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## NEEDS AND REQUIREMENTS FOR ONLINE PART-TIME AND SHORT-CYCLE IN HIGHER EDUCATION IN SERBIA\*

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**Abstract:** *This report provides the results of the survey on the subject of the needs and requirements of online PT&SCHE in higher education institutions in the Republic of Serbia. It gives a systematically presented overview of the gathered information about practices and principles for quality assurance and other aspects relevant for online PT&SCHE studies, as well as on the needs and experiences in this area in the Republic of Serbia.*

**KEY WORDS:** PART-TIME STUDIES, SHORT CYCLE EDUCATION, ONLINE STUDIES, NEEDS, REQUIREMENTS,

### 1. INTRODUCTION

The PT&SCHE project is implemented by a consortium of fifteen partners from Serbia, Estonia, United Kingdom, Netherlands, Hungary and Slovenia. The consortium consists of four European universities, one European Vocational College, four universities in Serbia, one school of applied studies in Serbia, the Ministry of Education, Science and Technological Development, the National Council for Higher Education, the Conference of Universities of Serbia, Belgrade Chamber of Commerce and one IT Serbian company. One of the main objectives of the project is the adoption and implementation of the most suitable online and traditional (face-to-face) learning methodologies.

The report is focused on paving the way for strengthening sustainability of PT&SCHE with adoption of e-Learning technologies and pedagogical approaches in order to specify the needs and requirements for online PT&SCHE in Serbia.

### 2. THE NEEDS AND REQUIREMENTS FOR ONLINE PT&SCHE - RS PROJECT PARTNERS SURVEY

Since Part-Time and Short-Cycle studies currently do not exist in the Republic of Serbia, in this part of analysis, we focused on answering two main questions:

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1. What is the opinion about and readiness for the introduction of PT&SC studies and their implementation modalities, with focus on online implementation?
2. What is the current state of Serbian HE system regarding online learning in general?

Both questions are important in order to establish and evaluate current situation in this area. This evaluation is needed in order to have the proper grounds for defining the most effective ways and pace of introduction of PT&SC studies in Serbia through e-Learning.

The survey was distributed among two target groups:

1. Teaching staff of the HEIs in Serbia participating in PT&SCHE project,
2. Enrolled and potential students of the HEIs in Serbia that participate in this project.

Since the project consortium encompasses 3 of the largest universities from public sector in Serbia (UB, UNS, UNIKG), one university from private sector (BMU), and one school of applied studies (VISER), the teaching staff and students from these institutions can be perceived as a representative sample for the Serbia HE system survey. Data collection was done by using the set of questionnaires developed by the consortium members for the purposes of the project.

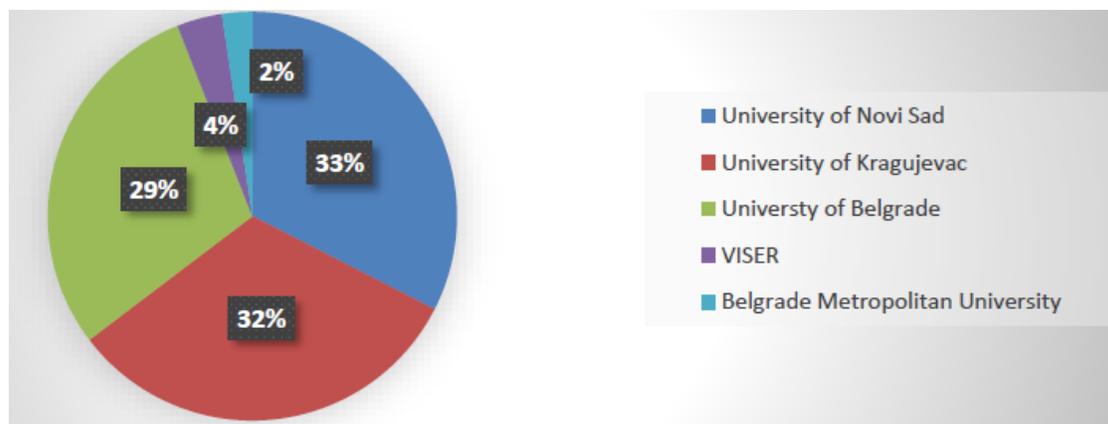
The survey was responded anonymously. It was distributed as an online survey (using the Google form) to the representatives of the academic community and students. The teachers' survey was distributed to all the faculties and departments within the participating institutions, followed by official plea sent by the contact person or the responsible person (Vice-Rector for teaching affairs etc.). The teachers' survey received 537 responses. The students' survey was distributed through student databases (owned by the Rectorates, University Centers for Career Development and Students Counselling, the teachers etc.). The students' survey received 838 responses.

### **2.1. Teachers' survey**

As above mentioned, the survey responses have been provided by the representatives of 3 of the major public universities in RS, 1 of private universities and one school of applied studies. UNS, UKG and UBG had the largest response rate among the teachers. These numbers could be expected due to the size of all 5 partner institutions. The universities mentioned have considerably higher number of teachers than VISER and BMU, so this ratio is reasonable.

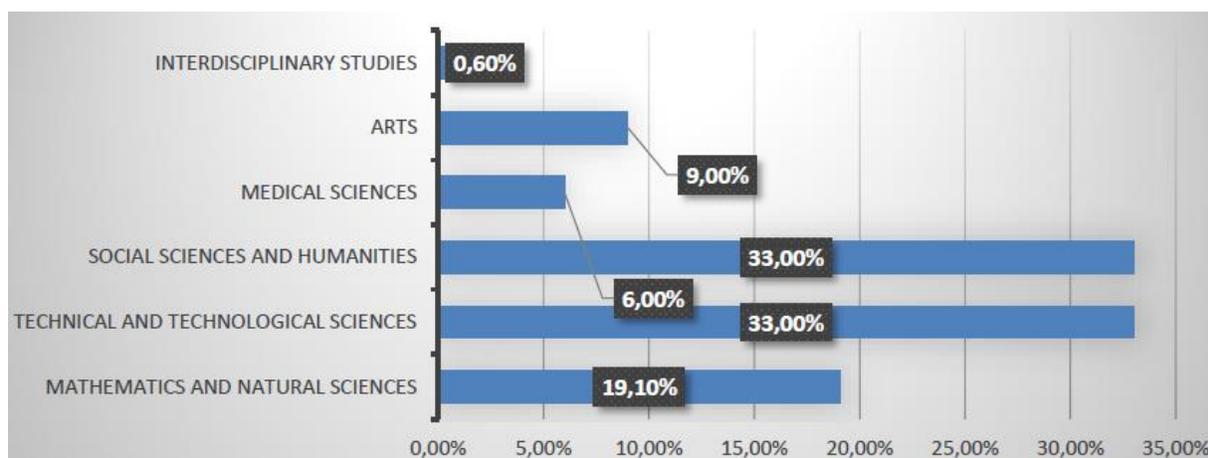
The teachers from all scientific fields gave their contribution. Except for VISER, which conducts studies exclusively in the field of technical and technological sciences, the other HEI conduct studies in almost all the fields – social sciences and humanities, mathematics and natural sciences, medical sciences, arts and interdisciplinary studies.

