BENEFITS OF BUSINESS AND UNIVERSITY COLLABORATION IN CURRICULUM DEVELOPMENT

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Abstract. The relevance of the research In the face of increasing global competition, business was challenged to seek new methods for creating their competitive advantage and at the same time the decreasing budgets of higher education institutions were pressured to find new streams of financing. In both cases, collaboration is seen as an important method for achieving their objectives but universities of today have as well to find the appropriate balance between teaching, basic and applied research, and entrepreneurship. Ten types of university-business collaboration are related quite directly to the missions of the university and the needs of business. Curriculum development and delivery is one of that ten, which aim is to develop human resources to modern society. A summary of benefits was identified in the academic literature as arising from UBC in relation to curriculum design and delivery for multiple stakeholders including academics, students, university administration, business and community. Overall, UBC may take various forms that are influenced by different factors but even if all stakeholders seeks the main purpose of this process they may get different benefits.
The research aim was to identify the benefits of universities and business organizations in curriculum development. The objectives of the research: to determine the instruments and activities used for universities and business organizations collaboration, to identify universities and business organizations benefits from collaboration to the various stakeholder groups.

Analysis of recent research and publications. UBC became the subject of education and management sciences. P. D'Este and M. Perkmann explored the factors of UBC, the types were identified by T. Davey, T. Baaken, V. Galan Muros, A. Meerman, T. Barnes, A. Gibbons and the levels of UBC were represented by B.N. Ponomariov, P.C. Boardman, T. Davey, R. Laužackas. The benefits of UBC to research quality have been studied by researchers T. Davey, M. Crespo, N. Carayol, H. Forsyth, R. Laxton, S. Lamichhane, T. Nath Sharma, P. Van der Sijde and H. Dridi, as a collaborative factor for learning improvement by researchers K. Ramakrishnan, N.M. Yasin, A. Draghici. An overview of the study of this object shows that it was mostly analysed in vocational training and in last ten years’ period the publications is growing in UBC. Research methodology. The paper seeks to represent the UBC benefits for different stakeholders and collaboration forms, which was used by university with the business organizations from leisure industry. Quantitative research was used to gain quantify opinions of benefits and instruments of UBC – and generalize results from a larger sample population. Methods applied for the research was scientific literature review, a questionnaire survey for business organization leaders and mathematical statistics.

Conclusion. The benefits of the UVB were grouped according to the type of stakeholder's: society, university administration, academics, entrepreneurs, students. The benefits of business stakeholders include additional funding, access to education resources, lecturer and coordinator, support in evaluating the program and developing new study subjects. The highest rated benefit to others stakeholders from their view could be reducing academic staff training costs, as well as business information available to student projects,
Benefits of business and university collaboration in curriculum development and student employment opportunities and human resource development in the region.

**Keywords**: university and business collaboration, UBC benefits, UBC collaboration forms, curriculum performance, business collaboration in curriculum.

**University and business collaboration benefits in curriculum development.**

In the political and scientific area, UBC is increasingly becoming the subject of heated debate and it has different meanings for both parties. An overview of scientific literature has shown that for academicians best appreciated advantage in collaboration with the business is reach the knowledge in practice, integrate that information into the higher education system, obtain funds for research or find the sponsors [4]. From the business position, the collaboration has been a shift toward the acquisition of knowledge with an academic base, which can then be transformed into production [14]. This helps business organizations to compete with others in the industry.

According to this an extensive study among European universities [5] and other studies [6, 22, 28], there were identified ten types of UBC, which are related quite directly to the missions of the university (Education, Research and Entrepreneurship) and the needs of business (Entrepreneurs, Qualified employees, Innovation, Turnover and profit): Curriculum development and delivery, Lifelong learning, Student mobility, Academic mobility, Commercialization in R&D, Entrepreneurship, Governance, Resource (facilities, equipment & data), Sharing and popularization of science in the Media. Five forms of outlined collaboration are particular relevance to education collaboration, although all of them can play an important role.

Collaboration between universities and businesses can be in various types and at the various levels, it is also taking place in different ways, depending on the type of institution involved, and the specifics of the individual areas of science. It can argued that relationships are often supported by a variety of communication mechanisms, such as research collaboration, industrial contribution to the development of study programs, student support and recruitment, and the exchange of
scientific staff [20]. There is also the cultural divide between how universities and business operate [17], think and behave [19]. As long as there is mutual benefit, an access to expert researchers with innovative capacity and a needed stream of funding for universities, the collaborations between universities and business will continue.

A series of benefits for European UBC were identified through literature but the importance and benefits of collaboration between universities and business in this context is seen due to its effects for various stakeholder groups [4, 9, 19, 27]: academics, students, university administration, business and community.

