Kosovo VET Barometer

REPORT 2020-2021

BASED ON THE ALLED2 SCHOOL SURVEY

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KOSOVO VET BAROMETER
REPORT 2020-2021
Based on the ALLED2 School Survey

ALLED II – "Aligning Education and Training with Labour Market Needs" Programme, funded by the European Union (EU) and the Austrian Development Cooperation (ADC), implemented by the Austrian Development Agency (ADA)

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1. Introduction

This is the second report for the second year that has been prepared for ALLED2, a project funded by Austrian Development Agency (ADA) Under the European Commission's Instrument for Pre-Accession Assistance Programme for 2017 (IPA 2017). ADA has been delegated to implement the project "Aligning Education and Training with Labour Market Needs" (ALLED Phase II)". The aim of the project is to reduce poverty through increased labour market participation and improved employability of the population in Kosovo.

Despite the pandemic situation, ALLED 2 project together with collaborators and stakeholders continued activities in 2020 in order to improve education in Kosovo. The ALLED2 project selected 20 vocational schools and 4 Vocational Training Centres in Kosovo to be supported through project activities. ALLED2 team will collaborate with these schools/VTCs, which will be supported by the ALLED2 project in the project priority areas. This report is based on the data gathered from 20 schools and 4 VTCs through the survey questionnaire and visits have been made by consultant and project coordinators to look at the existing situation in these schools, type of the support needed for improvement for each school.

Following ALLED2 project objectives, the attention of this report is on emphasizing the further step in aligning education and training with labour market needs. The new structured approach of building an education system responsive to the labour market and the many opportunities bringing both education and labour market representatives together, highlight innovation as a driving force in aligning education with labour market needs. The survey questionnaire is designed to at best capture the situation in existing schools/VTCs and their potential to improve the alignment of these schools with labour markets.

This report is structured as follows. Section 2 provides an overview of the project objectives. Section 3 presents the overview of school management. Section 4 discusses issues related to teachers and Section 5 is related to students. Section 6 discusses curricula, while Section 7 provides data regarding schools' infrastructure. Section 8 presents data on information technology and section 9 about business cooperation. Suggestions and recommendations are provided for each section to show the potential areas of intervention by ALLED2 project. Finally, the report ends with summarized conclusions and key findings.

This year we have been working on several qualitative aspects of the survey, questions and database. Based on last year's data, we have been able to recreate the survey in order to be more accurate in conveying the respondents' insights and circumstances. Additionally, the newly created survey has the validating features in majority of the questions which led to a better data quality. This year's report is more concise and will provide better data for decision-making.

Data Analysis on Last Year Database

Last year's survey (2019-2020) was the initial set of questions that was sent to respondents. Based on their answers, we could revise questions to:

a) Be easier to be answered (by including multiple choice answers with their most common answers as well as possibility to add new)
b) Be more understandable
c) Be statistically useful (we avoided maximum the open-ended questions).

By analyzing every question and revising with the above-stated criterion, we amended some 80%+ of the last year's questions. The table with question revision tackled 300+ records.

Data Adjustments on Last Year Database

Because there were many open-ended questions on last year's questionnaire, we had to adjust the answers (withholding the respondents' core answer) to fit for the year-to-year statistical analysis as well as overall readability of it.

Improved Questions

Except for the questions when it was needed from the respondents to give an elaborative answer (explicable narrative), all other questions we have revised with the suggested answers to be precise i.e.: be able to be chosen from the list of answers / numbers). Questions, for instance like: "How many times have you conducted self-evaluation?" we have provided the validation rule to ensure that respondents provide an integer, as opposed to last year's survey where they could write free text.

COVID-19 Questions

Due to the pandemic and the newly enforced "modus operandi" throughout the education system, we have included some questions to get some insight on the difficulties and the means explored for education under the new circumstances. Such questions as "the percentage of subjects offered on distance, challenges on distance learning, which platforms are used by the institutions" etc. have given us some understanding of the front-line situation.

New Survey Creation

Because we amended the majority of the questions, and in order to have a clean survey, we had to create both VET and VTC surveys from scratch. The newly created surveys are now question-concise and have validation rules implemented to have the respondents not miss or misguide the answers. The number of questions, however, is considerably high because of the needed information to be gathered and because of the year-to-year analysis to be done.

- VET Survey Questions: 199

- VTC Survey Questions: 163

Collaboration with the Respondents

Upon completing the surveys for both VET and VTC, we sent them to the corresponding respondents via email. About one-third of the respondents answered immediately whereas the rest reported challenges due to the pandemic rules, key staff being on sick-leave, long survey etc. We had to have many iterations with some of the respondents until they completed the surveys. During the time the surveys were out, we conducted quality checks on the data being submitted to ensure we have good quality to work with.

Data Publication on the Portal

After the survey completion by all respondent's milestone was accomplished, we begun analysis of the data as well as publishing the new data on the portal alled.eu. All school and VTC data are published.

Data Analysis for the Year Report

Having all the respondents answer the surveys, we begun analysing data for the year report. This year's report is richer in the sense that there are added year-to-year analysis as well as results from quality questionnaire.

2. Objectives of the study

The overall objective of the ALLED2 project is to reduce poverty through increased labour market participation and enhance employability for the population of Kosovo. The ALLED 2 project will support the updating of VET programs, as well as the quality of teaching processes in the following sectors in Kosovo: agriculture, food processing, mechanical engineering and the energy sector. Project intervention sectors have been selected based on recommendations and findings from the "Labour Market Needs Analysis - Perspective for the Future in Kosovo".

The key purpose of this assignment is to support the ALLED2 Coordinator for VET and Private Sector Cooperation in building a database from the ALLED2 VET school network, which is subject to ALLED2 support. The findings of this report will be used to support the lead expert (Coordinator for VET and Private Sector Cooperation of ALLED2 project) on the data collection, data entry and processing of data collected from the ALLED2 VET Education network (EDUnet), but also the collection of a data set from all other VET schools in Kosovo.

Specific objectives of the study

The specific purpose of ALLED2 is to enhance the quality and relevance of labour market education and training programs and to support the adaptation of the legislative framework and mechanisms as a prerequisite for increasing employability.

More specifically, this assignment will support the development of a database of the VET schools in Kosovo, with special focus on ALLED2 school network, which consists of 20 VET schools and 4 VTCs.

Specific objectives of this report include the following:
- To carry out a data collection, data entry and data processing and interpretation of the data gathered from the ALLED2 VET school's questionnaire, school visits and other primary data collection. This is done in consultation and close cooperation with the VET schools/VTC directors and ALLED2 responsible person,
- Report on current situation in VET schools/VTCs with key conclusions and findings

Following section presents the sample and methodology used for this study.

3. Methodology

The methodology used in this study is mixed between collection of qualitative and quantitative data for the sample of 20 schools and 4 VTCs selected by ALLED2 to be supported through project activities. Initially the database and coding were designed to fit the purpose and to standardize the dataset and questions for each school/VTC. The ALLED2 project selected 20 vocational schools and 4 vocational training centers in Kosovo for cooperation. ALLED2 team will collaborate with these schools which will be supported by the project in the priority areas. Each school has completed a questionnaire and visits have been made by project coordinators to look at the existing situation in these schools, type of the support needed for improvement in each school.

The questionnaire is divided into eight parts: Management, Teachers, Students, Curricula, Infrastructure, Information Technology and Business Collaboration. For each part of the questionnaire, challenges, milestones and advantages have been identified. Based on the collected data, different graphs and tables were produced to better illustrate the existing situation in the schools and possible areas for intervention and support by the ALLED2 project.

Collection of data was done through school based qualitative interviews with representatives of the schools, as well as from the electronic questionnaires delivered through e-mails. Collected qualitative and quantitative data for each of the selected 20 VET schools was processed in Excel for further analysis or alternatively through content analysis approach for qualitative responses.

After the database of 20 schools was completed, ALLED2 EDU NET on the webpage alled.eu has been updated with the latest data collected for the second year. Furthermore, the statistical analysis of the data was done in excel where tables and graphs were produced to depict the assessment of the current situation and were compared to the data of the previous year to assess the changes that ALLED2 20 schools have undergone during the period of one year. For the dependency analysis of schools, Power BI application was used to produce geographic visualization. Also, this data will be used as input for ALLED2 web portal to be presented in graphical, user-friendly.

4. Survey results

This section provides an analysis of the 20 ALLED2 VET schools and 4 VTCs. The results are presented in the order of the questionnaire sections.

4.1. School management

This section discusses various aspects of the school management such as the gender of the director, their occupation/qualification, how many years of work they have as a director and years of their general work experience. The similar data is collected for the deputy directors of each school, including some additional questions.

Of the total 20 ALLED2 schools, same as previous year's ALLED2 survey data, there are 16 male and 4 female directors, or 80% male and 20% female as shown in Figure 1. This data shows a significant gender difference in terms of managerial roles, posing great deal of concern in terms of gender equality in Kosovo.

Figure 1. Director's gender in 20 schools of ALLED2
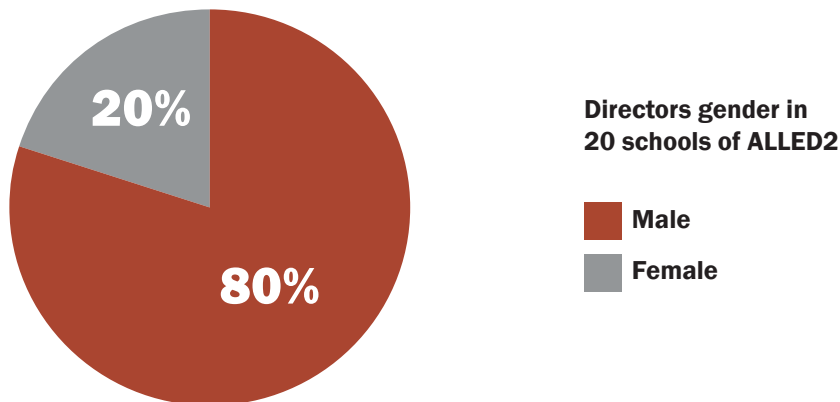
Source: ALLED2 School Survey, 2021

Same as the previous year data, gender of VTC directors continues to be 100% male.

