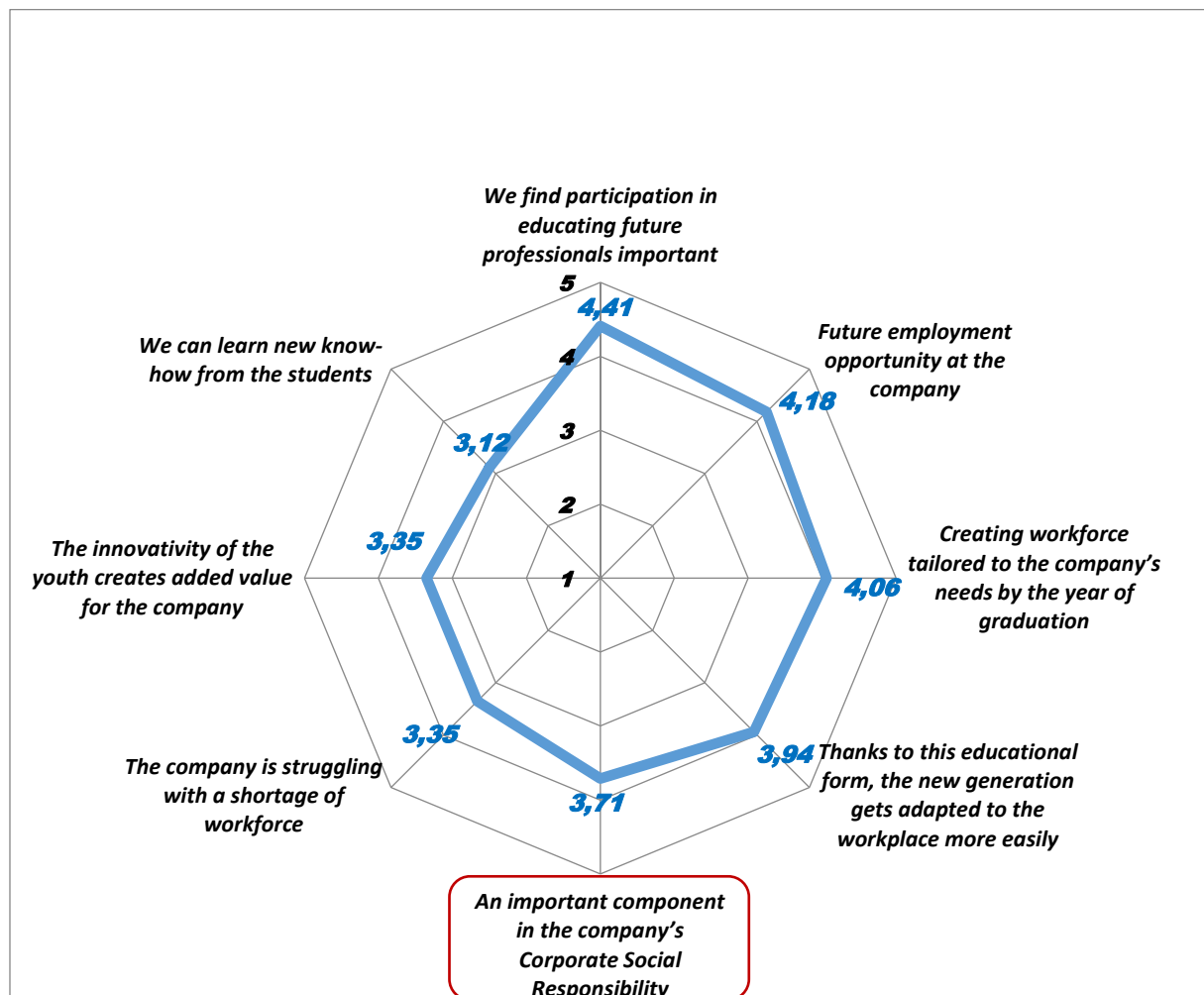


Figure 5: The opinion of dual educational partner companies about the significance of their involvement in dual education (average scores)

Source: own compilation based on primary research

Dual educational corporate partners primarily find participation in dual education important in terms of educating future professionals that will mean a new pool of workforce. This is supported by that ‘future employment opportunity at the company’ is ranked second among the statements. This is a promising fact for the students currently participating in dual education programmes, since in the event they meet the requirements, there is going to be an opportunity for them to find employment at the specific company after graduation. This is furthermore verified by the statement ‘creating workforce tailored to the company’s needs by the year of graduation’ being number three. Since one of the main advantages of dual education is that the

company will get an employee by the end of the college/university programme that is aware of the specific corporate culture, is able to fit in with it and possesses the practical know-how related to the specific functional areas of corporate operations. Of the factors listed, the corporate social responsibility approach is ranked in the middle. More than half of the respondents (58.8%) believe that *dual education is an important element of corporate social responsibility*, since they assigned the scores 4 or 5. Only one respondent gave a score lower than medium. Building on the innovativity and new know-how of the young people is less typical of companies. They do not consider this really important as a motivating factor to join dual education.

