

# PREFERENCES OF POTENTIAL APPLICANTS FOR UNIVERSITY EDUCATION AND THE “LEARNING ECONOMY”

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## Abstract

In the current postmodern society, knowledge is still more important. Also corresponding with this fact are the development theories which have been developed from the theory of learning organisation, the theory of learning regions to the relatively new term “learning economy” used in some current publications (e.g. Lam, Lundvall, 2006). Knowledge, learning process and education become an integral part of personality development and also the development of the whole of society. The concept of the “learning economy” is based on the responsibility of each member of society for its education and individual knowledge dynamics and also is based on the responsibility of the whole of society for the collective knowledge dynamics as a prerequisite of its successful development. In this context, the paper is focused on the preferences and ideas of potential applicants for university education within the process of the choice of universities. The main factors which influence the decision-making process of potential applicants for university education are examined by using quantitative empirical research. The correspondence of these factors, preferences and ideas with the requirements of the “learning economy” is also analysed. Attention is also paid to the responsibility of potential applicants for university education for the creation of their knowledge and knowledge dynamics (mainly codified and scientific knowledge are the focus of this paper).

## Key Words

education, knowledge, learning economy, preferences, university

## Introduction

Current society is often called a knowledge society and this results in the logical common effect which is possible to be described as a focus of society on human resources from the perspectives of knowledge, skills and qualifications. From these facts, the concept of knowledge emerges as the most strategic resource, with learning as the most important process (Lundvall 1995). Qualifications (qualifications of people living in a particular delimited area, which consists not only of the educational structure, but also of the ability to be self-educated using more or less formalised methods and to use the knowledge and skills gained to increase the quality of life within the area) are therefore regarded as one of the main factors of development potential, not only from the individual aspect, but also from the regional and societal points of view.

Despite the fact that the learning process is not a complete guarantee of economic success, it still remains a universal cure for the problems of socio-spatial inequalities. Innovations and learning are important features in understanding why some firms or regions are economically successful and some are not (Hudson 1999b). Firms use quasi-rent, which results from the possibility of using the knowledge potential and skills of a locality or region (not only of the individuals living in the locality, but also the synergic effect of sharing knowledge). Firms are localised on the basis of the capacity of localities or regions, which is formed in particular by the infrastructure, natural resources, institutional endowment and knowledge available within the locality (Maskell, Malmberg 1999a). From these perspectives, knowledge becomes one of the most important locational and developmental factors. Murdoch (1995) claims that the type of available knowledge and information is less important than the significance which is attributed to particular

institutional assets. However, other authors (e.g. R. Hudson, A. Malmberg, P. Maskell – see below) consider the type of available knowledge as a crucial developmental factor.

Knowledge is often classified as codified and tacit because there is a significant difference between these basic types. Codified knowledge is possible to be standardised and transferred by instructions, manuals, education, and it is possible to be sold as goods. Tacit knowledge (e.g. know-how, skills and competences) is possible to be acquired only directly by one's own experience and participation in a particular activity (Hudson 1999a). Knowledge is difficult to grasp. Knowledge assets provide valuable services and they have potential economic value. Compared to physical assets, it is possible to share knowledge without the loss of it by its owner. Knowledge sharing does not decrease the usefulness of knowledge, but it decreases its value. Shared knowledge loses its scarcity. In this context, it is possible to debate about the codification of tacit knowledge, because codified knowledge itself represents an instrument for the production of new knowledge (Maskell, Malmberg 1999b).

This concept of knowledge is typical of the individual, organisational and regional levels, but current conceptualisation is shifting away from these levels to the whole of society, by use of the term, "learning economy". Nielsen and Lundvall (2006) define the "learning economy" as one in which the ability to attain new competencies is crucial to the performance of individuals, firms, regions and countries. Recent decades have been characterised by an acceleration of both knowledge creation and knowledge destruction. Information and communication technology has made a lot of information more easily accessible to a lot of people, but it also has made many skills and competencies obsolete.