Figure 2. Director's gender in 4 VTCs of ALLED2

100%

Director's gender in VTC

■ Male
■ Female
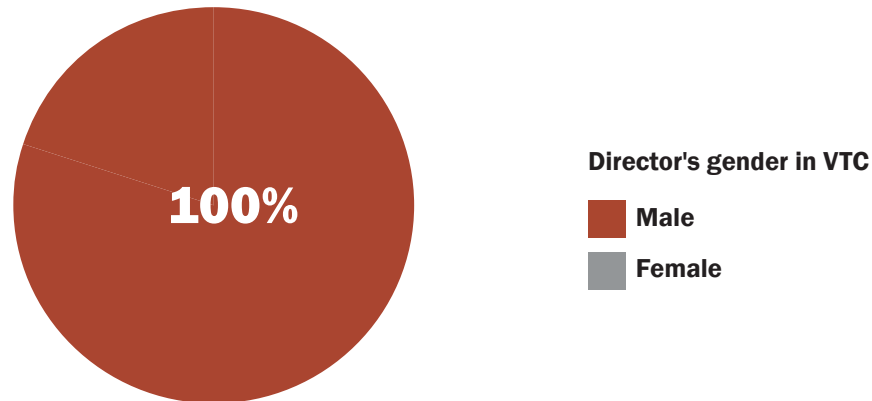
Source: ALLED2 School Survey, 2021

Schools around the world had to shut down due to the pandemic. As a result, the education system has changed dramatically with schools having to resort to other teaching methods such as distance learning through digital platforms. During the ALLED2 school survey in Kosovo, schools were asked if they practiced distance learning and 13 schools or 65% responded that they practiced distance learning while 7 schools, respectively 35% said they did not. Studies show that distance learning has both its advantages and disadvantages and based on the results of these studies, online learning during the pandemic was completed successfully, even though quite a number of teachers said that this process was very challenging for them[1].

Figure 3. Distance learning in ALLED2 schools

35%

65%

Is your school practicing distance learning?

■ Yes
■ No
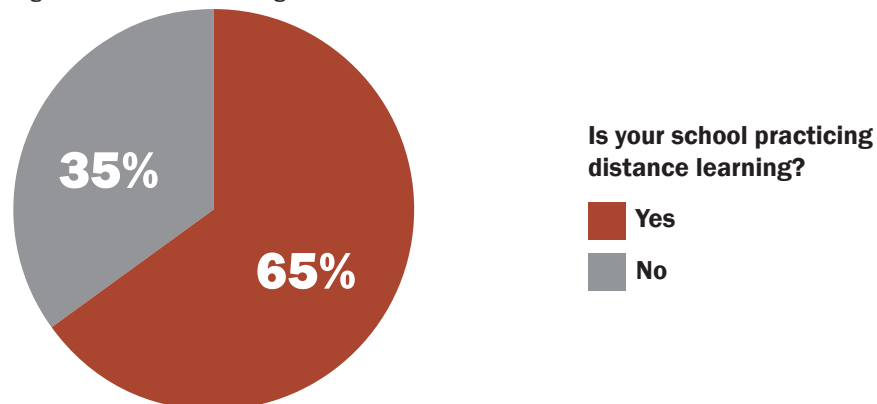
Source: ALLED2 School Survey, 2021

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[1] https://www.academia.edu/44731316/CHALLENGES_AND_ADVANTAGES_OF_ONLINE_LEARNING_THE_CASE_OF_KOSOVO_Challenges_and_Advantages_of_Online_Learning_The_Case_of_Kosovo

When schools were asked if the distance learning was provided for each school profile, 14 schools or 70% said that they do provide it for each profile, while 6 schools or 30% responded that distance learning was not provided for each profile.

Figure 4. Distance learning in ALLED2 schools

Is distance learning provided for each profile?

- Yes
- No
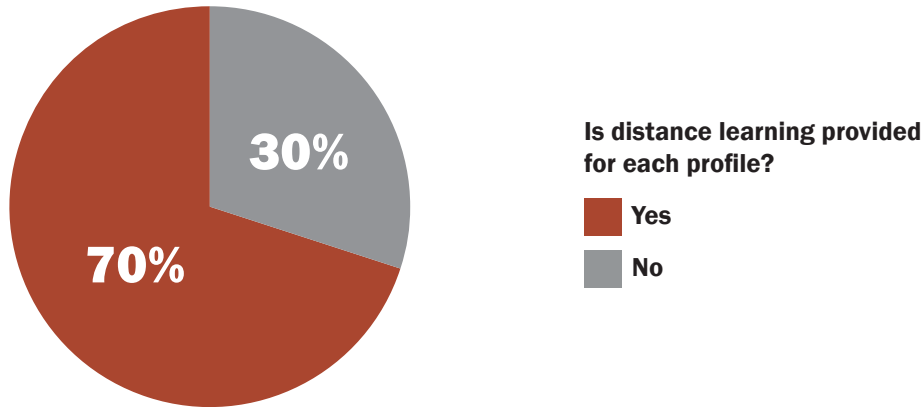
Source: ALLED2 School Survey, 2021

Regarding the main challenges of distance learning, schools pointed out the lack of technological equipment and technological knowledge. Also, one of the main challenges was the slow internet or complete lack of it in some rural areas.

Challenges during distance learning

What are the main challenges of distance learning?
1. Lack of digital equipment for students and teachers
2. Lack of internet in rural areas or weak internet connection
3. Lack of knowledge using online platforms

Source: ALLED2 School Survey, 2021

When the schools were asked during the 2019/2020 survey if they have a school website, 90% or 18 schools said they do not have websites and 10% or 2 of them stated that

they have. When we compare to the data of 2020/2021, we notice that there has been an increase in the number of schools that now have a school website. In the 2020/2021 survey, 30% or 6 schools said they have a website while 70% or 14 school said they do not. There is still a low number of schools that have websites and this seems to be compensated by the use of the Facebook pages. Around 95% of schools have their Facebook pages that they consider as a website or substitute of the website, which usually is used for purposes of posting latest news about the school activities and related information. While Facebook platform is a good way to promote the school and post latest activities, people looking for information need to scroll down through the history of posts to try to find what they are looking for. On the other hand, a website is more practical and better organized for getting to the information easier and faster.

Figure 5. Does school have a webpage?
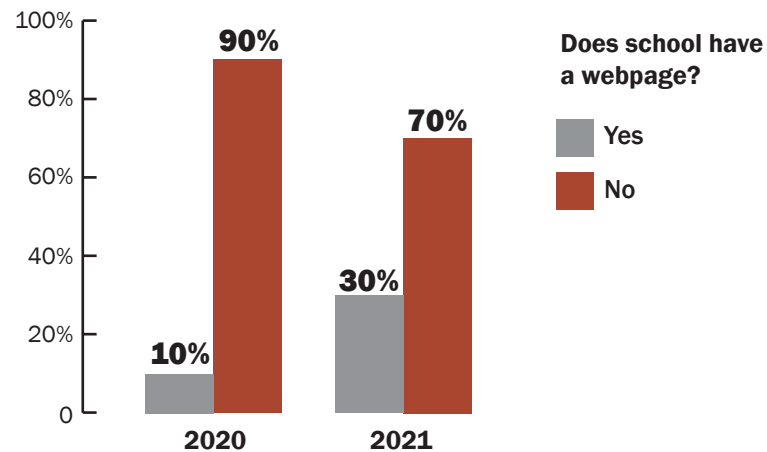
Source: ALLED2 School Survey, 2021

Compared to last year when all 4 VTCs said they have a website or link within the APRK website, in 2020/2021 survey 1 VTC (Prizren) said it didn't have such a website or link.

Figure 6. Is there a VTC website or links within the APRK website?
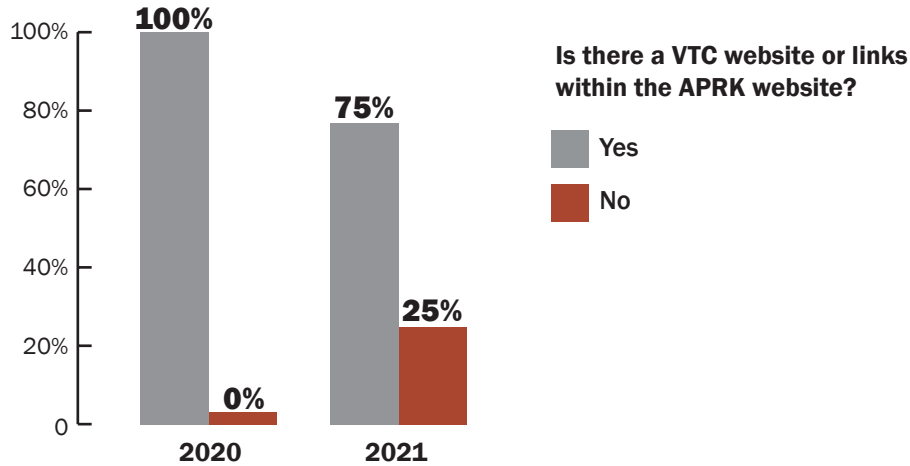
Source: ALLED2 School Survey, 2021

Those schools that have webpages, use those extensively to provide students with information about schools, study programs, activities for both existing students and those potentially interested in enrolling in the future. These webpages should be updated frequently with information about the latest school activities or news. This is likely to attract more interested students to enrol in those schools. Compared to 2019/2020 survey, where 90% of schools said they do not update the school webpage or Facebook page regularly, in 2020/2021 survey, this changed significantly where now 90% or 18 schools said that they update the webpage regularly, and this includes the Facebook pages. Schools could further be supported in finding the best solution for website design and/or website maintenance.

Figure 7. Do you update webpage regularly?
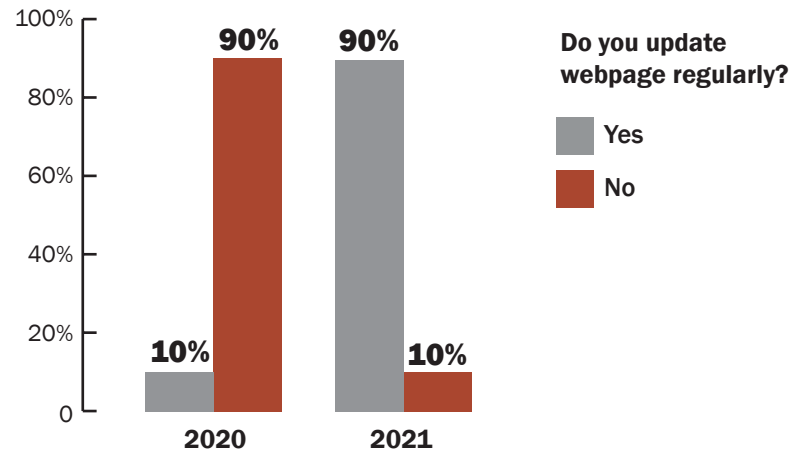
Source: ALLED2 School Survey, 2021

When asked if the VTCs update their webpage regularly, 2 VTCs said yes (Prishtina and Gjakova) and 2 no (Peja and Prizren).