The most interest is the survey on this subject was shown by the teachers from the field of technical and technological sciences and social sciences and humanities (33 % of the responses per each field). Relatively low interest is shown by the teachers from the field of medical sciences, due to the nature of the studies in this field that mainly requires clinical practice and direct contact with the patients.



**Figure 1. Home institutions of the respondents**

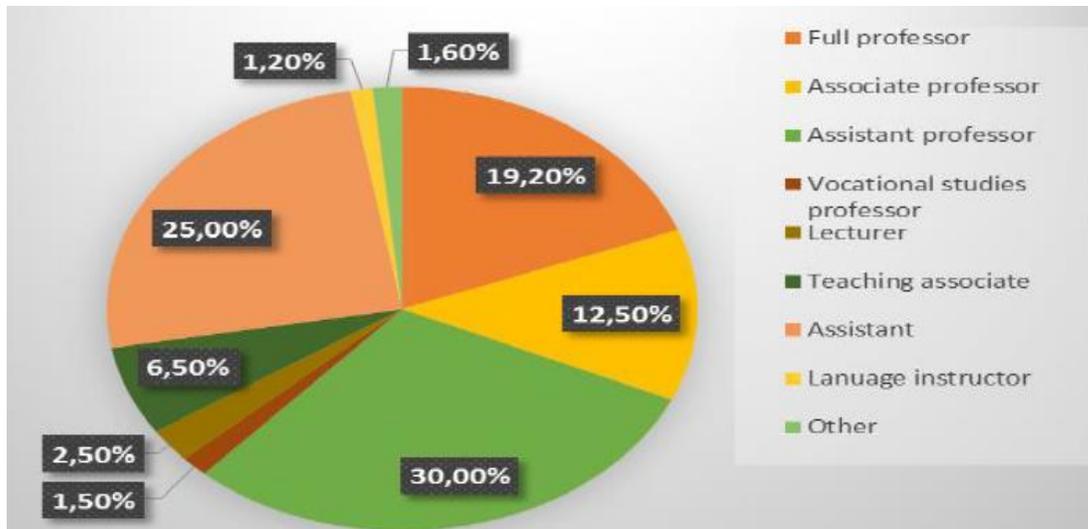
The smallest number of professors that participated in the survey are teaches within the field of interdisciplinary studies, due to the small part of study programmes within this area in RS.



**Figure 2. Teaching field of the respondents**

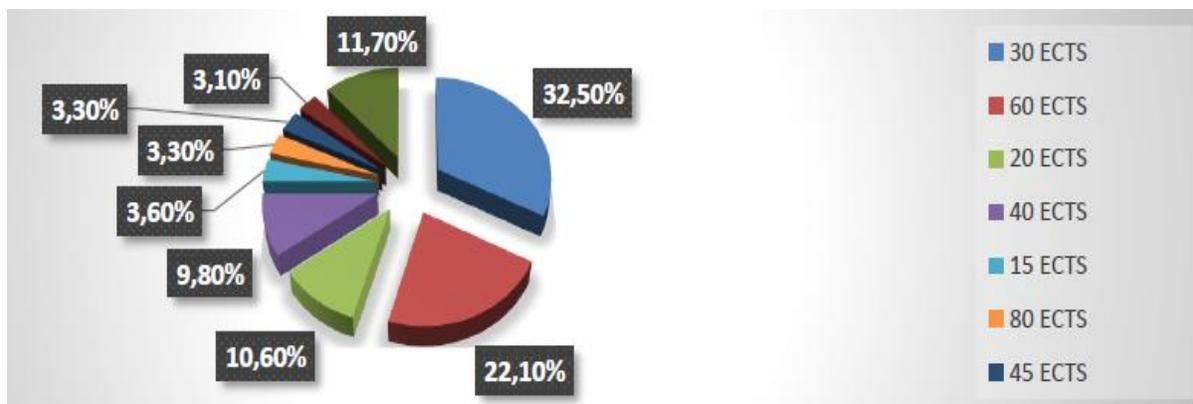
According to the academic ranks, more than a half of the respondents (63.2 %) are professors, more precisely: full professors – 19.5 %; associate professors – 12.5 %, and predominantly, assistant professors – 30 % of all respondents. Also, significant numbers of respondents are assistants of the professors. These numbers indicate the prominent interest of the younger generations for this subject, indicating that in the future there will be the faculty interested for these activities. However, the more experienced professors were not reluctant to discuss it.

Since the issue of neither the duration, nor the number of ECTS for SC studies is not yet established, the respondents were asked for their suggestions. As can be seen at the figure above, the answers are provided to an extent that significantly varies. The largest group (32.5 % of the sample) is of an opinion that SC should be worth half a regular study year, in terms of ECTS (30 ECTS).



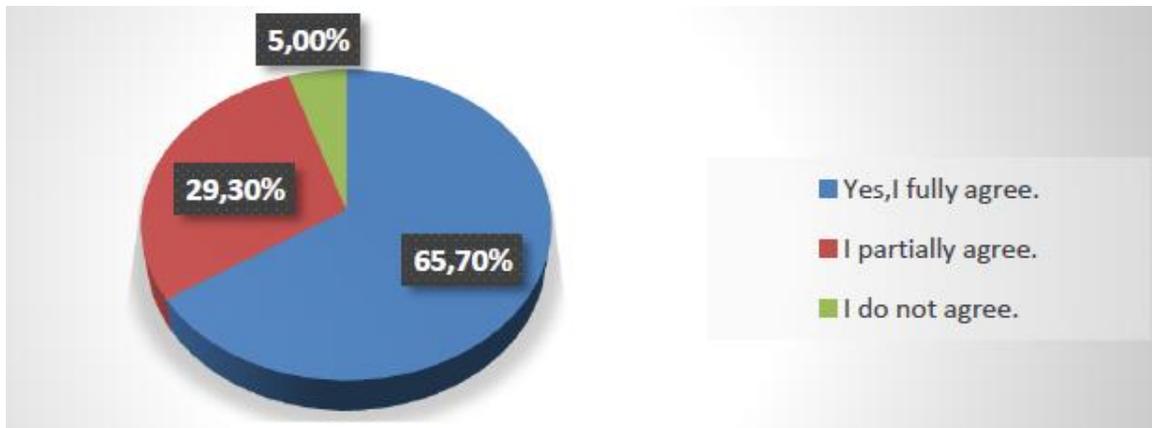
**Figure 3. Title of the respondents**

Considerable portion (22.10 %) suggests the same distribution of the credits as in the regular academic year (60 ECTS). Around 10 % of the respondents would find suitable 20 ECTS and 40 ECTS per SC. Interesting differences can be observed between the rests of the answers (from 0 to 90 ECTS). However, none of the solutions separately is not supported enough so as to be considered as a significant statistical group. These varied responses are, of course, due to the broad definition of a Shot Cycle, which is not very familiar concept in RS.