These facts result in the new typology of knowledge, using a combination of two criteria – individual or collective entity and explicit (codified) or tacit knowledge. On this basis, Lam and Lundvall (2006) create the typology of four different forms of knowledge – embrained, embodied, encoded and embedded. Embrained knowledge is possible to be characterised as individual and explicit (codified), which is dependent on the individual’s conceptual skills and cognitive abilities. It is formal, abstract or theoretical knowledge. It is typically learnt through reading books and by formal education. Embodied knowledge is possible to be characterised as individual and tacit, which is action oriented. It is the practical, individual type of knowledge which is learnt through experience and training based on apprenticeship relations. Encoded knowledge is possible to be characterised as collective and explicit (codified), which is shared within organisations through formal information systems. Any member of an organisation can easily gain access to relevant databases using information technology. Encoded knowledge is formed by making explicit as much as possible of tacit knowledge. Embedded knowledge is possible to be characterised as collective and tacit, which is built into routines, habits and norms that cannot easily be transformed into information systems. Embedded knowledge is produced by an interaction among different members of the organisation. It is relation-specific, contextual and dispersed.

On this basis, it is possible to conceptualise the “learning economy” more precisely as an economy in which individuals, firms and even national economies will create wealth and gain access to wealth in proportion to their capacity for learning. This will be true, regardless of their present level of development and competence (Lam, Lundvall 2006). Tacit knowledge (embodied and embedded) is at the centre of attention of many

authors (e.g. R. Hudson, A. Lam, B. A. Lundvall, A. Malmberg, P. Maskell) because it is regarded as crucial for development, using the endogenous concept of development. Attention given to codified/explicit knowledge (embrained, encoded) is usually minor. But the research on regional and local development empirically acknowledges the suitability and applicability of a mixture of endogenous and exogenous approaches to regional development and, from this point of view, codified/explicit knowledge is also important (Husák 2010).

Therefore, this paper is focused on the types of knowledge which are also significant for the development of individuals, localities, regions and even national economies, as also acknowledged by Lundvall (2001) when considering educational systems. Educational systems should be geared to encourage the ability to learn mainly for weak “students”. The first of the components is to use modern information and communication technologies, such as, for example, multimedia. The second component is the regulation of the possibility and equality of access to modern information and communication technologies for disadvantaged individuals, less developed regions and national economies (Lundvall 2001).

## Material and Methods

The paper is focused on the preferences of potential applicants for university education within the process of university choice, in the context of the knowledge based economy or “learning economy” as defined above. From this fact results the attention which is paid mainly to embrained and encoded knowledge as a special type of codified knowledge (Lam, Lundvall 2006). Focus is also on the preferences of potential students before entering a university, because universities are one of the most important sources of codified knowledge. Universities are expected to be

active in the process of the creation of a knowledge society or “learning economy” and they play an important role within this process. This is mainly because of their twofold traditional vocation of research and teaching. However, they are also confronted with new specific challenges, mainly the new public funding mechanism, competition for grants and research contracts and the evaluation of outputs (Margarisová, Šťastná, Stanislavská 2010). As also claimed by Rymešová and Kolman (2010), a university is not only a definitive component in a student’s choice of career, but is also important in its graduates’ career paths. Thus the preferences of potential applicants for university education significantly influence their professional careers and vicariously also knowledge dynamics within society.

The main aim of this paper is to identify and analyse the preferences of potential applicants for university education within the process of university choice and to compare these preferences with the demands of the “learning economy”. On the basis of this aim and the theoretical background, it is possible to formulate three main research questions:

1. What are the preferences of potential applicants for university education within the process of university choice?
2. Do these preferences correspond with the demands of the postmodern society and the “learning economy”?
3. How are potential applicants responsible for the creation of their knowledge and the knowledge dynamics?

From the methodological point of view, mainly standardised interviews with potential applicants for university education were used. These interviews were conducted in the International Education and Lifelong Learning Exhibition Gaudeamus in

Prague and Brno during the years 2009 and 2010. The Answer Sheet consisted of 34 standardised questions considering three main topics – the previous education of applicants, their preferences within the process of university choice and identification questions. Statistical software SPSS and simple descriptive statistics (mean, median, skewness and kurtosis) were used in the analysis of the data. The Chi-square test, appropriate coefficients for nominal and ordinal variables and Z-scores were also used for testing of the dependency of variables and their degree –according to Hendl (2009) and Řezanková (2007).