Figure 8. Is the VTC webpage regularly updated?
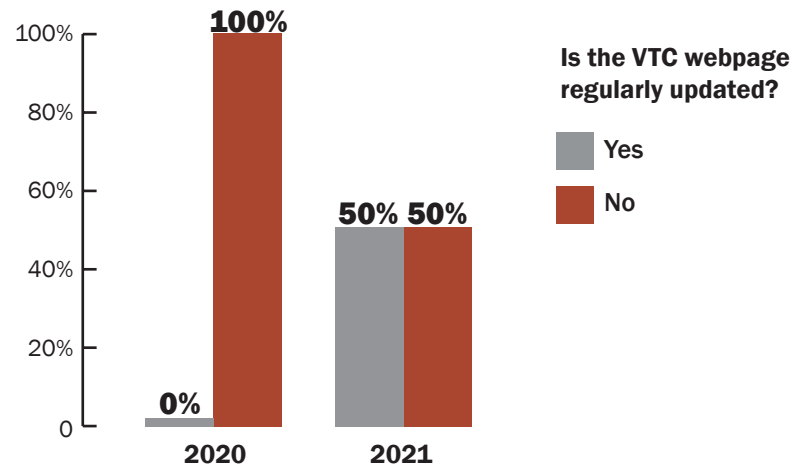
Source: ALLED2 School Survey, 2021

When it comes to income generating activities and school to school cooperation, there has been an increase in both of these activities in 2020/2021 compared to 2019/2020 survey. In 2020/2021 survey, 85% of schools said they are involved in activities for generating supplementary income, an incense by 54% from last year. Regarding school-to-school cooperation, in 2020/2021 survey, 95% of schools were engaged in some type of this activity, and compared to last year, there has been an increase in school-to-school activities by 19%.

Figure 9. Income generating activities and School to school cooperation
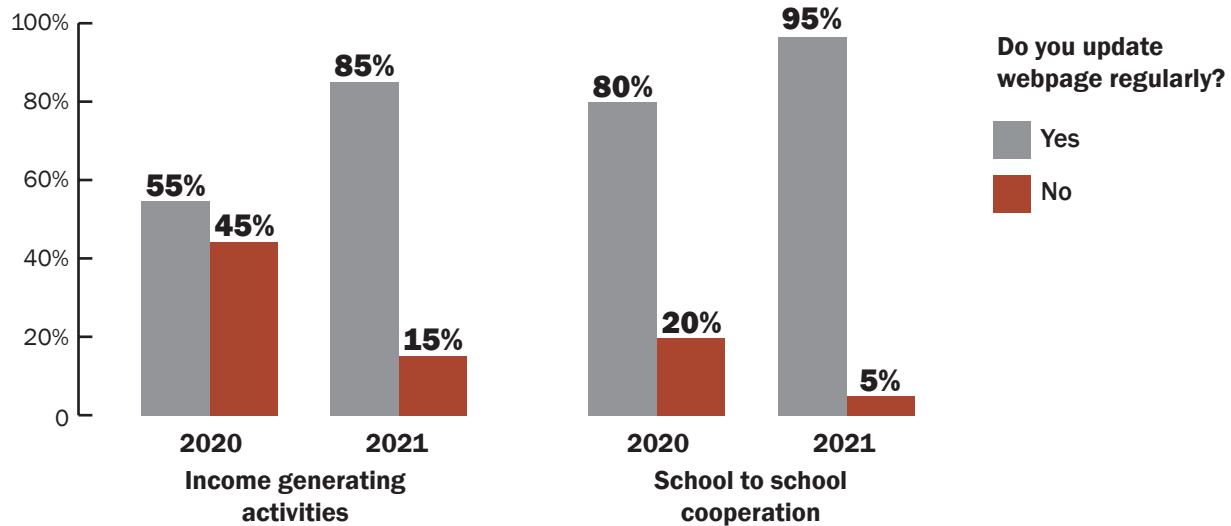
Source: ALLED2 School Survey, 2021

The qualifications and skills of school managers are a very important factor in determining the school performance. In particular, the qualifications of directors and deputy directors are very important for the school because they can provide leadership that affects every teacher and student have a high responsibility to shape the strategy and connect the schools with industry and business sector. Compared to 2019/2020 survey, in 2020/2021, the qualifications of directors and deputy directors have notably improved. In 2020/2021, 65% of directors have a master's degree, while in 2020 only 30% had this degree. The number of directors with PhD, was the same for both years (5%). There has been an improvement in the qualifications of deputy directors as well, where compared to 2020 when only 25% said they have a master's degree, now 55% have this degree, while from 0% deputy directors with PhD, now there are 5%. The number of directors and deputy directors with master's degree qualifications has been increased significantly.

Figure 10. Qualifications of directors in the 20 schools of ALLED2
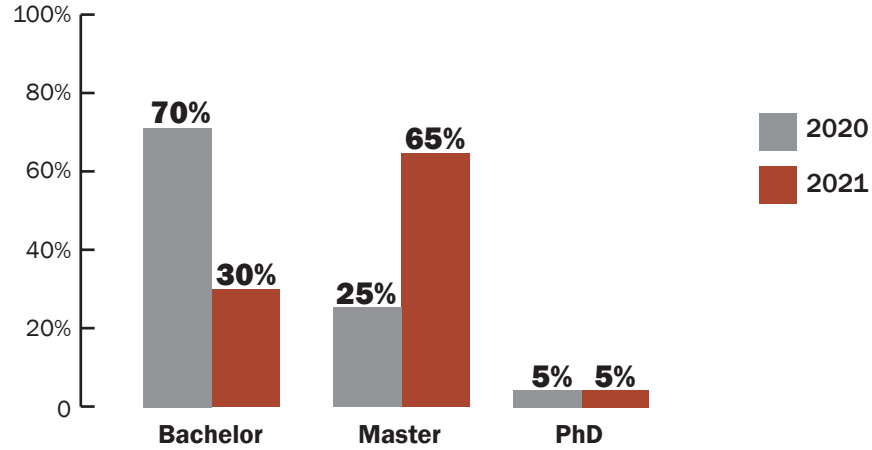
Source: ALLED2 School Survey, 2021

Figure 11. Qualifications of deputy directors in the 20 schools of ALLED2
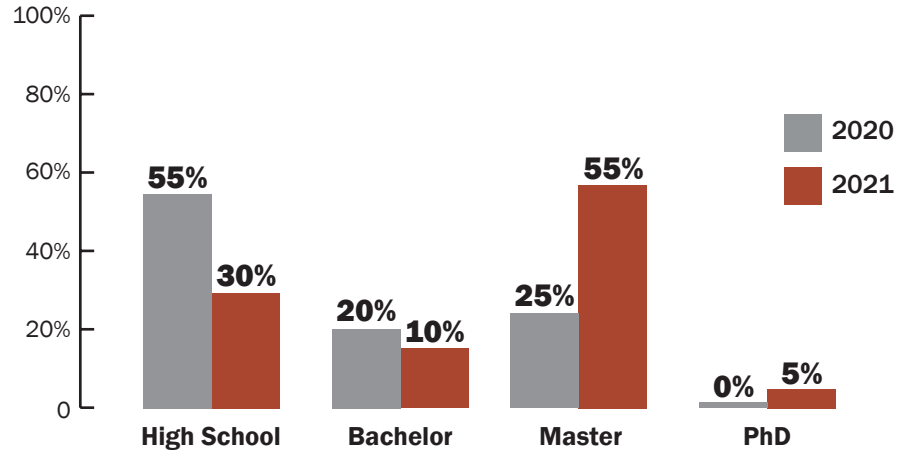
Source: ALLED2 School Survey, 2021

Table 1. Qualifications of directors and deputy-directors in each school

School	Qualification/Director	Qualification/Deputy director
Skender Luarasi	Master's in Thermo energetics Engineering	High school
Andrea Durrsaku	Bachelor in Traffic engineer	Master's degree in Law
Abdyl Frashëri	Bachelor in agricultural engineering	Master's degree in Biotechnology
Jonuz Zejnullahu	Masters in Mining Engineering	Bachelor degree
Nexhmedin Nixha	Masters in Construction Engineering	High school
Kadri Kusari	Masters in Economy, Management and Finance	Bachelor degree in Law
Fan S.Noli	Masters in Physical Education and Sports	Masters in Mechanical Engineering
Selajdin Mullaabazi-Mici	Masters in Thermo energetics	High school
Zenel Hajdini	Bachelor, Chemistry Professor	Doctorate in Veterinary Medicine
Arbëria	Bachelor in Economy	High school
Pjetër Bogdani	Masters in Mechanical Engineering	Masters in Management and Technology
Mithat Frashëri	Bachelor degree in Law	Master of Mechanical Engineering
Ali Hadri	Bachelor degree in Biology	Master's degree
Arkitekt Sinani	Masters in Manag. of Educational Institutions	Master's degree
Fehmi Agani	Master of Mechanical Engineering	High school
Mehmet Isai	Masters in Architecture	Master's degree in Physical Education
Tafil Kasumaj	Masters in Electrical Engineering	High school
11 Marsi	Masters in Technical Sciences	Master's degree
Ismail Dumoshi	Master's degree in Geology Engineering	Master's degree
Fehmi Lladrovci	Doctorate in History	Master's degree in Geology

Source: ALLED2 School Survey, 2021

An important question was made to schools whether they have different coordinators whose role is very important in schools because they help school directors to manage or coordinate various school activities. Based on the figure below, all schools responded that they have quality assurance coordinators, same as the previous survey, which is very important in terms of establishing quality assurance system in schools. In terms of cooperation with the business sector, 60% of schools (12 schools) stated that they have coordinators for business cooperation, a 20% increase from last year. When asked if the schools have a career orientation coordinator, 40% of them have one, which is a 33% increase from the previous survey. Regarding the coordination of schools with the Municipal Education Directorate (MED) or the employment office, 90% of schools responded that they have a coordinator for such activities, and compared to the last year's survey when it was 70%, there is a 29% increase.