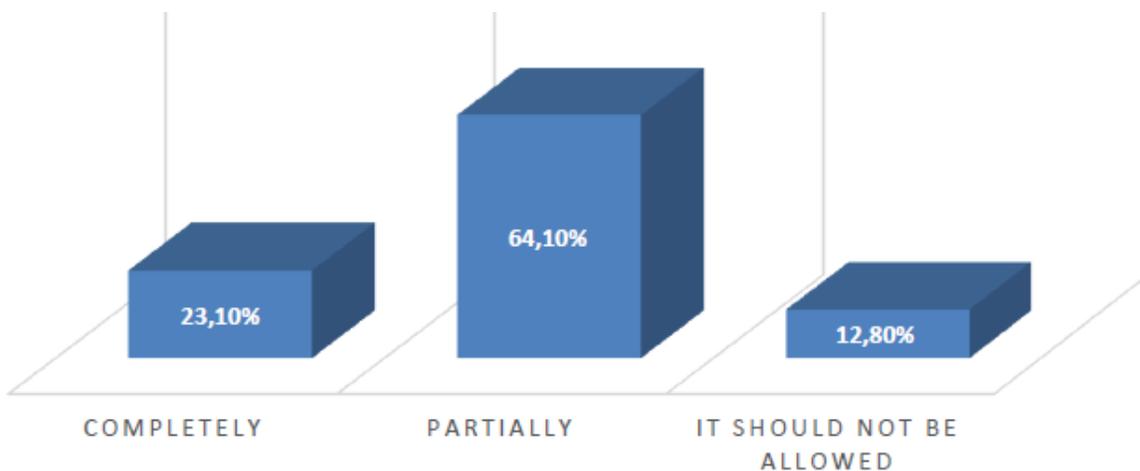
**Figure 4. Opinion about the number of ECTS in SC**

The vast majority of respondents (95 %) agree about the question of consulting employers about the formulation of SC structure, as well as its financial implementation. 65.70 % fully supports the collaboration with the employers, 29.30 % partially, and only 5 % would not support this idea. When asked about the suggestions for PT studies, more specifically, should it be provided as distance learning – almost 90 % of the respondents agree.



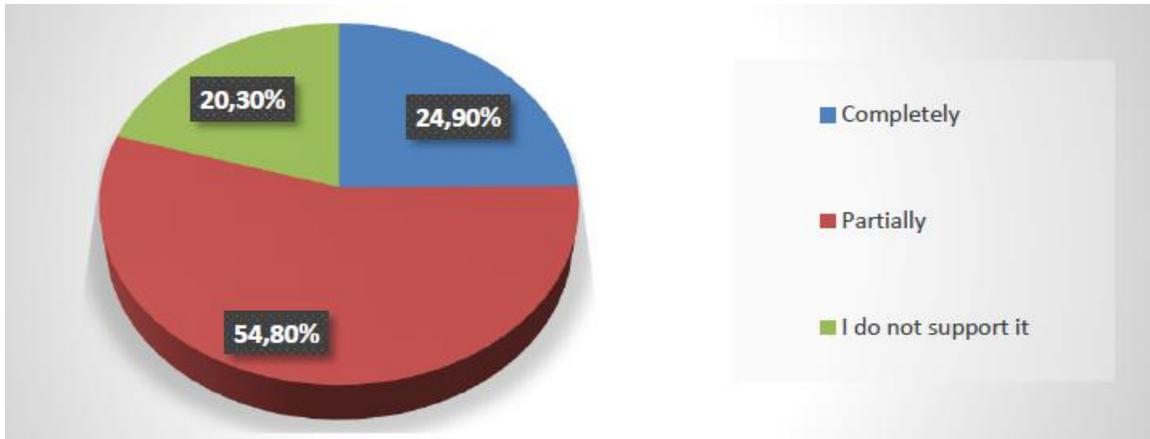
**Figure 5. Support of the cooperation with employers**

The number of students which would prefer it as a blended learning is almost a double of students who would support providing it completely at a distance. 12.8 % do not support this form of distance learning.