A random selection of respondents at the International Education and Lifelong Learning Exhibition Gaudeamus in Prague and Brno was used for the quantitative empirical research. A sample population was defined as people (participating at the Gaudeamus Exhibition) of the age of 18 years and older, who have achieved the highest level of secondary education (previously, or in the current year) and who are actively interested in the choice of university education. On the basis of this random choice, a sample with the characteristics stated below was chosen. The total number of respondents who were listed in the analysis was 196 – 129 women and 67 men. This disproportion results from the generally higher participation of women in the choice of an appropriate university, corresponding also to the structure of visitors to the Gaudeamus Exhibition. The age structure of respondents also corresponds to the structure of visitors to the Gaudeamus Exhibition and also to those people actively interested in university choice. 62.2% of respondents were younger than 19 years, 11.7 % were between 20 – 25 years, 15.3 % between 26 – 35 years and 10.7 % of respondents were older than 36 years.

Also the structure of respondents according to gainful activity corresponds to the general structure of visitors to the Gaudeamus Exhibition and the structure of potential applicants. 66.8 % of respondents were not employed full-time and 33.2 % of respondents were possible to be characterised as gainfully employed. For representativeness of the sample, regional structure is also important. The sample consists of respondents from 52 districts of the Czech Republic – most respondents were from Prague (27%). 36.9% of respondents had their permanent residence within municipalities of more than 100 000 inhabitants and 18.5% of respondents lived in villages with less than 2000 inhabitants, which closely corresponds to the distribution of population within this category of municipalities. From the characteristics of the sample stated above, it is clear that the sample could be considered as a representative selection from the sample population as defined above.

## Results

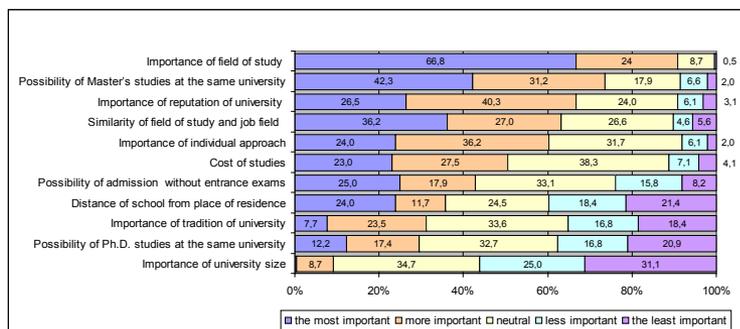
### Whole sample results

The empirical section is divided into two important parts. The first part is focused on the results related to the whole sample of population and the second part provides results concentrated on the differences among the chosen groups of potential applicants.

Figure 1 depicts the preferences of 11 factors which are important for potential applicants for university education during the process of university choice. The factors are ordered from the most important to the least important according to the “top two boxes”. The most preferred factor is the field of study which is important or the most important to 90.8% of respondents. In addition, the possibility of obtaining a Master’s

degree at the same institution, the reputation of the university, similarity between the field of study and field of employment, and an individual approach to students were among the most highly preferred factors (all of these are important or the most important to more than 60% of respondents). Among the least preferred factors are the distance of the institution from the place of residence, the tradition of the university, the possibility of obtaining a Doctoral degree at the same institution and the size of the university.

On the one hand, a positive factor, from the viewpoint of the knowledge society and “learning economy”, is possible to be evaluated from the special emphasis placed on the preferred field of study and the aspiration of attaining a Master’s degree at the same university. Thus potential applicants appreciate the importance of a Master’s education in their preferred field of study for their future careers, which is also significant for the knowledge dynamics within society. On the other hand, the lesser importance of a Doctoral education could be evaluated as a problem due to the increasing importance of post-graduate education within the postmodern society, particularly in the context of the increase in persons with Bachelor’s and Master’s education within the present society.