Most noted benefits in the literature for the community were growing employability, growing local gross, domestic product and disposable income, social and recreational benefit creation [6].

The benefits for the administration according to the other researchers were are ability to improve the quality of studies, the emergence of innovation, availability for additional government and business funding [3], possibility of implementation of the university missions [6]. The most significant benefit for the university is that recent interactions between business have brought academic science closer to business [8].

The academics in collaboration with the business increase the competence in the business world, informs teaching curriculum design and delivery [4, 19], provides inspiration for teaching [27], provides understanding of companies as well as the current challenges and management topics [12], helps to become an important part with their research, increase the possibilities for additional funding and employability [6].

There is increasing pressure from government on universities to provide opportunities for higher education students to acquire and develop the skills and attributes required by business. During UBC students exposure to interesting and relevant “Real world” problems adding a valuable dimension to learning process, provides current and future employment opportunities [1, 7, 18, 19, 23], improves preparation for future professional challenges in industry [2, 6], increase practical skills knowledge and experience [4, 18, 27], provides industry mentors from industry for developing future career ladders [16], improves quality of his experience [9], improves learning experience [6] and the student's competence corresponds more to the business world.

According to the business it seems that collaboration with the university provides candidates for internship [24], allows identification of talented young people with the best fit in: to increase their competitiveness and innovation [9, 12], brings new skills, fresh enthusiasm and new perspectives, reduces cost in hiring, improves attractiveness as prospective employers [12], improves relevance of education to industry [9], might get additional government funding, increase revenue from licenses [3],
increase business efficiency and improves business performance [6].

Universities collaboration with the business in curriculum development has received very little academic attention [25], despite its widespread practice [5, 15], and its ability to enrich education [4, 9]. The curriculum delivery is still seen as the delivery of programs, courses and content to the students via a large range of mechanisms [5]. A lot of growing reports about the benefits [5, 21, 26] relating to business and universities co-designing and co-delivering curricular and developing practices aimed at supporting such collaborations, there was also investigated the instruments driving business engagement in curriculum-related activities and achieving an alignment of business needs with universities offers [22]. Even if the collaboration of universities with the business was analysed in different levels, the emerging problems is still addressed to the university or business organization itself or their members.

The business organizations rely on universities to deliver qualified and skilled employees and universities rely on business to provide work placements for their students and to employ their graduates [22]. Now universities face strong pressures to marry theoretical understanding with real-life practice to ensure high levels of graduate employability [11, 22] by advancing and modernising their curricula. So all types of the university and business collaboration relays also on curriculum development. The most successful partnerships are built on trust, having a common vision and seeing mutual benefits.

UBC benefits for all stakeholders illustrates that are many ways in which businesses and universities could work together. The most important thing in curricular development is that the business engaged in curriculum design, curriculum delivery and curriculum evaluation. Engaging with the universities in curricular design, delivery and evaluation not only allows business to influence the education of the future workforce but engage with prospective future employees throughout their educational experience [22].

**Research methodology**

Based on a thorough literature review were identified universities and leisure organizations benefits in curriculum development. For this study purpose it was organized the quantitative research with the Lithuanian Sports university (LSU) social partners from business leisure organizations. Quantitative research was used to gain quantify opinions of benefits of UBC – and generalize results from a larger sample population. This research is based only on the opinion of leisure business organizations leaders who are the LSU social partners. LSU has 221 social partners but only 24 are from business organizations. All the 24 leisure business organization leaders were asked to participate and fulfil the survey questionnaire as the respondents for this research from October to December of 2017. Questionnaire was used as data
Collection instrument and the benefits were divided according to the group of the stakeholders. In questionnaire it was used the five point Likert-scaled ranging. The validity of questionnaire was checked by two senior and well experienced educators of Sport management, economy and sociology department. Data of the research was processed by mathematical analysis.

**Results**

The research results showed that the minority of business organization leaders from the leisure industry thinks that the bets benefit of UBC to community (Figure 1) is growing employability (4,58) and that it helps to improve the regional productivity (4,33). The less important benefit according business is the growing local gross (3,62). This confirms that there is a strong link between growing employability and growing student’s employability which is higher if the university collaborates with the business during students practises and etc.

![Figure 1. UBC benefits for community.](image)

The Figure 2 shows that business organizations don’t see a lot of benefits for university administration. The least benefit obtained from UBC according to business it could be implementation of the university missions (3,12). The most benefit obtained from the UBC are additional government and business funding (4,37) and possibility to improve the quality of studies (4,33).

![Figure 2. UBC benefits for administration.](image)

The benefits for academics is shown in Figure 3. According to the results the maximum benefit for academics is to increase the possibilities for additional funding and employability (4,83), provide
understanding of companies as well as the current challenges and management topics (4,58). Leisure industry business leaders don’t think that the UBC could provide the inspiration for teaching (2,91) or academics become an important part with their research in the business (2,7).