Figure 12. Coordinators for quality assurance, business cooperation and career centre
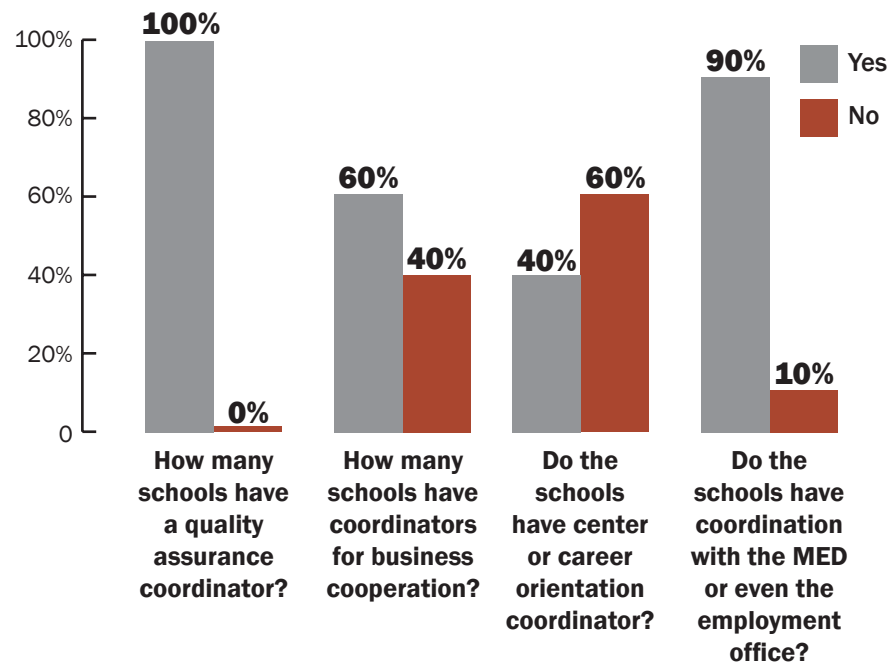
Source: ALLED2 School Survey, 2021

Regarding whether VTCs have different coordinators for managing specific activities in schools, for the question whether they have a quality assurance coordinator, all the VTCs claimed they do, but none of them have a coordinator for business cooperation, and compared to the previous survey, the percentages are the same. Also, when asked if the VTCs have career orientation coordinators, the answer was the same as the previous year where 2 schools answered yes and two said they didn't have. The only difference compared to the previous survey is for the question if the VTCs have coordination with MED of employment office, which in the last survey, 75% said they do compared to 100% that said they do in the previous survey.

Figure 13. Coordinators for quality assurance, business cooperation and career centre for VTCs
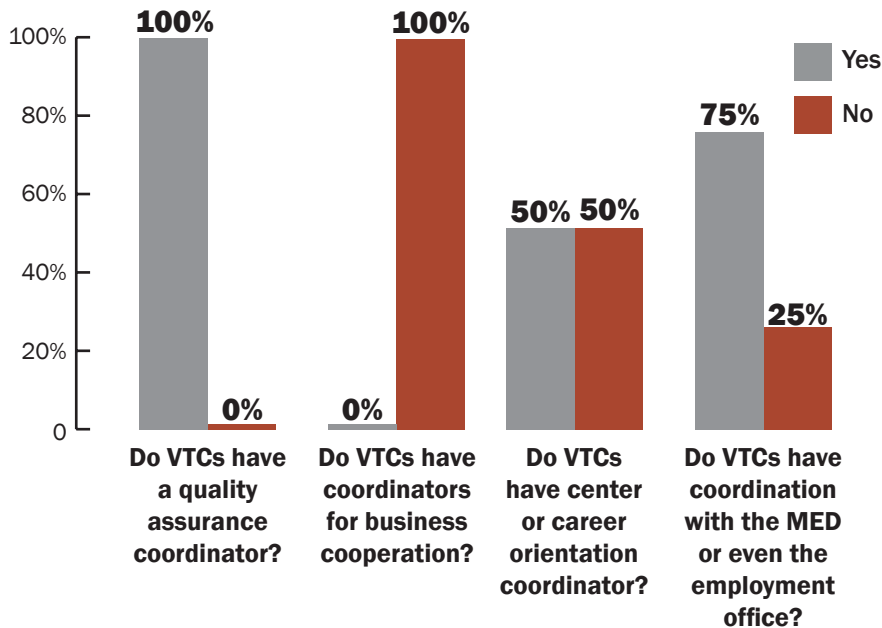
Each school must have its own professional Activas. Out of the 20 ALLED2 schools responded that these Activas in the figure below are functional. These Activas include areas where the ALLED2 project is focused on such as entrepreneurship, electronics, machinery, ICT, food processing and food technology which are identified as priority areas by the ALLED Labour Market and Skills Needs Analysis in Kosovo (see Krasniqi, 2019).[2] These

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[2] *Krasniqi (2019) Labour Market and Skills Needs Analysis in Kosovo: Perspective for the future, Aligning Edu-*

functional areas could be used as a mechanism to support potential schools and also students' candidates for internship in industry and boost school-to-business cooperation. Compared to last year's survey, some of the new functioning Activas are: architecture, geodesy, interior design, production operator and telecommunication.

Figure 14. Functional areas of student activities in each school

Professional Activas which function in the schools are:
Agriculture, Architecture, Auto mechanic, Construction, Design, Economics and Entre-preneurship, Electrotechnics, Energy, Food Technology, Geodesy, Geology & Mining, Health, Hotel & Tourism, Informatics, Interior design, Languages, Legal, Machinery, Mathematics, Natural and Social Sciences, Physical Education (gym), Physics, Production Operator, Psychology, Road Traffic, Science Lab Technician, Society & Environment, Tailoring, Telecommunication, Textile, Trade, Veterinary, Woodwork.

Source: ALLED2 School Survey, 2021

Self-assessment of schools is an important element in school's strategy planning and performance. 2020/2021 survey findings show that out of the 20 ALLED2 schools, 19 of them has performed a self-assessment, compared to 20 from the previous survey. The main challenges that were emphasized during this self-assessment had to do with the lack of trainings, lack of adequate work space and old facilities, implementation of practical work activities, lack of volunteer work and the situation with the pandemic which was quite a challenge for many schools around the world to adjust to a new system of teaching.

Out of the 20 ALLED2 schools, based on the 2020/2021 survey data, 19 schools said they have completed the improvement plan, compared to 18 in the previous year. The challenges during the process of implementation of the improvement plan based on the 2020/2021 survey have been the lack of budget, insufficient commitment of relevant actors, lack of equipment in school cabinets and workshops, lack of workshops and consumables, and lack of teacher trainings, while the challenges of the previous year include lack of financial resources, teachers' training, provision of technical support, cooperation with businesses, etc. In order to improve their skills in conducting the self-assessment analysis and improvement plan, ALLED2 project could help schools in providing trainings and capacity building, and also providing financial assistance to schools for the necessary equipment that students will need to accomplish the tasks which will prepare them for the labour market.

Table 2. Challenges during performance self-assessment and improvement plan

Is performance self-assessment done?	The main challenges during the self-assessment process	Is the improvement plan done?	Challenges in implementing the improvement plan?
Yes (19 schools) No (1 school)	1. Lack of trainings 2. Lack of adequate work space and old facilities 3. Realization of practical work 4. Lack of volunteer work 5. Situation with the pandemic	Yes (19 schools) No (1 school)	1. Lack of budget 2. Insufficient commitment of relevant actors 3. Lack of equipment in school cabinets and work-shops 4. Lack of workshops and consumables 5. Lack of teacher trainings

Source: ALLED2 School Survey, 2021

4.2. Teachers

This section provides findings from the survey regarding teacher's gender, qualifications and other characteristics. Based on the 2020/2021 ALLED2 school survey, there are 1,316 teachers in total, of which 61% of them are male and 39% are female, whereas during the 2019/2020 survey there were 1,231 teachers in total, of which 60% of them were male and 40% female. This means there are still some gender differences and there hasn't been much of a difference from last year's survey, except that there has been only a slight decrease in the number of female teachers. Schools should pay attention to increase the number of female teachers to ensure the gender balance.

Figure 15. Percentage of teachers by gender in 20 schools of ALLED2
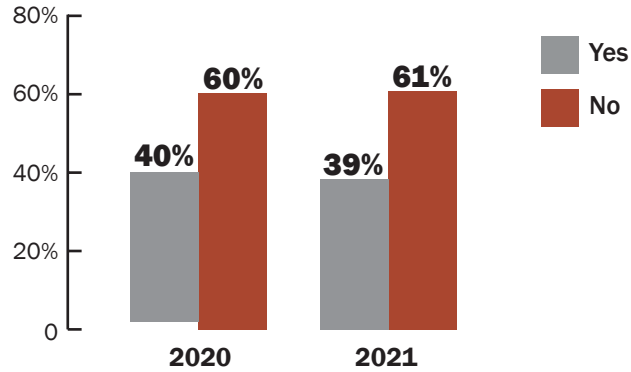
Source: ALLED2 School Survey, 2021

Teacher's work experience is important for strengthening the education system and increasing student achievement. The figure below shows the number of teachers based on number of years of work experience based on the findings from the 2019/2020 and 2020/2021 ALLED2 surveys. With less than 5 years of work there are 7% or 89 teachers, with 5-10 years of work 17% or 218 teachers, 10-15 years of work are 24% or 298 teachers, with 15-20 years of work are 19% or 238 teachers, and teachers with over 20 years of work experience are the most with 33% or 408 teachers. Compared to the previous year survey, in the second year survey there has been an improvement in the number of years of work experience.