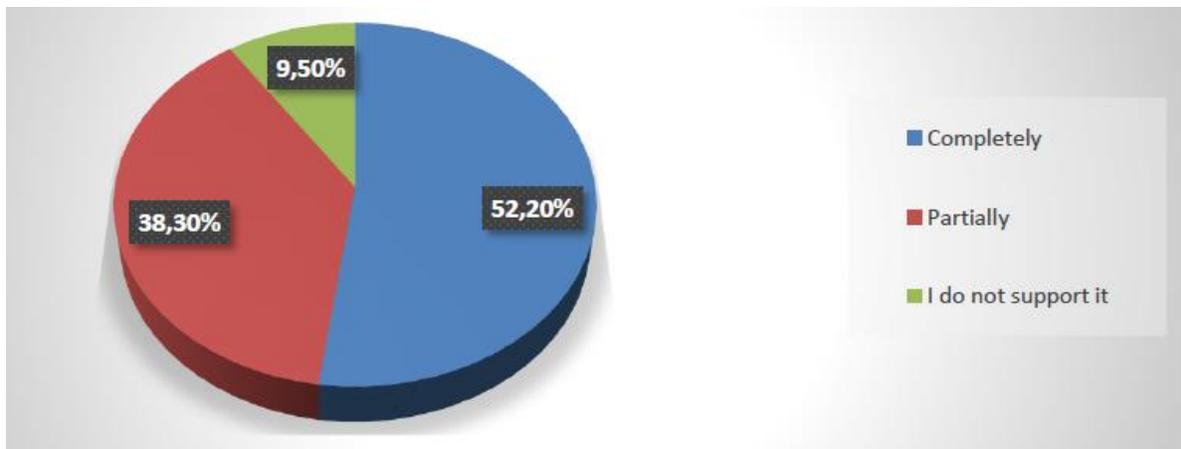


**Figure 6. Opinion on distance learning in PT**

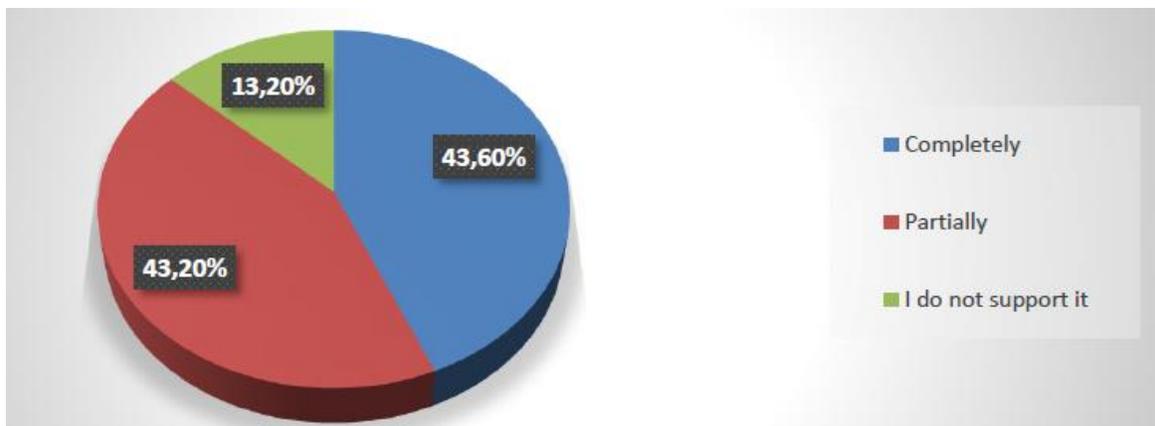
Several modalities of implementation of online teaching were suggested for the evaluation of the teachers. As it can be seen from the figures below, online learning is very strongly supported in Serbia. Most support is given to blended learning: study programs (90.40 %) and Short-Cycles (90.50 %) implemented in this way. Studies implemented entirely online rise a little bit more skepticism, especially when it comes to whole study programmes, but they also have support by the majority of teachers. Utilizing online studies for mutual teaching in collaboration with other institutions is also perceived as a positive initiative by the largest group (almost 90 % of the teaching staff).



**Figure 7. Support of Short-Cycles implemented online**

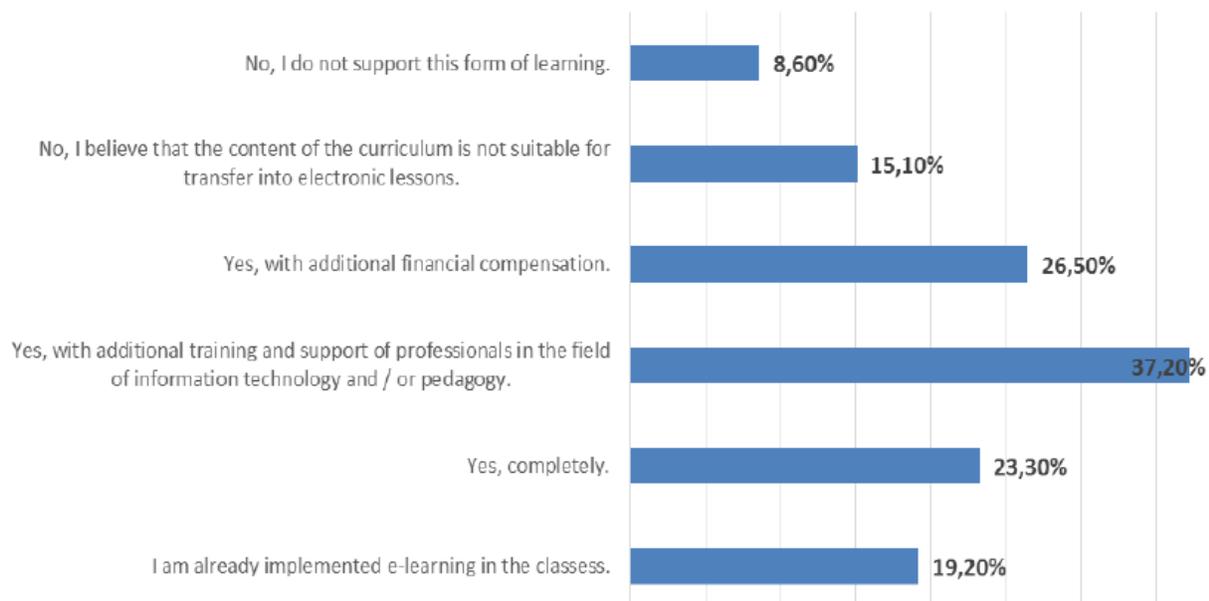


**Figure 8. Support of Short-Cycles implemented as blended learning**



**Figure 9. Support of online teaching implemented in cooperation with other institutions**

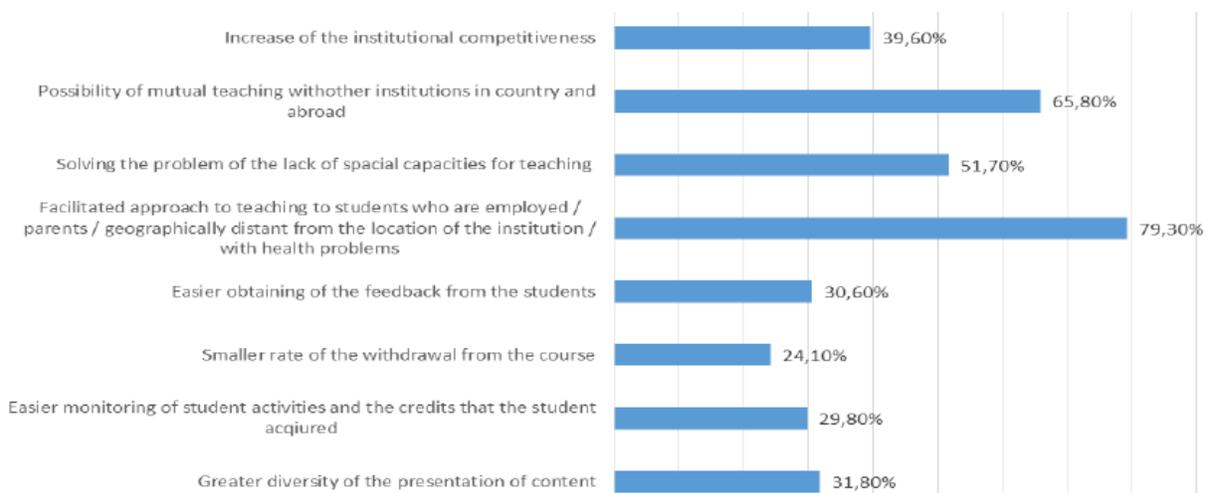
Apart from the general opinion and the support for the online PT, SCHE and other types of e-learning, we wanted to find out the level of readiness of RS teachers for the implementation of e-learning in their specific subjects. This would not be an issue for almost half of the respondents (44.5 %), since 19.20 % indicated that e-learning already takes place in their classes. Additional 23.30 % of the respondents stated that they are completely ready for introducing it. As for the rest of the respondents, 37.20 % would support it, but would need training in the field of IT usage and/or pedagogical approach to this form of teaching. To about a quarter of the respondents, additional financial compensation seems important. 23.7 % teachers stated that they would not be ready for e-learning– 15.10 % due to the nature of the subjects that they teach, the content of which is not suitable for transfer in electronic lessons. Overall, the readiness level is found to be favorable.