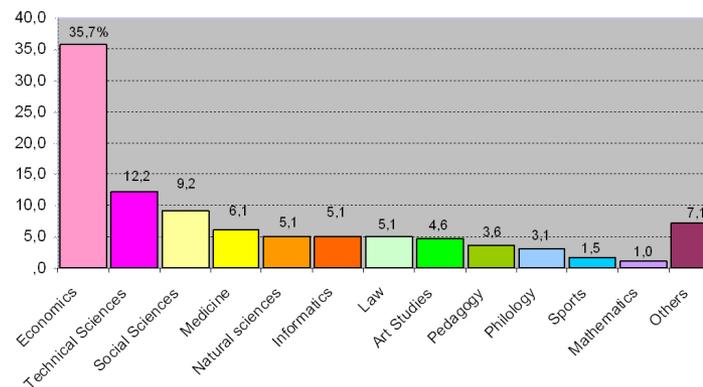


**Figure 1: Importance of factors during the process of university choice**

Considering the field of study as the most preferred factor, which is important or the most important to more than 90% of respondents, it is also important to examine the particular fields of study which are preferred by potential applicants. The most preferred field of study is Economics for almost 36% of respondents (Figure 2) – it is significantly higher than the other fields of study. Preferences for the other fields of study are evenly distributed among them, with only Technical and Social Sciences (excluding Economics) being slightly more preferred than the others.

Therefore, the question is whether the preferences for particular fields of study correspond to the demands of current society and the “learning economy”. On the one hand, Economics and the Social Sciences (with almost 45%) provide a general education which is required by current society, particularly when considering the concept of endogenous development and the significance of tacit knowledge (embodied and embedded). Education in Economics and the Social Sciences assists in cooperation within the community by the use of social capital and

trust and, from this perspective, codified knowledge is directly connected to tacit knowledge (with regard to the appreciation of the significance of local and regional identity). But, on the other hand, the preferences for the Technical Sciences (12.2%) could be regarded as a potential problem for the future development of society, from the point of view of exogenous development (where technical innovations are preferred), especially if a mixture of endogenous and exogenous development is suitable, applicable and currently also the most preferred (Husák 2010).



**Figure 2: Preferred field of study**

The concept of the “learning economy” also anticipates the responsibility of individuals for their education and knowledge creation. Factors chosen for the evaluation of the responsibility of potential applicants are commuting distance, commuting time and willingness to pay study fees. Because these factors do not rank among the most important, it is possible to anticipate that potential applicants are responsible for their education, but only a detailed analysis could provide an accurate view. The average distance which respondents are willing to commute is

126 km, but the median is only 100 km (Table 1). A comparison of the mean and median and also the value of skewness indicate a predominance of the lower values within the sample of respondents. It is necessary to evaluate these results together with the commuting time. The average commuting time is 115 minutes and the median is 120 minutes (Table 2). A detailed insight into this factor shows that 28% of respondents are immediately willing to commute for 60 minutes and 16.3% of respondents are not willing to commute at all. From these facts, it is possible to deduce that, from the commuting point of view, the responsibility of potential applicants towards university education is rather less, but a few potential applicants appreciate the significance of education and particularly education in their preferred field of study (there are a few exceptions within the sample of respondents).

mean	126.56 km
median	100 km
skewness	2.316
kurtosis	6.069

**Table 1: Commuting distance**

mean	115.47 min.
median	120 min.
skewness	2.219
kurtosis	6.924

**Table 2: Commuting time**

The willingness to pay study fees is another indicator of the responsibility of individuals for their education and knowledge creation. The results of this indicator are depicted in Table 3. The first important fact is the number of missing answers (25% of respondents). These respondents could not answer the question about the amount of study fees because they did not have any idea about it (as results from the standardised interviews

indicate). It probably results from only a low awareness of the costs of university education and the idea still persisting about free education (or that education costs nothing). But the average amount of study fees that respondents are willing to pay is 17 292,- CZK per semester and the median is 20 000,- CZK per semester. These amounts are similar to the actual study fees at private colleges and within the lifelong learning programmes at public universities. It is significant to consider the skewness predominance of the lower values of study fees within the sample of respondents. Almost 15% of respondents are willing to pay study fees of less than 10 000,- CZK per semester and more than 33% of respondents are willing to pay study fees of between 10 000,- and 15 000,- CZK per semester. From this point of view, the responsibility of potential applicants for university education is rather low.

mean	17 292 CZK
median	20 000 CZK
skewness	1.209
kurtosis	3.559
No. of answers	147
No. of missing answers	49

**Table 3: Willingness to pay study fees**

### Results according to chosen groups

Besides the results related to the whole sample of the population, the results concentrated on the differences among the chosen groups (mainly economic activity and size of residence) of potential applicants are also considered. The first test of dependency is focused on the dependency of the willingness to pay study fees and the economic activity of respondents. This analysis indicates differences among the groups of economically active and economically inactive respondents (= students within