Figure 16. Percentage of teachers according to their work experience
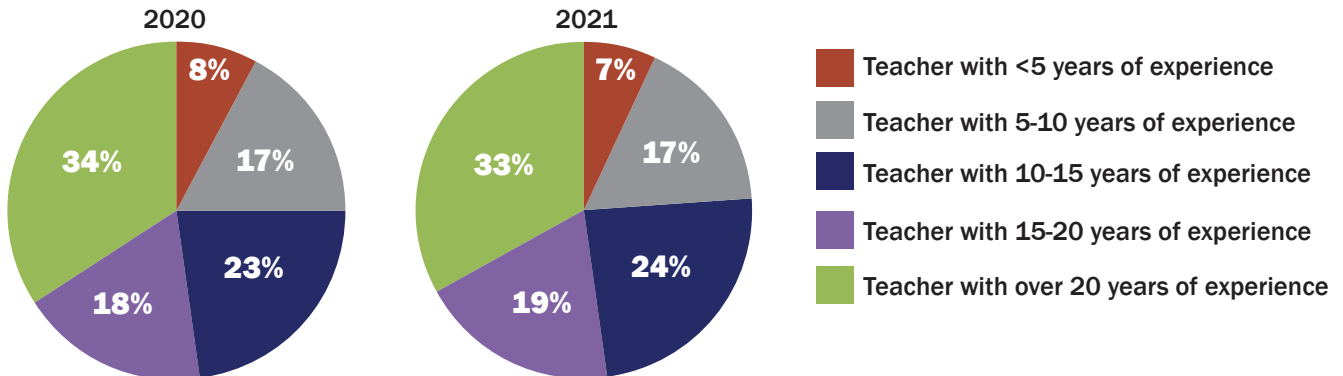
Source: ALLED2 School Survey, 2021

Table 3. Number of teachers by experience in 20 schools of ALLED2

School	Number of teachers by experience				
	< 5 years	5-10 years	10-15 years	15-20 years	>20 years
Skender Luarasi	3	18	15	7	17
Andrea Durrsaku	5	6	9	5	11
Abdyl Frashëri	3	2	6	7	19
Jonuz Zejnullahu	2	14	10	29	16
Nexhmedin Nixha	2	4	8	8	24
Kadri Kusari	7	7	12	9	29
Fan S.Noli	3	17	14	12	29
Selajdin Mullaabazi-Mici	2	6	12	6	9
Zenel Hajdini	5	14	19	31	17
Arbëria	0	10	25	10	5
Pjetër Bogdani	11	9	12	9	21
Mithat Frashëri	5	5	14	9	10
Ali Hadri	2	19	29	20	16
Arkitekt Sinani	2	9	12	9	31
Fehmi Agani	5	15	12	14	27
Mehmet Isai	1	7	21	13	32
Tafil Kasumaj	2	2	5	3	24
11 Marsi	19	23	15	8	43
Ismail Dumoshi	4	6	12	5	8
Fehmi Lladrovci	6	25	36	24	20
Total	**89**	**218**	**298**	**238**	**408**

Source: ALLED2 School Survey, 2021

When it comes to the number of qualified male and female teachers, in the figure below we can see that 59% or 705 of male teachers are qualified, while for female teachers this percentage is 41% or 497 teachers.

Percentage of qualified male and female teachers in 20 schools of ALLED2

2020

60% 40%

Female
Male

2021

59% 41%
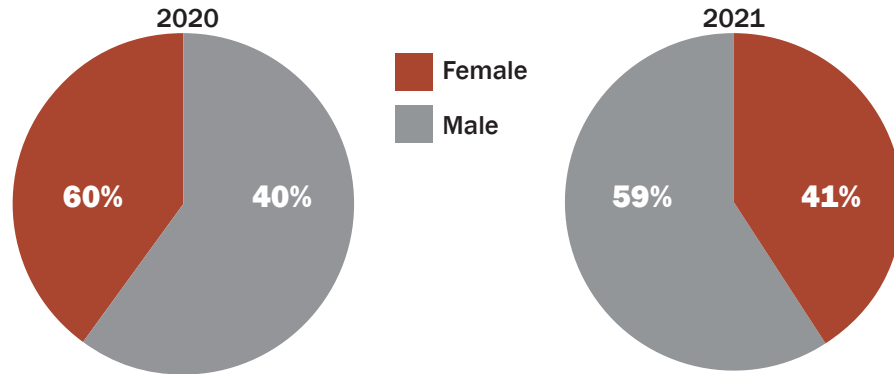
Source: ALLED2 School Survey, 2021

The number of teachers in the 4 ALLED2 Vocational Schools is 35, where 63% are male and 37% female teachers. When it comes to qualified male and female teachers, out of 22 male teachers, 18 or 62% are qualified while 11 female teachers or 38% are qualified out of 13. These percentage are the same as in the previous survey.

Figure 17. Percentage of qualified male and female teachers in 4 VTCs

62% 38%

Number of qualified female teachers
Number of qualified male teachers
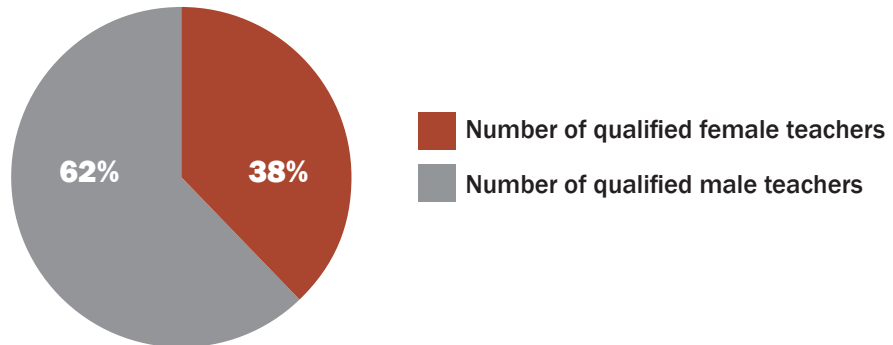
Source: ALLED2 School Survey, 2021

The provision of training for new teachers is a precondition for quality of teaching. The ALLED2 survey included question if Initial Teacher Training (ITT) is provided for teachers. Based on the last year's findings, 90% of the 20 ALLED2 schools answered "no". In the 2020/2021 survey, the results show that there has been quite an improvement in this aspect where 75% of schools claim that ITT is provided for teachers and 25% said "no". When it comes to VTCs, 4 VTC claimed that they ITT is not provided for teachers, while in the previous survey, 50% or 2 VTCs said it was provided. Taking into consideration the importance of such training for teachers, every teacher and each school should strive to provide this kind of training if they want to be more successful in both teaching and learning. ALLED2 project could support schools in providing this type of training by organizing workshops in selected school, and also working with the Ministry of Education, Science, Technology and Innovation in offering this type of workshop for teachers at national level which can have more effective results for this project.

Figure 18. Provision of teacher training
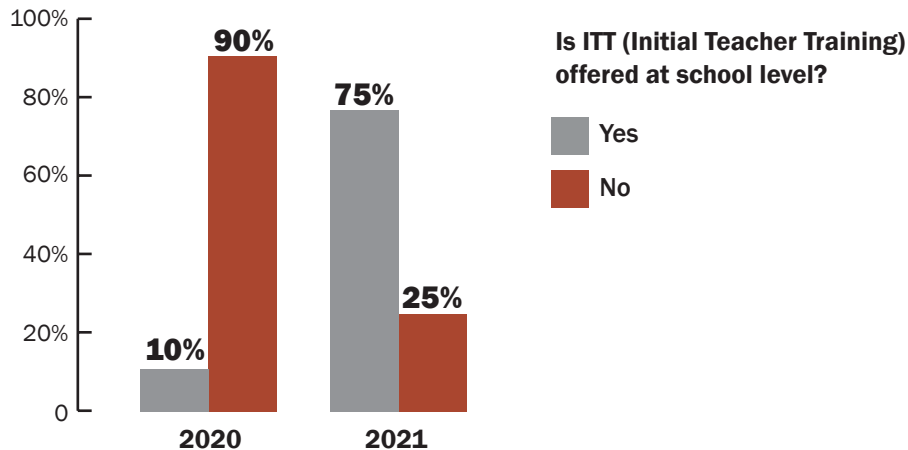
Source: ALLED2 School Survey, 2021

Of the 20 ALLED2 schools, only 10% said that the school has teachers responsible for teacher professional development. This percentage is lower than last year, where 16% said that they have such teachers. Again, these findings reconfirm the need to establish a systematic approach in training and professional development of teachers.

Figure 19. Responsible teacher for professional development
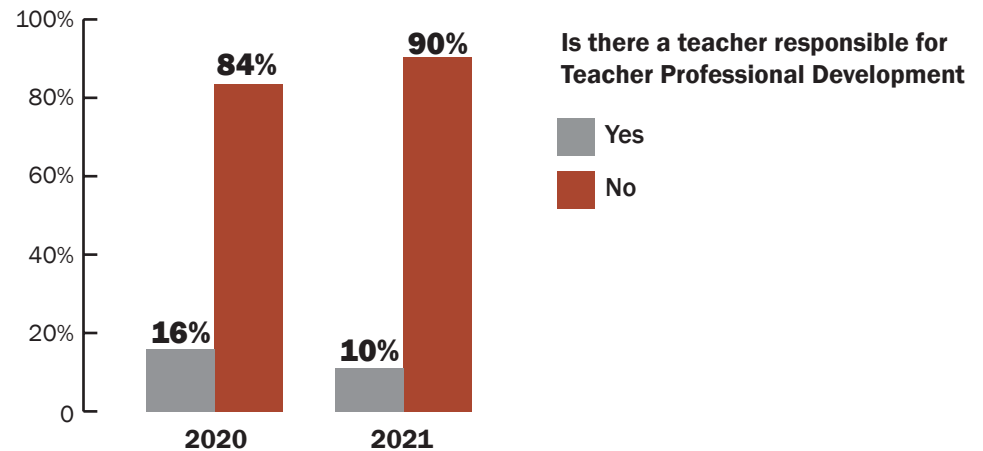
Source: ALLED2 School Survey, 2021

The figure below shows the number of students per teacher based on ALLED2 2019/2020 and 2020/2021 data. In the European Union, the average number of students per teacher was 12 in 2018[3]. Based on ALLED2 2020/2021 survey data, the average number of students per teacher is 11, whereas for 2019/2020 was 13, which means for ALLED2 schools the student per teacher ratios is quite good and very close to the EU average. On the other hand, VTCs have quite a high ratio with an average of 58.