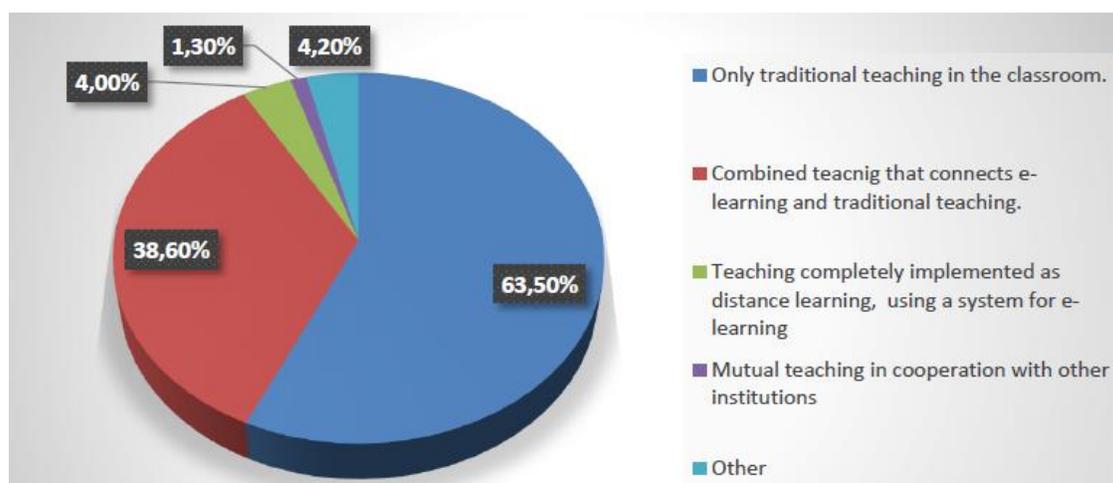
**Figure 10. Readiness of the respondents for introduction of e-learning**

Most teachers (79.30 %) find e-learning suitable for attracting larger number of students which are currently not enabled to study, such as employed, disabled students, people with family obligations, geographically distant students etc. Again, the possibility of collaboration with other institutions via these forms of HE is highlighted by many (65.8 %). The special capacity is something that is often a problem in RS HEIs, and the benefit of online teaching in this area is stressed by more than a half of the respondents.

The need for innovation is evident when we state that almost two thirds of the teachers (63.5 %) currently implement only traditional teaching in the classroom. Completely online study courses are implemented only by 4 %, while blended learning is more frequently implemented – in almost 40 % of the cases.



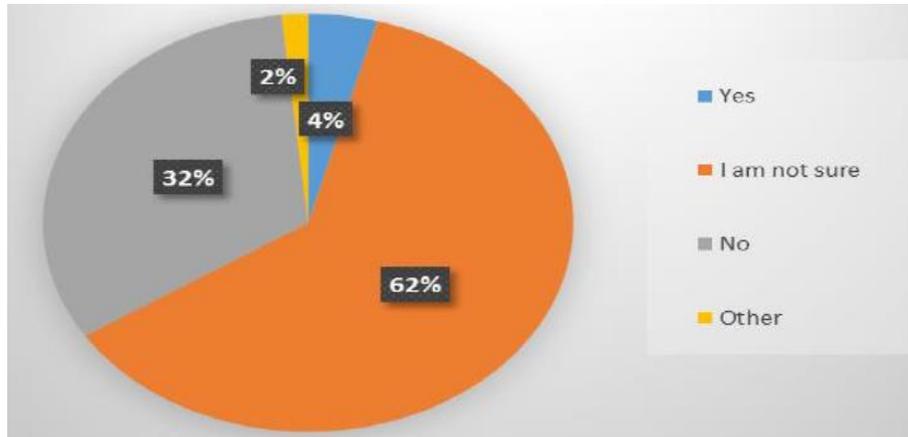
**Figure 11. Rating of benefits of online courses**



**Figure 12. Existent teaching modalities**

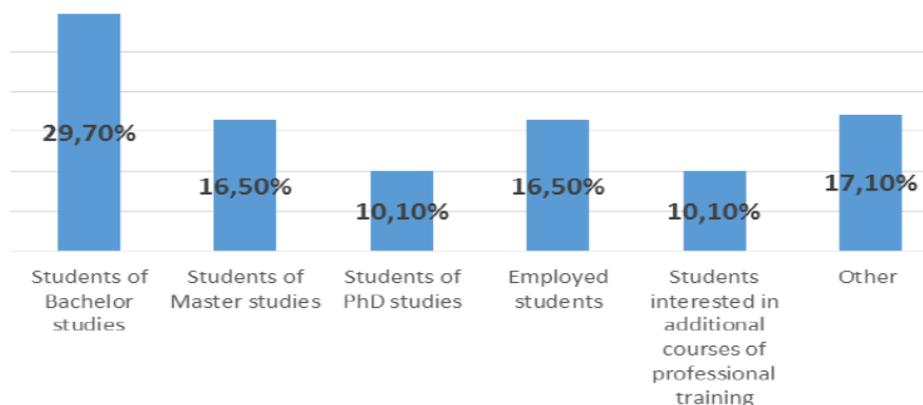
In line with the above indicated percentage of the teaching staff not involved in e-learning, almost the same number (62 %) is not familiar with the existence of institutional rules and regulations related to it. 32 % state that there is no legislative or official rules at their institution, as opposed to only 4 % where there is some form of e-learning guidelines.

Those answers very mainly vague and were related to study programmes accreditation standards (existing specifically for distance learning studies). Only 2 respondents mentioned documents specifically targeted to e-learning (1. Regulation on distance learning and 2. Setting up the concept of online lessons 2016-17, Increase of the interactivity of online lessons 2016-17). However, having in mind that out of almost 537 people, only 2 provided these answer, it can be concluded that either the responses are not exact, or the existence of the documents is not sufficiently known in practice.



**Figure 13. Existence of institutional e-learning regulations**

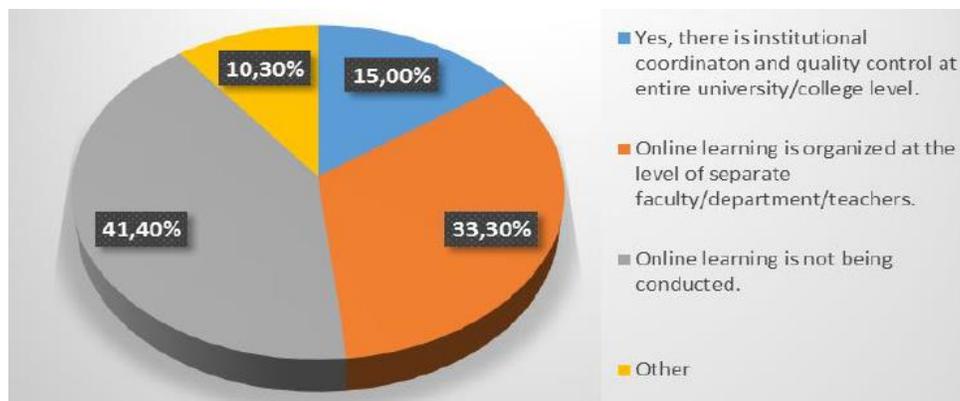
For those whose institutions implement online classes, we wanted to investigate what are the target groups of the students. Since in the previous questions we concluded that there is no formal strategic approach to e-Learning, these answers should be interpreted with care i.e. the parts of the student population that are provided with e-tools for learning might have these opportunities as a result of enthusiasm of specific departments or event teachers alone, not necessarily as a result of a deliberate approach. This could explain the choice of the response “Other” in 17.10 % cases 29.7 % of the respondents indicated the students of Bachelor studies as a main target group, while on the second place there are students of Master studies and employed students (16.5 % each). According to the survey, the least targeted categories are of PhD students and students interested in additional courses (10.10 % each). The letter is actually potential students of SC, which do not exist in RS so far, which explains the lack of the data on this.