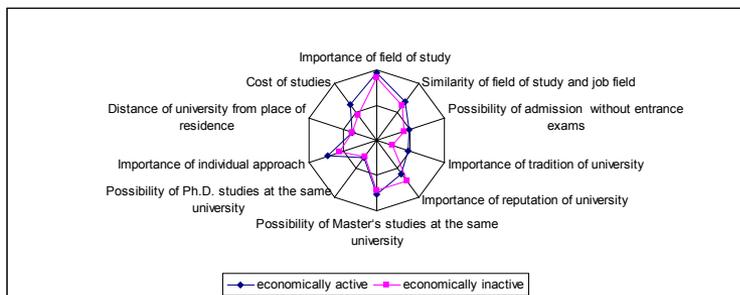
this research) considering the responsibility for education and codified knowledge creation. The created Contingency Table shows that 41.5 % of economically inactive respondents and even 62.2 % of economically active respondents are willing to pay study fees of less than 20 000,- CZK per semester, demonstrating significant differences among the chosen groups. Table 4 displays the results of the tests of the Contingency Table. The tested null hypothesis states that dependency does not exist between the willingness to pay study fees and the economic activity of the respondents. This statement denies the alternative hypothesis. According to the results of the Chi-square test, it is not possible to reject the null hypothesis at 5% significance level, but it is possible to reject the null hypothesis at 10% significance level. Thus the Chi-square test confirms a dependency between the willingness to pay study fees and the economic activity of respondents at a 10% significance level. If Z-scores are applied to the Contingency Table, it is possible to state that economically inactive respondents are willing to pay higher study fees. Considering the coefficients of contingency and the values of Z-scores, the dependency between the variables is rather weak. It is possible to derive from this analysis that economically inactive applicants are more responsible for their education and knowledge creation than economically active applicants. Analysis of the age structure of potential applicants (economically inactive respondents are younger than economically active respondents) and the willingness to pay study fees also provides similar results. From this point of view, the younger generation seems to be more responsible for its knowledge creation and education than the “older” generation. Thus the attitude of the younger generation to education better corresponds with the demands of postmodern society and the “learning economy”.

	Value	P-Value
Pearson Chi-Square	7.523	0.057
Phi	0.226	0.057
Cramer's V	0.226	0.057
Contingency Coefficient	0.221	0.057

**Table 4: Tests of Contingency Table – Economic activity vs. Willingness to pay study fees**

Attention is also given to the differences of the preferred factors among the economic activity of respondents. For this purpose, a “spider graph” which shows the importance of factors during the process of university choice for economically active and economically inactive applicants, was created (Figure 3). The results are displayed according to the “top two boxes”. It is possible to see a significant difference in only four factors. The cost of studies, the tradition of the university and the importance of an individual approach are significantly more important to economically active respondents. The reputation of the university is the only factor which is more important to economically inactive respondents.

Generally, all the factors (except the reputation of the university) are more preferred by economically active respondents. These potential applicants usually have a clear idea about their further education and knowledge creation to answer the demands of the “learning economy”. But an analysis of the willingness to pay study fees, as represented above, shows that they are also very careful in considering the cost of studies and, from this point of view, could be considered less responsible for their education. On the one hand, economically inactive applicants are usually nondescript, but on the other hand, they are more flexible in their preferences. A flexibility of their attitude to knowledge creation and the educational process is their significant advantage, considering the demands of postmodern society.