_____

[3] *https://data.worldbank.org/indicator/SE.SEC.ENRL.TC.ZS*

Figure 20. Number of students per teacher in 20 ALLED2 schools

2020
2021
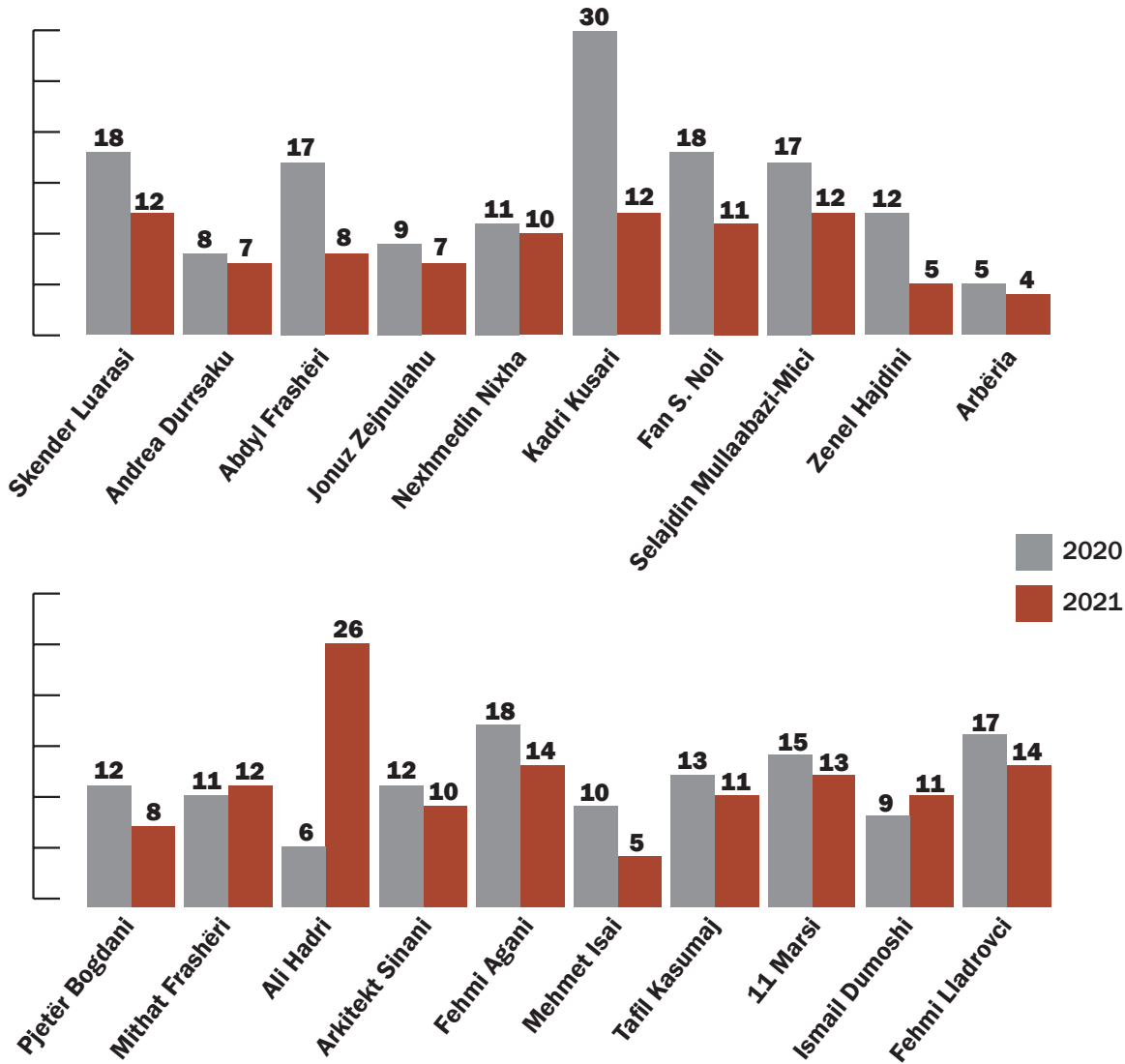
Source: ALLED2 School Survey, 2021

Figure 21. Number of students per trainer in ALLED2 VTCs

Student per teacher ratio
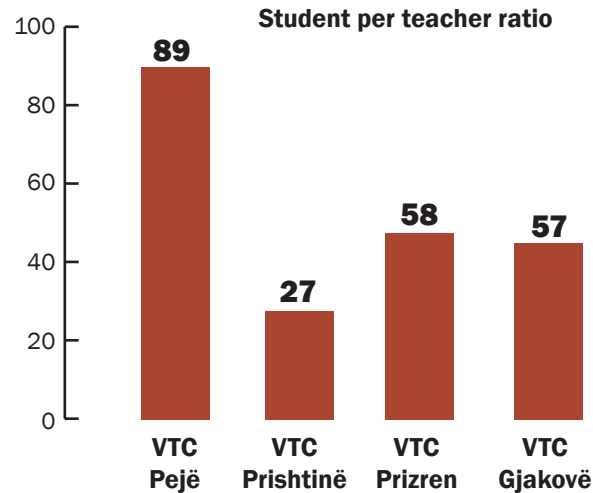
Source: ALLED2 School Survey, 2021

Practical training and practical-based teaching and learning is important element in ensuring the quality of education. This is particularly true for linking education with labour market needs. Students at vocational schools in particular have to spend most of their time in practical training, which is why they are also called vocational training schools. After graduation, students must be able to practice what they have learned during their education immediately on the job or even on their way to college. In 20 schools, the time spent in practical learning increases from 10th grade - 6 hours, then 11th grade - 9 hours and 12th grade - 12 hours.

Figure 22. Time spent in practical learning in 20 ALLED2 schools

How much time is spent in practical lessons (hours per week) 10th grade

How much time is spent in practical lessons (hours per week) 11th grade

How much time is spent in practical lessons (hours per week) 12th grade
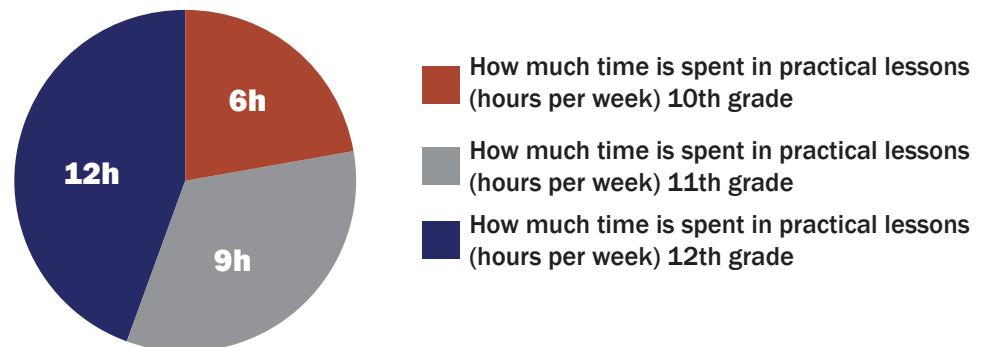
Source: ALLED2 School Survey, 2021

In order for the 20 ALLED 2 schools to achieve their objectives, ALLED2 project in collaboration with the schools is working towards meeting the school's needs in the best possible way. In the ALLED2 survey, schools have presented their main concerns, challenges and areas in need of improvement. Some of the most common complaints have been the lack of budget, lack of equipment and poor infrastructure, lack of training for teachers and management, difficulties in establishing collaboration with businesses, and the need of decentralisation on budgeting planning and execution.

4.3. Students

This section provides data about the total number of students, the number of students by gender, enrolment in study programmes by gender, etc. Regarding the number of students in 20 schools of ALLED2 project, they are predominantly male, about 9,241 or 63% while female students account for 37% or 5,503. Compared to the 2019/2020 survey responses, in the 2020/2021 survey we notice that there has been a considerable increase in the number of female students by 32% while the total number of students increased by 10%. When compared by gender, there are 40% less female students than male students in vocational schools, which means that despite the increase in female students from last year's survey, there still is a big gap between male and female students who enrol in vocational schools.

Figure 23. Percentage of students by gender in 20 schools of ALLED2
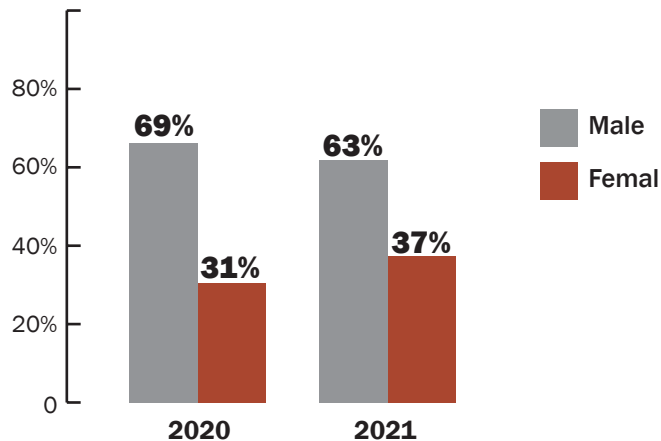
Source: ALLED2 School Survey, 2021

In the figure below which shows the percentage of students by gender, we see that there is still a big gap between male and female student enrolment. In 2020/2021 survey, there are 55% more male than female students, and compared to the previous year, there are 13% more male students in 2020/2021 survey. If analysed by VTC, in 2020/2021 survey, in all VTCs, the number of male students is higher, except in VTC Gjakova, where the number of female students is higher by 14% than the number of males.