**Figure 3. UBC benefits for academics.**

<table>
<thead>
<tr>
<th>Benefit</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increase the possibilities for additional funding and employability</td>
<td>4,83</td>
</tr>
<tr>
<td>Provides understanding of companies as well as the current challenges and management topics</td>
<td>4,58</td>
</tr>
<tr>
<td>Increase the competence in the business world</td>
<td>3,75</td>
</tr>
<tr>
<td>Informs teaching curriculum design and delivery</td>
<td>3,66</td>
</tr>
<tr>
<td>Provides inspiration for teaching</td>
<td>2,91</td>
</tr>
<tr>
<td>Become an important part with their research</td>
<td>2,7</td>
</tr>
</tbody>
</table>

Most appreciated benefits of university and business collaboration evaluated by business were for students. Figure 4 shows that leisure industry business leaders see the greatest benefits for students to increase their practical skills, knowledge and experience (5), it is opportunity to improve the quality of his experience (4,79) and as well helps to improve the learning experience (4,37). The less important benefit according business is the UBC helps to improve the student’s preparation for future professional challenges in industry (3,62).

**Figure 4. UBC benefits for students.**

<table>
<thead>
<tr>
<th>Benefit</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increases practical skills knowledge and experience</td>
<td>5</td>
</tr>
<tr>
<td>Improves quality of his experience</td>
<td>4,79</td>
</tr>
<tr>
<td>Improves learning experience</td>
<td>4,37</td>
</tr>
<tr>
<td>Provides industry mentors from industry for developing future career ladders</td>
<td>4,2</td>
</tr>
<tr>
<td>The student’s competence corresponds to the business world</td>
<td>4,08</td>
</tr>
<tr>
<td>Exposure to interesting and relevant “Real world” problems</td>
<td>3,95</td>
</tr>
<tr>
<td>Provides current and future employment opportunities</td>
<td>3,75</td>
</tr>
<tr>
<td>Improves preparation for future professional challenges</td>
<td>3,62</td>
</tr>
</tbody>
</table>

The last group was the benefits of UBC for the business. As you can see in the figure 5 the most appreciated benefits were that UBC helps to reduce the cost of hiring (4,87), the business can get the government...
funding (4.87), helps to improve the attractiveness as prospective employers (4.58) and provides candidates for the internship (4.58). According to the leisure industry business leaders (LSU social partners) the collaboration with the university do not achieve the increasing revenue from licenses (1.04) and as well do not improve the relevance of education to industry or business (2.91).

**Figure 5. UBC benefits for business (leisure organisations).**

<table>
<thead>
<tr>
<th>Benefit</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reduces cost in hiring</td>
<td>4.87</td>
</tr>
<tr>
<td>Additional government funding</td>
<td>4.87</td>
</tr>
<tr>
<td>Improves attractiveness as prospective employers</td>
<td>4.58</td>
</tr>
<tr>
<td>Provides candidates for internship</td>
<td>4.58</td>
</tr>
<tr>
<td>Allows identification of talented young people with the best fit in: to increase their competitiveness and...</td>
<td>3.37</td>
</tr>
<tr>
<td>Brings new skills, fresh enthusiasm and new perspectives</td>
<td>3.33</td>
</tr>
<tr>
<td>Increases business efficiency and improves business performance</td>
<td>3</td>
</tr>
<tr>
<td>Improves relevance of education to industry</td>
<td>2.91</td>
</tr>
<tr>
<td>Increasing revenue from licenses</td>
<td>1.04</td>
</tr>
</tbody>
</table>

According to the research results it seems that the business knows the benefits for all the stakeholders of the university, but probably university has to build stronger links with business, suggesting that business should be more involved in all collaboration forms and especially in curriculum performance and licenses. Business still need to extend the UBC types in their organizations, engage in more activities which are very important for curriculum development and use all instruments/methods they could.