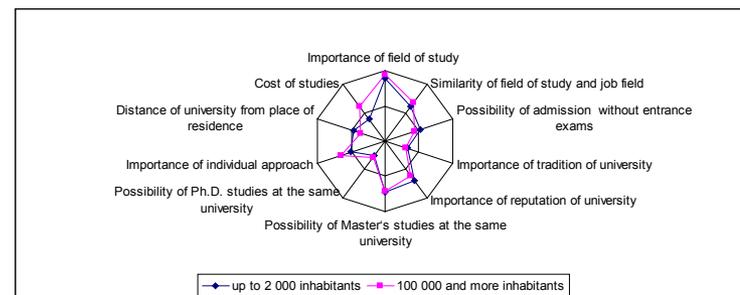


**Figure 3: Preferences according to economic activity of potential applicants – “spider graph”**

An analysis of the differences between the groups of applicants from rural municipalities (according to the Czech Statistical Office definition – municipalities of up to 2000 inhabitants) and applicants from big cities with more than 100 000 inhabitants provides another important insight into the preferred factors and responsibility of potential applicants. For this purpose, a “spider graph”, which shows the importance of factors during the process of university choice for applicants from rural municipalities and also from big cities, was created (Figure 4). The distribution of the importance of factors is rather equable – four factors are more preferred by respondents from big cities, three factors are more preferred by respondents from rural municipalities and three factors are similarly preferred by both groups.

Considering the particular factors, applicants from big cities seem to be more prepared for the demands of the “learning economy” (importance of field of study, similarity of field of study and job field, individual approach, as well as the cost of studies, which seems to be slightly contradictory). Applicants from rural municipalities mainly prefer factors which facilitate

entrance to universities and also the whole educational process (admission without entrance exams and distance of school from place of residence). On the one hand, these facts could indicate a higher responsibility of applicants from big cities, but on the other hand, also simpler access to universities and to knowledge creation generally.



**Figure 4: Preferences according to size of residence of potential applicants – “spider graph”**

## Discussion

Knowledge is one of the most important sources of the development of localities, regions and also national economies. This fact is also reflected in the theoretical concepts which emphasise the role of knowledge and knowledge dynamics. These theoretical concepts evolve from the concepts of learning organisations, learning regions to the relatively new concept of the “learning economy”. Attention is paid mainly to tacit (embodied and embedded) knowledge, which is usually regarded as a source of competitiveness of firms, regions and national economies. Less attention is paid to explicit or codified knowledge (embrained and encoded) which is also important,

mainly considering innovations, as well as support for tacit knowledge creation.

Therefore, knowledge both tacit and codified, is important for the development of individuals, regions and society as a whole. But the question is, how does it function in practice? What are the preferences of potential applicants for university education and do these preferences correspond to the demands of current society? How are these facts reflected within the university educational system of the Czech Republic? Considering the factors preferred during the process of the choice of universities, the field of study is the most preferred factor. This fact seems to be positive, because potential applicants appreciate the significance of a particular field of study for their future careers.

Evaluation of the most preferred fields of study is ambivalent – Economics and the Social Sciences provide a general education focused on society and its problems. This approach could also aid in tacit knowledge creation, because it may strengthen the local and regional identity of individuals. But the lack of technical knowledge as a result of the relatively less preferred Technical Sciences could compromise future innovations. It is not only their preferences, but also the responsibility of potential applicants for their further education, which is important.

The problem of the responsibility of potential applicants is possible to be characterised as a “perception that education and also university education is free of charge”. However, education is not free of charge, but is paid for from the taxes of everyone. The willingness to pay study fees (thus to be responsible for education and knowledge creation) is rather low and 25 % of respondents even have no idea about an approximate amount of study fees. This situation leads to the wasteful use of the educational system and to an inflation of Bachelor’s and Master’s education within the current society. In this context, the fact that

only a few preferred a Doctoral education could be evaluated as a problem, due to the increasing importance of post-graduate education within the postmodern society.

Considering the differences among the chosen groups of potential applicants, only small differences could be observed. But these differences lead to the consideration that applicants from big cities and especially economically inactive applicants (= students and also younger applicants – within this research) are slightly more responsible for their education and knowledge creation. They are willing to pay higher study fees and their neutrality considering the preferred factors could be evaluated as an integral part of their flexibility, which corresponds to the demands of postmodern society and the “learning economy”.

## Conclusion

This paper is focused on the preferences of potential applicants for university education within the process of university choice, in the context of the demands of the “learning economy”. Three main research questions were formulated at the beginning (see above). The first research question is focused on the preferences of potential applicants for university education. Among the most preferred factors are the field of study, the possibility of obtaining a Master’s degree at the same university and a similarity between the field of study and job field. A preference for these factors could indicate the responsibility of potential applicants for their knowledge creation and further education. The possibility of obtaining a Doctoral degree at the same university, which ranks among the few preferred factors, can be evaluated as a contradictory fact.