**Figure 14. Existent teaching modalities**

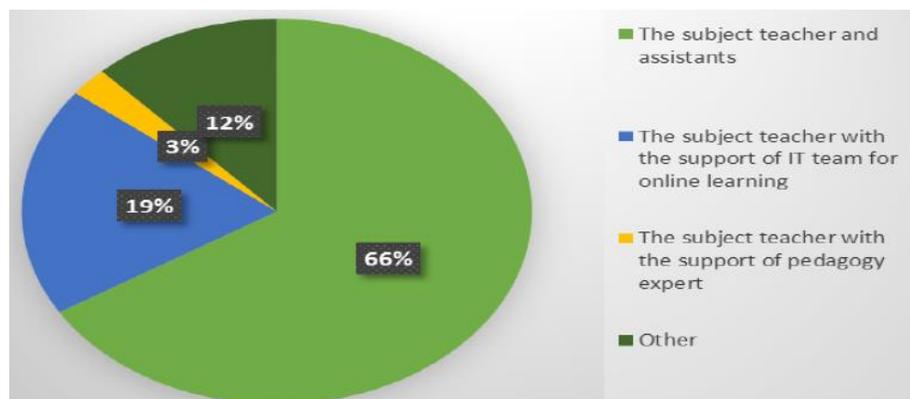
In addition to the issue of lack of regulatory basis for e-Learning, the same applies to the processes of quality control of these types of activities. Only 15 % of the respondents state the existence of the quality assurance approach at the institutional level. However, through further investigation in details on the internal and external quality control processes, it shows that these

answers were mainly related either to the external quality control by National Accreditation Committee. When the answers are related to internal control, in 45 % cases it points to the anonymous surveys (28.33 % stated the students' surveys) and 18.33 % of responses it points to monitoring by University/Faculty Quality Assurance Commissions. These commissions control the work of teachers, propose plans for quality improvement, and make suggestions to the competent authorities of the faculty/university, teaching staff and non-teaching staff. They have the roll to take the proper actions to improve the quality of teaching, following legal and other regulations of the university and the faculty, taking into account labor market needs, opportunities and aspirations of students.



**Figure 15. Institutional coordination and quality control of online learning**

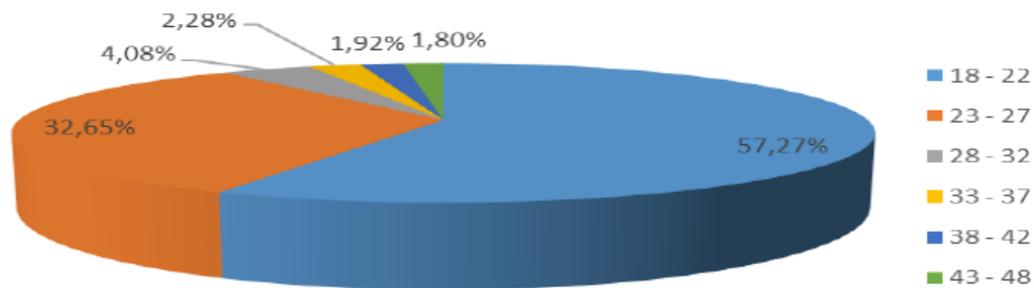
When it comes to the material generated for e-learning purposes, the majority of teachers make them alone or together with their subject assistants (66 %). Around one fifth of the teachers conducting online teaching have the support of the teams such as IT or pedagogy experts, and the question of intellectual property is not nor clear nor resolved. Great majority of teachers believe that IP question should be of priority and that this not being regulated is even a significant factor for the reluctance of many professors to produce the materials and participate more actively in e-learning. Several teachers suggested Creative Commons application.



**Figure 16. Institutional coordination and quality control of online learning**

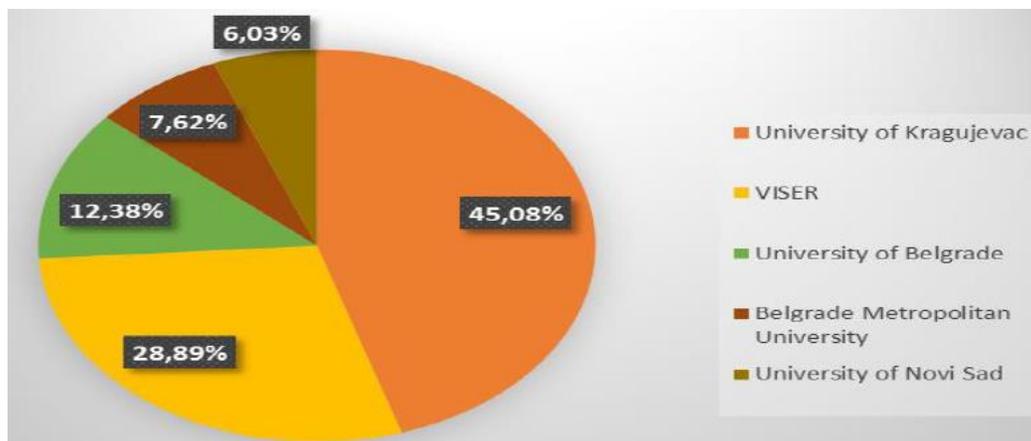
## 2.2. Students' survey

Majority of the respondents are between 18 and 22 years of age, i.e. on bachelor studies (57.27 %). After that, the students between 23 and 27 participated (32.65 %). The oldest respondents are 48 years old. Since PT and SCHE is targeted at lifelong learners and people in need of requalification or additional training for work-related purposes, as well as for young people, it is positive to state that the survey reached a variety of target groups. In this survey, gender balanced responses have been received.



**Figure 17. Age of the respondents**

Students from University of Kragujevac actively participated in the survey (almost a half of the overall number), and VISER response rate is surprisingly high, having in mind the size of the institution and the number of students. But also, since the overall number of the students that responded is over 8 hundred, the smaller rates of other universities gave a sufficient number of students to perceive the overall picture.