Figure 24. Percentage of students by gender in VTCs
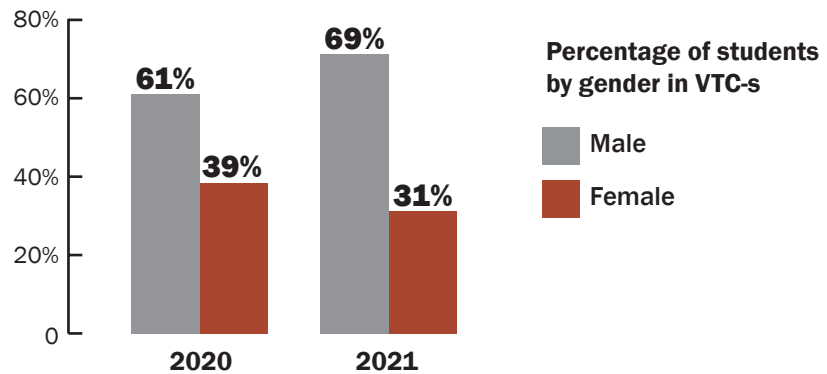
Source: ALLED2 School Survey, 2021

Table 4. Number of students by gender in ALLED2 schools

School	Male	Female	Total
Skender Luarasi	497	195	692
Andrea Durrsaku	175	59	234
Abdyl Frashëri	175	104	279
Jonuz Zejnullahu	386	144	530
Nexhmedin Nixha	366	86	452
Kadri Kusari	510	279	789
Fan S.Noli	703	115	818
Selajdin Mullaabazi-Mici	207	209	416
Zenel Hajdini	240	151	391
Arbëria	120	51	171
Pjetër Bogdani	489	31	520
Mithat Frashëri	335	185	520
Ali Hadri	206	2,012	2,218
Arkitekt Sinani	518	103	621
Fehmi Agani	782	465	1,247
Mehmet Isai	383	94	477
Tafil Kasumaj	277	119	396
11 Marsi	1,083	353	1,436
Ismail Dumoshi	278	106	384
Fehmi Lladrovci	1,511	642	2,153
Total	**9,241**	**5,503**	**14,744**

Source: ALLED2 School Survey, 2021

If we analyse the enrolment of male and female students by programmes, in the figure below we see that study programmes in vocational schools such as in machinery, mechatronics, electrotechnics, construction, road traffic, electrical installation, etc., number of male students is predominantly higher compared to female ones. When analysed by percentage, women's participation in male perceived profiles, overall has decreased compared to last year's participation, especially for profiles such as informatics, electrotechnics, and road traffic, while male participation in these profiles has increased. If we analyse the enrolment by the number of students, we notice a sharp increase in the male enrolment in electrotechnics and machinery by almost 4 times compared to last year, while for females, although still low in numbers, there was an increase in enrolment in electrotechnics by more than 4 times compared to previous year.

Figure 25. Participation of women in male perceived profiles

Legend:
- Male 2020
- Female 2020
- Male 2021
- Female 2021

Informatics: Male 2020 72%, Female 2020 28%, Male 2021 84%, Female 2021 16%
Electrotechnics: Male 2020 81%, Female 2020 19%, Male 2021 93%, Female 2021 7%
Road Trafic: Male 2020 75%, Female 2020 25%, Male 2021 83%, Female 2021 17%
Agribusiness: Male 2020 64%, Female 2020 36%, Male 2021 63%, Female 2021 37%
Telecomunications: Male 2020 71%, Female 2020 29%, Male 2021 82%, Female 2021 18%
Construction: Male 2020 82%, Female 2020 18%, Male 2021 82%, Female 2021 18%
Machinery: Male 2020 98%, Female 2020 2%, Male 2021 98%, Female 2021 2%
Mechatronic: Male 2020 95%, Female 2020 5%, Male 2021 93%, Female 2021 7%

Source: ALLED2 School Survey, 2021

Figure 26. Number of students in predominantly male profiles

Informatics: Male 2020 838, Female 2020 324, Male 2021 945, Female 2021 180
Electrotechnics: Male 2020 587, Female 2020 42, Male 2021 2230, Female 2021 173
Road Trafic: Male 2020 444, Female 2020 146, Male 2021 490, Female 2021 100
Agribusiness: Male 2020 123, Female 2020 68, Male 2021 121, Female 2021 71
Telecomunications: Male 2020 291, Female 2020 117, Male 2021 290, Female 2021 64
Construction: Male 2020 212, Female 2020 46, Male 2021 253, Female 2021 57
Machinery: Male 2020 590, Female 2020 10, Male 2021 2118, Female 2021 50
Mechatronic: Male 2020 129, Female 2020 7, Male 2021 132, Female 2021 10

Source: ALLED2 School Survey, 2021

The following figures provide information regarding main programmes chosen by male and female students. Based on ALLED2 2020/2021 survey, top female professions include economics, fashion design, nursing, legal, tailoring and others as shown in the figure. Meanwhile, for male students, the dominant professions were electrotechnical, machinery, informatics, heating and air conditioning, automechanic, etc. From these figures we can conclude that some profiles remained persistently gender stereotyped where female students still hesitate to enrol in such profiles that are perceived as "male" jobs. To address this issue, schools should have student career advisers to provide advice and motivate students about future jobs and careers and work on reducing gender stereotyping of career choices.

Figure 27. Top selected professions by number of female and male students
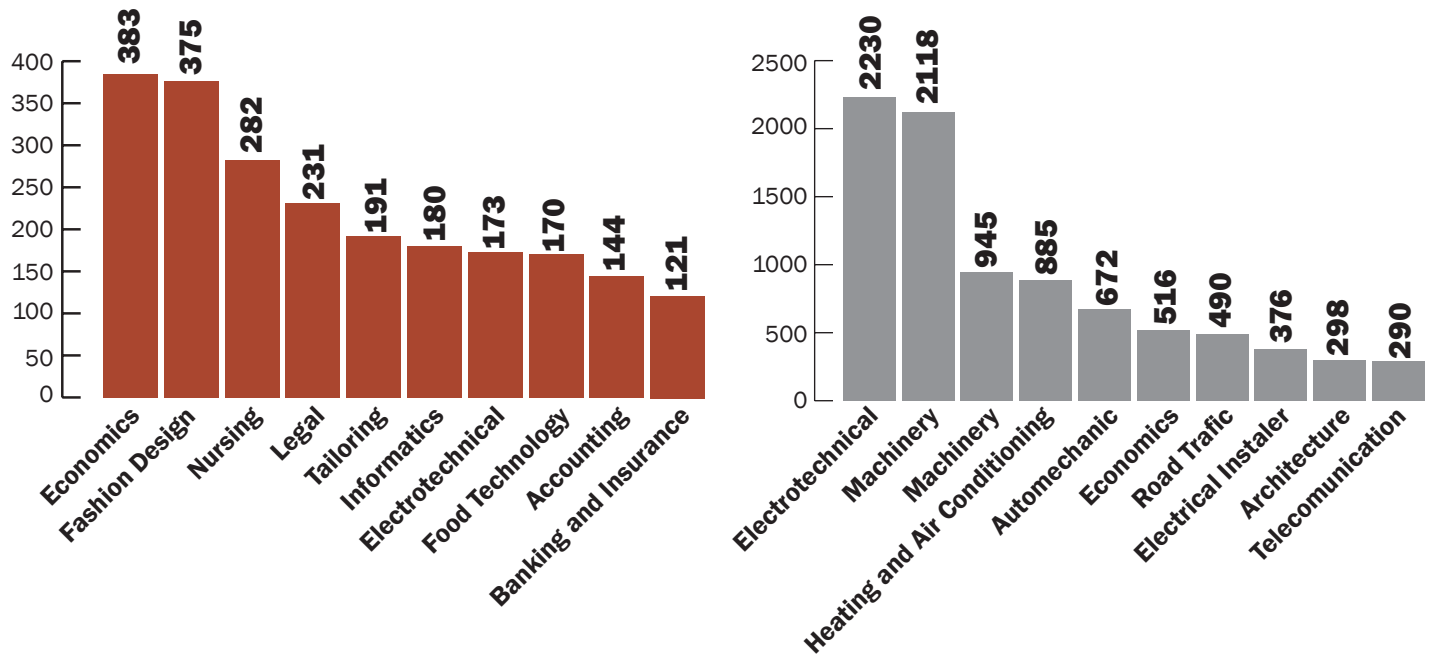
Source: ALLED2 School Survey, 2021

Another important aspect worth of analysing is the high dropout rates. In the 20 schools of ALLED2 the number drop out of school during the last four years was quite high. Based on the data from 2020/2021 survey, out of 642 students who drop out of school, 79% or 507 were male and 21% or 135 were female. As far as gender is concerned, the percentage between male and female didn't change much from last year, but if compared to the number of students that dropped out of school from 2019/2020 survey which were 1,556, 2020/2021 survey data shows that there has been a decrease by 59%. In VTCs, the 2020/2021 survey shows that the percentage of students drop outs is slightly higher than the previous year, by 4%. If we compare 120 male and 39 female drops outs in VTCs, there are 68% less female drop outs than male ones. The reasons for leaving school can be different, especially for men, such as difficult economic conditions which force children to abandon education, leaving the country at a very young age, finding a job in that profession or other, not adjusting to a professional profile, early marriage, etc.

Figure 28. Percentage of students by gender who drop out of school
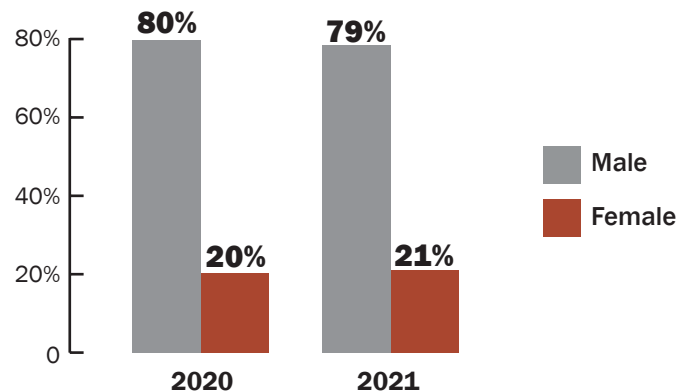
Source: ALLED2 School Survey, 2021

Figure 29. Number of students by gender who drop out of school in ALLED2 schools
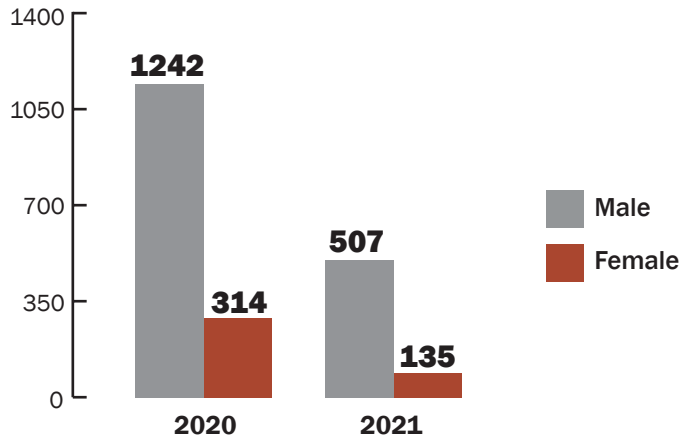
Figure 30. Percentage of students by gender who drop out of school in ALLED2 VTCs
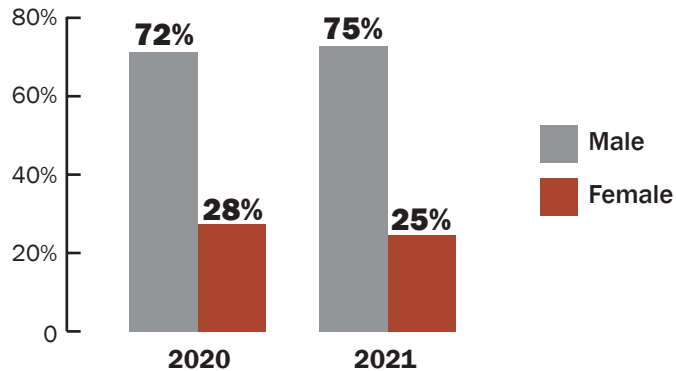
Next two figures provide data about the number of students with social difficulties and the number of students from minority groups based on each ALLED2 school. When analysing the number of students from minority groups, we see that the highest number is in "11 Marsi school", followed by "Nexhmedin Nixha", "Mithat Frashëri", "Pjetër Bogdani", Kadri Kusari", and others as shown in the figure below. If we compare to last year's data, we see that in general there has been an increase in the number of minority students. When it comes to number of students from environments with social difficulties, the highest number is in "Fehmi Lladrovci" school, "Fan S. Noli", "Fehmi Agani", "Arkitekt Sinani", etc. Compared to last year, based on school responses, in general there is a decrease in the number of students with social difficulties.