Generally, no significant relationship can be demonstrated between company size and the importance of dual education. We can only identify a moderate positive correlation between company size and the importance of workforce shortage (Gamma = 0.565, approx. sign = 0.004). The larger the size, the more important dual education becomes since the company is struggling with a workforce shortage.

Companies specified the following as the *advantages of dual education*:

- The adaptability of the innovative attitude and new know-how of the youth to corporate practices;
- Creating readily deployable, tailor-made workforce that fits in with the corporate culture;
- Providing a new supply of professionals;
- Strengthening students' sense of responsibility;
- Giving the candidates knowledge tailored to the business;
- Participating students become adults sooner, learn the corporate requirements and attitudes sooner, and consequently, students participating in dual education gain a competitive advantage in this respect.
- Students' communication skills improve, they learn to argue verbally, to express their opinions and make themselves understood with others.

Respondents specified the following *drawbacks of dual education*:

- Students require corporate employees (mentors) to help them (lost time);
- Students participating in dual education are much too costly for the company (the added value created by students does not pay their wages);
- During the time spent at the company they miss out on education/and have less time for studying during the examination period, so it is difficult to balance work with studies;
- There is a risk that students will not finish their college/university education;
- That the practical training programme is to be fitted in with the academic programme might pose a problem.

As evidenced by the earlier part of our survey, dual education causes difficulties for the companies too. The two main burdens are analysed here separately:

In terms of cost, our respondents specified the following problems:

- From this school-year, wages increased rather significantly, we pay about 3-4 times last years' wages to students.



- It is a medium level burden.
- The minimum wage payable to students is not realistic. Even if the company can charge it to vocational training contribution.
- It is a small cost since this wage cost can partly be charged to vocational training contribution.
- In the first year, no costs were budgeted for students. In the next year, there were (this answer was provided by a budgetary institution).
- The return on their employment is below the break-even point.
- It is hard, especially for students regarding whom allowances can only be made to a small extent.
- It is acceptable.
- It is good; it does not cause a burden.
- HUF 2 m/person/year.
- It causes a large financial strain for small companies.
- It shouldn't be perceived as a burden (Flextronics).
- It is acceptable.
- It is rather costly for the company. Working conditions must be provided for students; requires significant energy from the mentors to manage dual educational students (time, energy, extra workload). It is a significant investment and expense.
- This sacrifice is acceptable.
- It is acceptable [in-depth interview survey, 2015].

In terms of human resources the following factors cause a burden for the company:

- In terms of human resources, employees in finance/IT and co-ordination must support the students.
- It is a medium level burden.
- The students working at our organisation are at a disadvantage since the hospital can pay them less than businesses. For the current hospital management even the monthly cost of HUF 25 000 is a headache.
- It is not a burden.
- Training and supporting students requires a significant amount of time.
- It is a medium level burden since training takes the mentors' time.
- There is no burden (this answer was provided by a budgetary institution).
- Time lost for employees.
- It is also hard, especially if students come just once a week since their activities must be planned for these days separately in advance.
- It is acceptable.
- 0.1 FTE/student (FTE – Full Time Equivalent)
- At low headcount companies it is difficult to ensure students' continuous supervision and training.
- It shouldn't be perceived as a burden.
- High.
- Requires extra energy and time from mentors.
- Requires additional arrangements and other colleagues must be persuaded to accept it too ('a pain in the neck'). [Primary research, 2015]

The picture drawn up by businesses is rather varied regarding the cost and human resources demand of dual education. Replies range from low to high burden. If we examine the answers



more closely, more responses confirmed a lower and acceptable burden in terms of costs than in terms of human resources.

It is worth highlighting one reply, however, “*It should not be perceived as a burden.*” This reply explicitly reveals that there are companies among those surveyed that approach dual education from the aspect of corporate social responsibility.

5. Conclusions

Social responsibility has grown into a *complex system of stakeholder management* with the following tasks:

- to reduce or eliminate the risks attached to certain groups of stakeholders;
- to mitigate the (adverse) impacts on stakeholders;
- to utilise the business opportunities as they present themselves with certain stakeholder groups, and
- to facilitate sustainable and successful corporate operations [Braun 2015].

Since stakeholders focus on the aspects of the triple bottom line (people, planet, profit). In the event businesses fail to manage stakeholders and fail to incorporate the values and interests expected by stakeholders in their operations, they are faced with risks and hurdles that do not allow for successful and sustainable operation [Braun 2015].