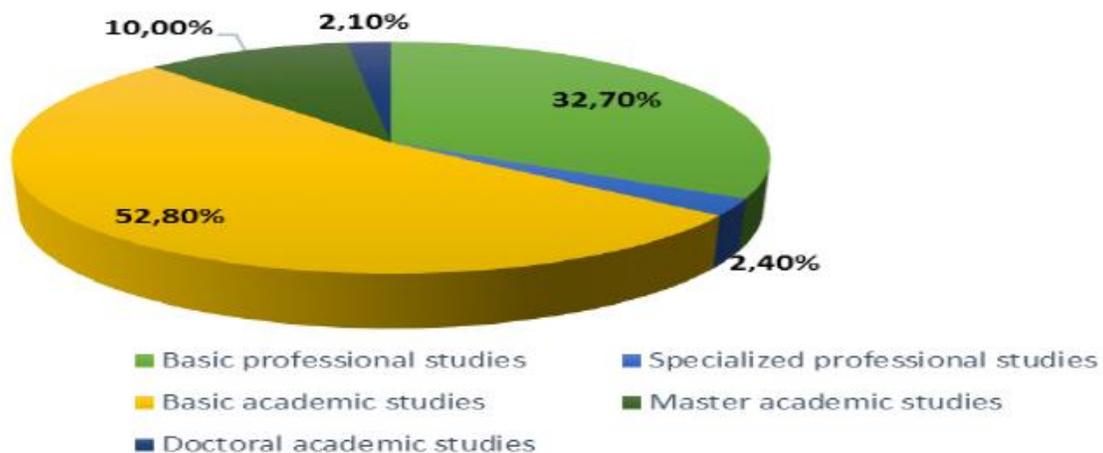
**Figure 18. University/School attended**

As in case of the teaching staff, the smallest sample of students came from the field of medical sciences. Almost half of the respondents study technical and technological sciences, and around 30% social sciences and humanities. Nevertheless, natural sciences, mathematics, arts and interdisciplinary students also participated.



**Figure 19. Field of study of the respondents**

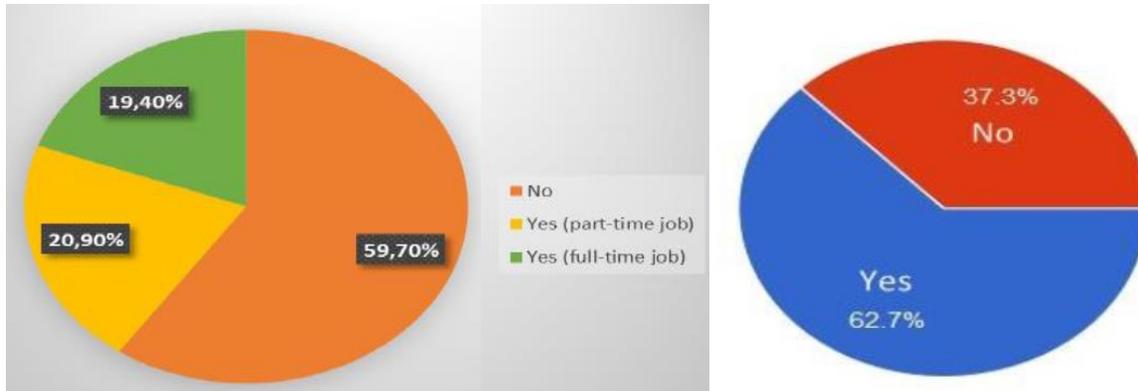
Majority of the respondents, as stated above, are students of basic (bachelor) studies – over 50 % (52.80 %) of the overall number attends basic academic studies, while 32.70 % attend basic vocational studies (this once more reflects VISER participation). Also, 10 % are at the master level of studies and a number of PhD students and students of specialized professional studies as well.



**Figure 20. Level of study of the respondents**

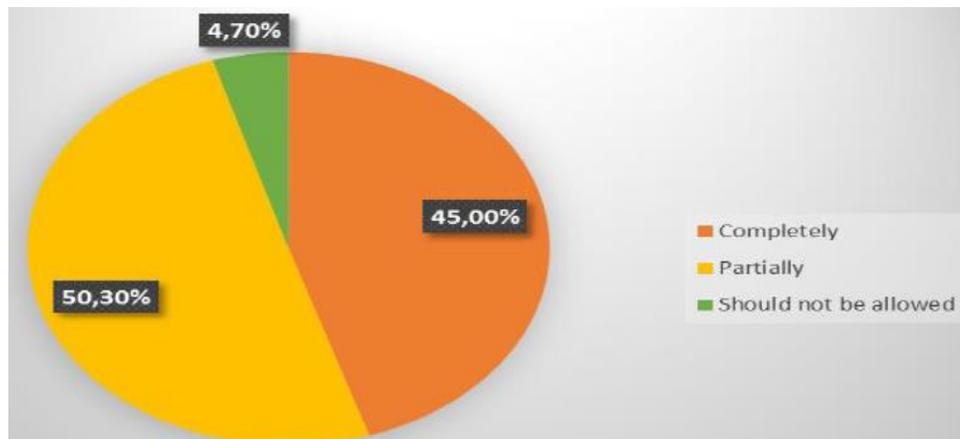
The ratio between employed and unemployed respondents is approximately 60 %: 40 %. Employed students are divided in nearly a half in terms of the type of employment (full-time vs. part-time job). Once again, all the target groups are successfully covered.

Among respondents, almost 40 % studies outside their city of residents, which is interesting finding, having in mind that these students could be one of the main target groups for online PT and SCHE.



**Figure 21. Percentage of employed students and city of residence**

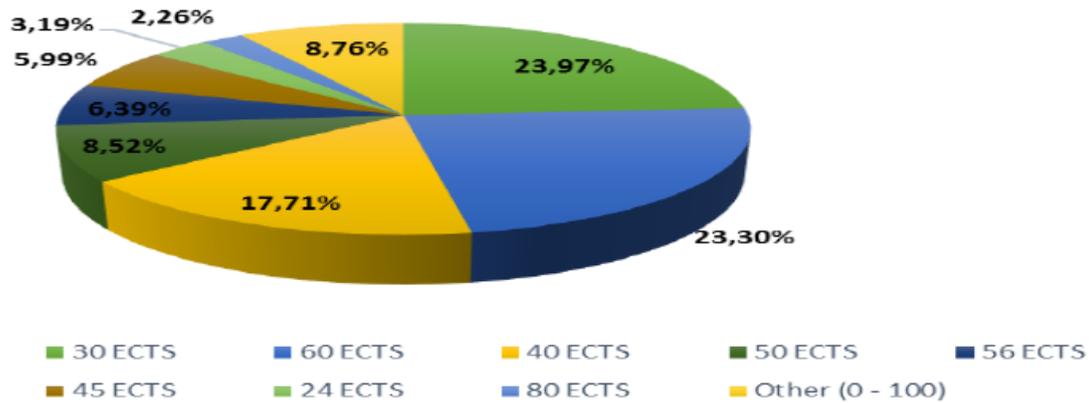
When asked about distance learning possibilities for part-time students, only 4.7 % of the students did not find this possibility attractive, as opposed to 95.3 % which support this option – 50.30 % partial allowance and 45 % complete teaching at distance. The interest rate in these studies will, in reality, of course, depend on many factors, but for the beginning, this response suggests interest and a good potential.