**Conclusion**

The most commonly established collaboration instruments during university and leisure business organizations were guest lecturers, internships, student’s consultations for final papers and being the member of the study program committee. The benefits of the UVB were grouped according to the type of stakeholder's: society, university administration, academics, entrepreneurs, students. The benefits of business stakeholders include additional funding, access to education resources, lecturer and coordinator, support in evaluating the program and developing new study subjects. The highest rated benefit to others stakeholders from their view could be reducing academic staff training costs, as well as business information available to student projects, skills development and student employment opportunities and human resource development in the region.
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покращенні змісту навчання. Задачами дослідження є наступні: розробити інструменти і види діяльності, за допомогою яких університет співпрацює з бізнесом; ідентифікувати переваги співпраці між університетом та зацікавленими сторонами у покращенні змісту навчання. Аналіз останніх досліджень і публікацій. З формуванням третьої університетської місії співпраця між університетом і бізнесом широко аналізувалася не тільки у сferі управління, але й у сфері природничо-наукової освіти. Результати дослідження демонструють тільки думку представників бізнесу про переваги, які отримують зацікавлені сторони. Для дослідження було застосовано наступні методи: аналіз наукової літератури, анкетування і дослідження даних, які були оброблені математичним аналізом. Висновки. Перевага співпраці між університетом і бізнесом з метою покращення змісту програм навчання були розділені перевагою зацікавленими сторонами: громадськість, адміністрацію університету та його засновників, вчені, студенти і бізнес. Самою великою перевагою та зиском бізнесу є можливість додаткового фінансування у рамках різних проектів у співпраці з університетом та перепідготовкою співробітників. Переваги вагомі і в співпраці між університетом і бізнесом у вигляді проведення лекцій студентам, участі у студентській практиці, покращення та оцінки змісту навчальних програм.

Ключові слова: університетсько-ділова співпраця, переваги співпраці університету та бізнесу, форми університетсько-ділової співпраці, покращення змісту програм навчання, співпраця бізнесу у змісті навчання.

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ПРЕИМУЩЕСТВА СОТРУДНИЧЕСТВА МЕЖДУ УНИВЕРСИТЕТОМ И БИЗНЕСОМ С ЦЕЛЬЮ УЛУЧШЕНИЯ СОДЕРЖАНИЯ УЧЕБНЫХ ПРОГРАММ

Аннотация. Актуальность исследования проявляется в том, что преимущества различных форм сотрудничества между университетами и бизнесом проявляются через различные заинтересованные стороны: общества, администрацию университета и его основателей, ученых, студентов и бизнеса. Десять типов сотрудничества УВС напрямую связаны с миссиями университетов и потребностями бизнеса, которые прямо или косвенно приносят пользу обеим организациям. Это исследование акцентирует внимание на преимуществе сотрудничества между университетами и бизнесом через содержание, разработку, реализацию и оценку содержания учебных программ.

Benefits of business and university collaboration in curriculum development
Цель исследования – выявить преимущества сотрудничества университета и бизнеса в улучшении содержания обучения. Задачами являются: разработать инструменты и виды деятельности, с помощью которых университет сотрудничает с бизнесом; идентифицировать преимущества сотрудничества между университетом и заинтересованными сторонами в улучшении содержания обучения. Анализ последних исследований и публикаций. С образованием третьей университетской миссии сотрудничество между университетами и бизнесом широко анализировалось не только в области управления, но и в сфере естественно-научного образования. P. D'Este и M. Perkmann исследовали преимущества сотрудничества между университетами и бизнесом; типы сотрудничества были идентифицированы T. Davey, T. Baaken, V. Galan Muros, A. Meerman, T. Barnes, A. Gibbons; уровни сотрудничества между университетами и бизнесом были представлены учеными B.N. Ponomariov, P.C. Boardman, T. Davey, R. Laužackas. Больше всего о преимуществах сотрудничества между университетами и бизнесом на разных уровнях исследовали T. Davey, M. Crespo, N. Carayol, H. Forsty, R. Laxton, S. Lamichhane, T. Nath Sharma, P. Van der Sijde and H. Dridi, K. Ramakrishnan, N.M. Yasin, A. Draghici. Обзор исследования показывает, что это был анализ обучения без отрыва от производства и обучения без отрыва от работы в UBC. Методология исследования. Для анализа объекта исследования было выбрано количественное исследование, в котором приняли участие социальные партнеры Литовского университета спорта, представляющие организации бизнеса. Результаты исследования демонстрируют только мнение представителей бизнеса о преимуществах, которые получают заинтересованные стороны. Для исследования были применены следующие методы: анализ научной литературы, анкетирование и исследованием данных, которые были обработаны математическим анализом.

Выводы. Преимущество сотрудничества между университетами и бизнесом в улучшении содержания программ обучения были разделены по преимущество получающим заинтересованным сторонам: общественность, администрации университета и его основатели, ученые, студенты и бизнес. Самым большим преимуществом и выгодой бизнеса является возможность дополнительного финансирования в рамках различных проектов при сотрудничестве с университетами и переподготовка сотрудников. Преимущества заметны и в сотрудничестве между университетами и бизнесом в виде проведения-лекций студентам, участия в студенческой практике, улучшения или оценки содержания учебных программ.

Ключевые слова: университетско-деловое сотрудничество, преимущества сотрудничества университета и бизнеса, формы университетско-делового сотрудничества, улучшение содержания программ обучения, сотрудничество бизнеса в содержании обучения.

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