The second question is focused on a comparison of the preferred factors with the demands of the “learning economy”. If one summarises the main characteristics of the “learning economy”

as 1. the ability to obtain new competencies, 2. the acceleration of knowledge creation and knowledge destruction and 3. the capacity to learn, the most preferred factors (regardless of different groups) correspond to the demands of this concept. Potential applicants rather prefer factors which are connected to the ability to learn and the acceleration of knowledge creation, with fewer preferring those factors which are only formal or which facilitate entrance to universities. An emphasis on knowledge creation within the chosen fields of study and a preference for Economics and the Social Sciences could strengthen the flexibility and capacity to learn and also the innovation process within society (but the lack of technical innovations could be a potential problem).

The third question is focused on the responsibility of potential applicants for their further education. The responsibility of potential applicants could be characterised as rather low, considering commuting time, commuting distance and a willingness to pay study fees, but higher responsibility is possible to be observed when considering the preferred factors. There are only slight differences among the chosen groups, but current high school students and younger applicants seem to be more responsible for their further education and knowledge creation.

This could be an opportunity for the development of the "learning economy" within Czech society. This research has been focused on potential applicants for university education, but it would also prove interesting and important to examine the same questions among groups of university students or graduates, which could provide the theme for further research.

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## References

- Hendl, J. (2009): "Overview of statistical methods: analysis and meta-analysis of data" (in Czech). Portál, Prague, 695 p.
- Hudson, R. (1999a): "The Learning Economy, the Learning Firm and the Learning Region: A Sympathetic Critique of the Limits to Learning", *European Urban and Regional Studies*, Vol. 6, No. 1, pp 59-72.
- Hudson, R. (1999b): "What makes economically successful regions in Europe successful? Implications for transferring success from west to east", [online], EGRG Working Paper No. 99/01, <http://www.egrg.org.uk>.
- Husák, J. (2010): "Regional policy of the European Communities and cross-border cooperation within the South Bohemia Region", *Agricultural Economics – Czech*, Vol. 56, No. 6, pp. 292-300.
- Lam, A., Lundvall, B.A. (2006): "The Learning Organization and National System of Competence Building and Innovation" In: Lorenz, E., Lundvall, B.A. (eds.) *How Europe's Economies Learn: Coordinating Competing Models*. Oxford University Press, Oxford, pp 109-139.
- Lundvall, B.A. (1995): "The Learning Economy – Challenges to Economic Theory and Policy", *BETA Working Papers*, No. 95/14, University Louis Pasteur, Strasbourg, pp 1-23.

Lundvall, B.A. (2001): "Innovation Policy in the Globalizing Learning Economy" In: Archibugi, D., Lundvall, B.A. (eds.) *The Globalizing Learning Economy*. Oxford University Press, Oxford.

Margarisová, K., Šťastná, K., Stanislavská, L. (2010): "Communities of Practice and their Role in the Field of Higher Education", *Journal on Efficiency and Responsibility in Education and Science*, Vol. 3, No. 2, pp. 86-96.

Maskell, P., Malmberg, A. (1999a): "Localised learning and industrial competitiveness", *Cambridge Journal of Economics*, Vol. 23, pp 167-186.

Maskell, P., Malmberg, A. (1999b): "The competitiveness of firms and regions: ubiquitousness and the importance of localized learning", *European Urban and Regional Studies*, Vol. 6, No. 1, pp 9-25.

Murdoch, J. (1995): "Actor-networks and the evolution of economic forms: combining description and explanation in theories of regulation, flexible specialization and networks", *Environment and Planning A*, Vol. 27, pp 731-757.

Nielsen, P., Lundvall, B.A. (2006): "Learning Organizations and Industrial Relations: How the Danish Economy Learns" In: Lorenz, E., Lundvall, B.A. (eds.) *How Europe's Economies Learn: Coordinating Competing Models*. Oxford University Press, Oxford, pp 161-177.

Rymešová, P., Kolman, L. (2010): "A Reflection on University Studies and further Career development of Chosen CULS Faculties' Graduates", *Journal on Efficiency and Responsibility in Education and Science*, Vol. 3, No. 2, pp. 42-53.

Řezanková, H. (2007): "Analysis of data from questionnaire surveys" (in Czech). Professional Publishing, Prague, 212 p.