**Figure 22. Distance learning for PT studies**

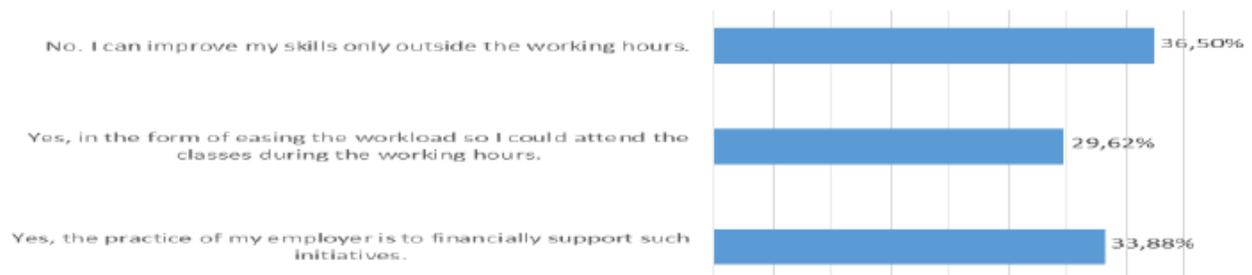
When asked about SCs, the students agree with the teachers about the suggested ECTS worth of a study cycle, giving preference to 30 ECTS (23.97 %) and 60 ECTS (23.30 %). Other suggestions are widely spread – from the smallest numbers to 100 ECTS. 40 ECTS also got a significant number of suggestions.

As we have seen in the teachers' survey, the academic community representatives believe it is important to include the employers into the formulation of SCs, and expect them to support the trainings of their staff. Fortunately, the opinions of the employed respondents are also optimistic – almost two thirds would receive some kind of employers' support – 33.88 % indicated the practice of their firms to financially support their staff in their professional improvement, while 29.62 % could be relieved from the workload with the aim to attend classes.



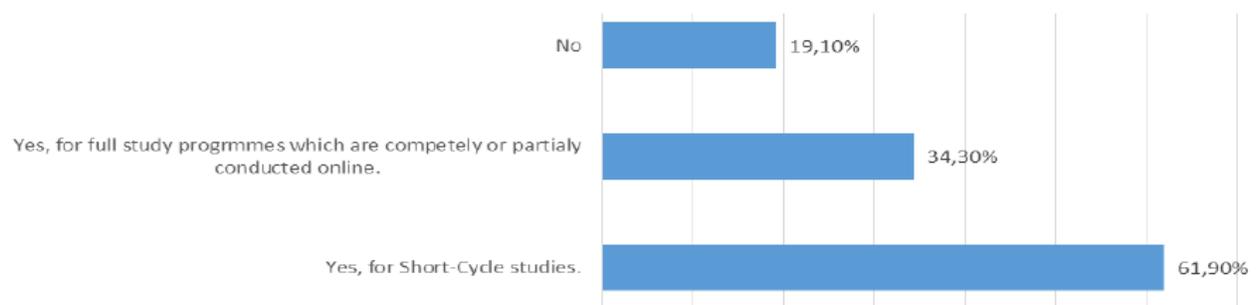
**Figure 23. Number of ECTS in SC**

On the other hand, 36.50 % of the employed students would not rely on their employers and would have to organize trainings only in free time outside work, and to pay it by their own means.



**Figure 24. Opinion on the employer's support**

Our so far conclusions are confirmed in this question. 61.90 % students questioned would be interested to attend online SC studies, and 34.30 % a study programme completely or partially conducted online. About 4% of the respondents are interested in both. Thus, both PT and SC studies, according to this survey, have a significant potential and interest rates in students in Serbia.



**Figure 25. Distance learning for PT studies**

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### **3. WIDER SCOPE ABOUT RS PRACTICE – OUTSIDE THE PROJECT PARTNERSHIP**

Since Serbia has no specific QA standards, strategies or action plans which are dedicated to online PT and SC studies, we will give an overview of the current regulations in the area of online studies, which would be, or already are, in most cases applied to the PT and SC which are implemented in a form of e-learning. We will here focus on regulatory and legislative frameworks. Further on, since the strategic approach is something that is very country / institution specific, we will mostly provide the information about the frameworks and models that can be most applicable – those for the quality assurance. In Serbia, there is no specific strategy for e-learning in HE at national or, at institutional level. It is promoted as a part of other development strategies (such as national Strategy of Development of Information Society in Republic of Serbia), but separate strategy is not specifically elaborated. Thus, it can be concluded that a correlation between the existence of a specific strategy and actual implementation of e-learning activities is not inevitable. The survey performed by the European University Association in 2013 showed that of all the HEIs that engage in e-learning more than 50 % of the students, 45 % has institutional strategy in place which points that there is a link, but not a very strong one, between the adoption of e-learning strategies and the volume of e-learning activities. Serbian HEI experience is additional a proof for this, since many e-learning activities exist for a long time as a result of independent efforts and initiatives.

Regarding the Quality Assurance of e-learning, there are several regulations at national level. The Standard 12 for Accreditation is dedicated to distance education. This standard states that distance learning programmes should be based on methods and technologies of distance education, and supported by resources that enable its quality implementation. Distant learning study programmes can be organized in every area, and for each educational, scientific and artistic field, if its content, supported by available resources, can be adopted through distance studies in a quality manner, and if it enables the same level of acquired knowledge of graduated students, same effectiveness of the studying and the same degree, as the usual methods of study programme realization.

The statute provides the following guidelines:

- ❖ The course contents should be conceptually adjusted to distance learning, with clearly noted consultation hours
- ❖ Learning guides, provided by the faculty, must contain concrete proposals and suggestions about the learning strategies of students and self-testing
- ❖ The testing subsystem must be integrated into a LMS, and must support different learning and assessment methods
- ❖ The exam must be executed within the premises of the faculty
- ❖ The faculty must provide the necessary equipment and ICT for keeping and maintaining two-way communication between lecturers and students, needed for realisation of distance education.

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## 4. CONCLUSION

On the basis of the conducted research study, a set of conclusion is provided.

- There is an extremely large variety of quality tools catering to many audiences and needs.
- There is no significant gap in terms of analysis of institutional systems, which would require a new scheme to be developed.
- In the case of recognition and unbundling, which are not e-learning specific; there are definite deficiencies with scope for further developments.
- All the quality systems suffer certain deficiencies (lack of universal applicability, unclear which maturity levels they are best for, widely divergent quality of reviews and of advice given, challenges to respond to change, etc.)
- There is a role for ICDE working with other international organizations in the following main areas, all of which are critical:
  - providing a register of effective quality systems, and a guide to members on which are appropriate for their context and purpose
  - addressing common issues around training, best practice sharing, localization, etc., for providers of quality systems
  - working with international organizations to ensure a harmonized regulatory environment
  - working with international agencies to ensure student engagement in determining quality standards.

*\*Text adopted from Report DEV 3.1 (WP3)*

*Activity 3.1 Analysis of needs and requirements for PT&SCHE*