It is no wonder that the concept of shared value creation has also come to the limelight and within this context the novel form of dual education has started out in our country which connects academic education with practice. As a result, better and better qualified professionals that are better able to meet the labour market requirements leave the tertiary education. That is why we need as many initiatives to support education in the field of CSR activities as possible since expanding the knowledge of the forthcoming generation, preparing them, forming their attitude and improving their competences is a key factor in sustainable development, competitiveness and, consequently, economic growth.

We are closing the description of our research findings to date with a summary diagram illustrating the value-creating elements of dual education from the stakeholders’ point of view (*Figure 6*).

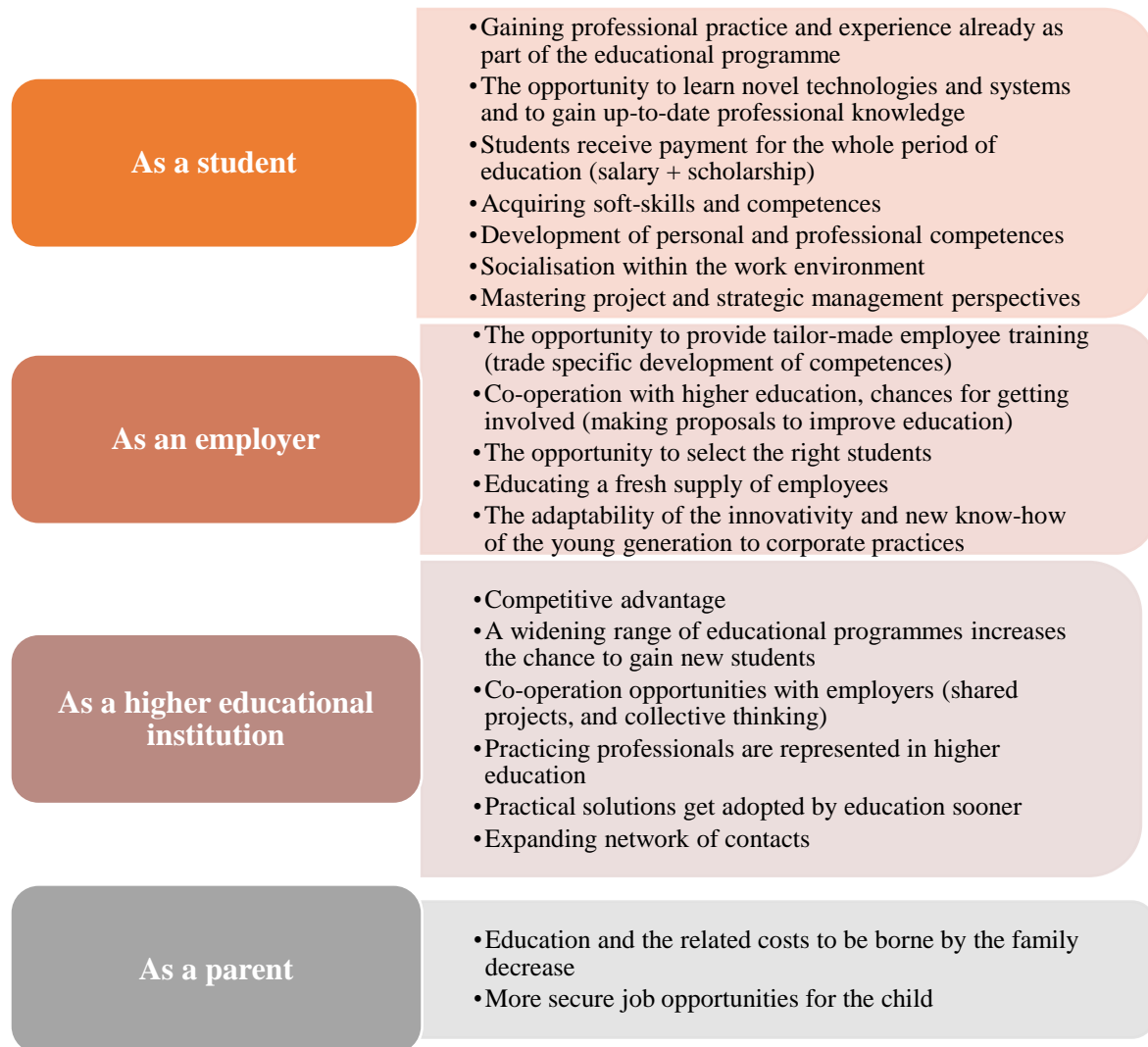


Figure 6: The determining stakeholders' value model of dual education

Source: Own compilation

In summary it can be concluded that dual education, as a new dimension of corporate social responsibility, helps prepare the upcoming generation for life and work through co-operation with educational institutions. It delivers participants for the labour market who will be able to stand their ground in international competition too.

Our research has confirmed that launching and expanding dual education is a good trajectory for higher educational institutions to follow. It is important for dual education to be present both among the strategic objectives of higher educational institutions and among the CSR practices of companies also in the future.

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