Figure 31. Number of students from minority groups

	2020	2021
Nexhmedin Nixha	71	72
Mithat Frasheri	43	46
Pjetër Bogdani	36	38
Kadri Kusari	8	32
11 Marsi	0	204
Fehmi Agani	8	25
Ali Hadri	12	16
Fan S. Noli	15	15
Zenel Hajdini	5	13
Ismail Dumoshi	9	12
Skender Luarasi	6	5
Tafil Kasumaj	3	5
Selajdin Mullaabazi-Mici	2	4
Arkitekt Sinani	0	2
Andrea Durrsaku	0	0
Abdyl Frashëri	0	0
Jonuz Zejnullahu	0	0
Arbëria	0	0
Mehmet Isai	0	0
Fehmi Lladrovci	0	0
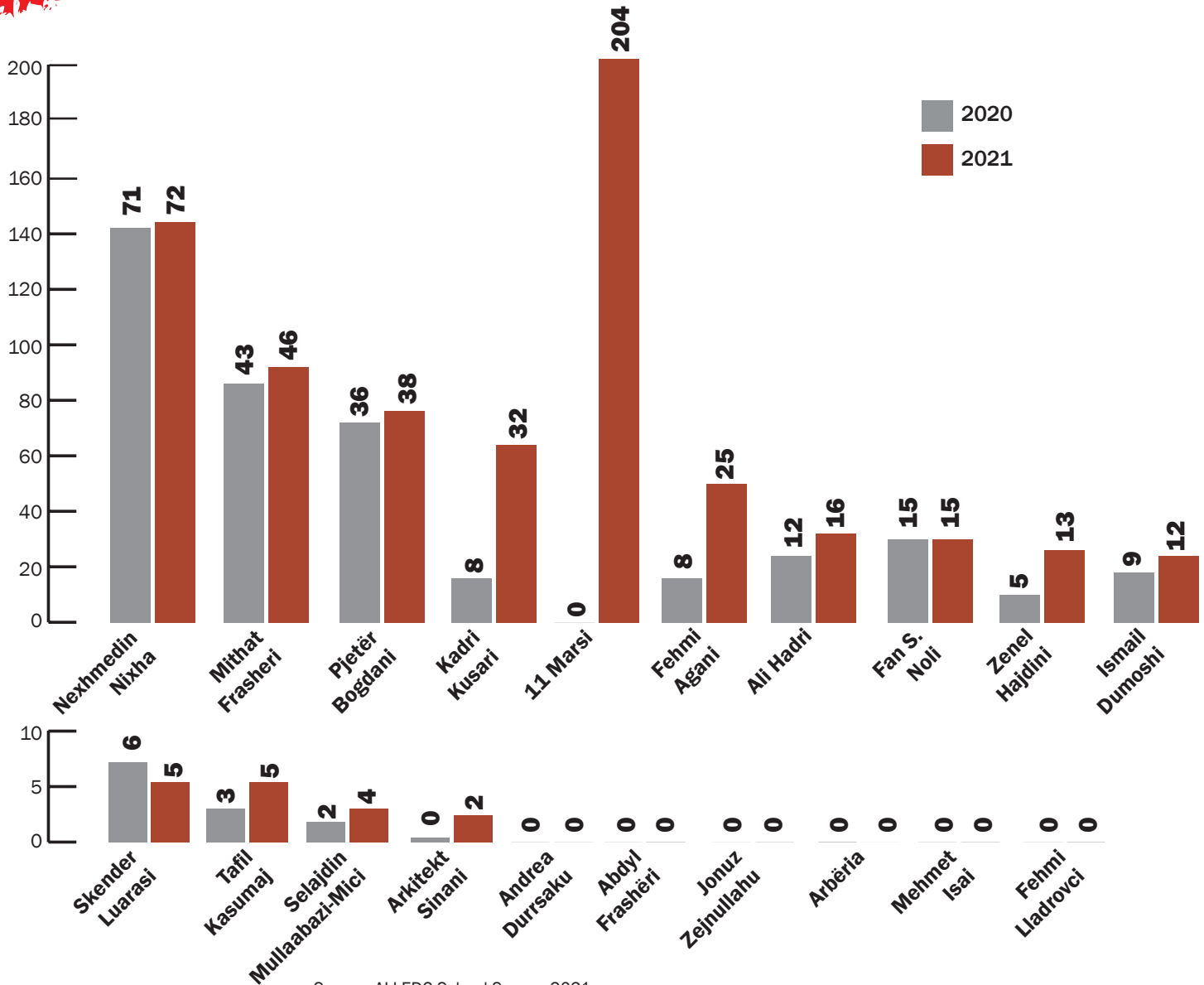
Source: ALLED2 School Survey, 2021

Figure 32. Number of students from environments with social difficulties (family, poverty, etc.)
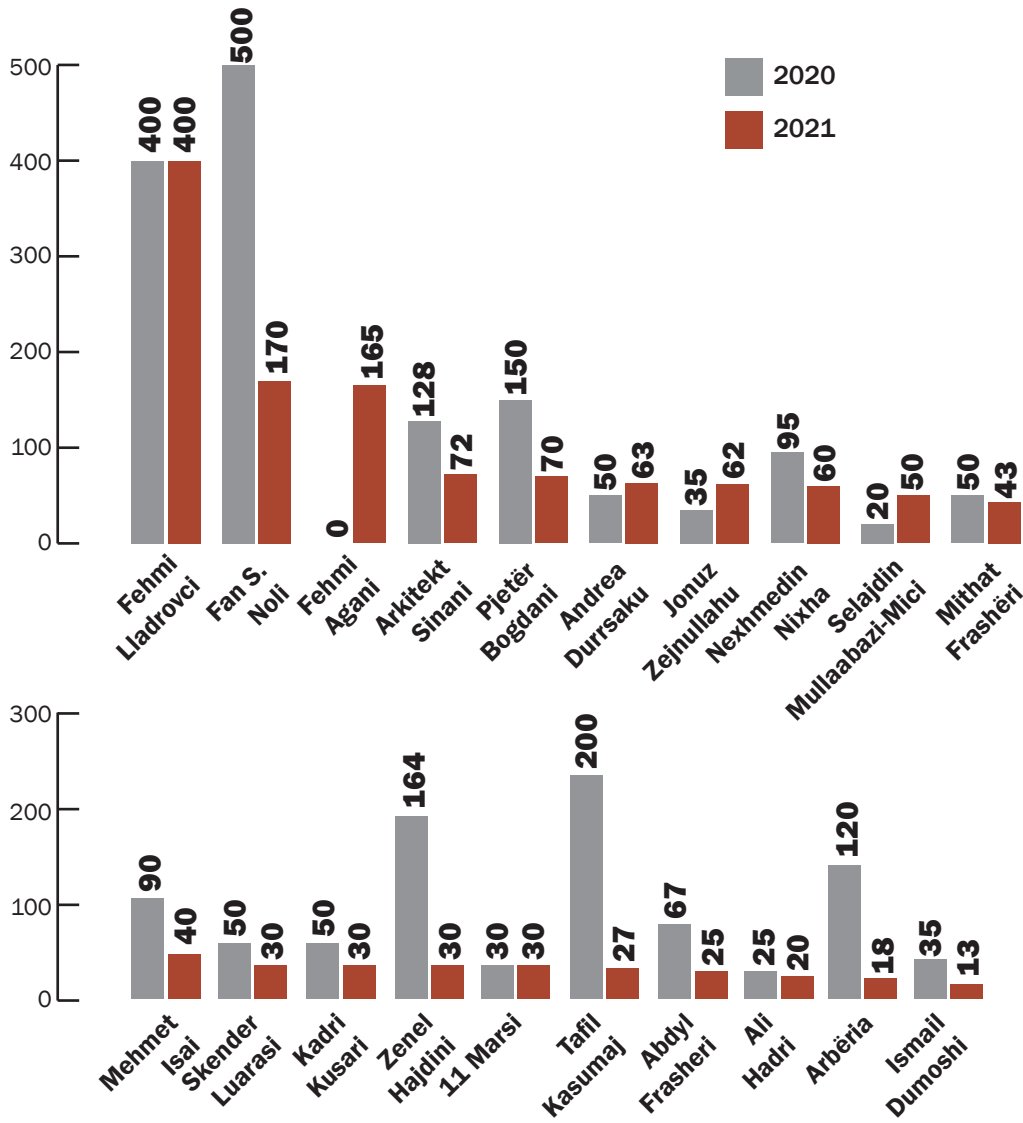
Source: ALLED2 School Survey, 2021

4.4. Curricula

Well-developed curricula are essential for each course in vocational schools and each school should have curricula prepared and included in each profile. From the 20 schools of ALLED2, on the question whether the curricula are based on the standards of the profession, half of them responded "yes" and half "no". Compared to last year, the number of schools who responded that their curricula is based on occupational standards has decreased by 33%. In the 2020/2021 survey for VTCs, all VTCs answered that their curricula in based on occupational standards, same as the previous survey.

Figure 33. Are curricula based on occupational standards?
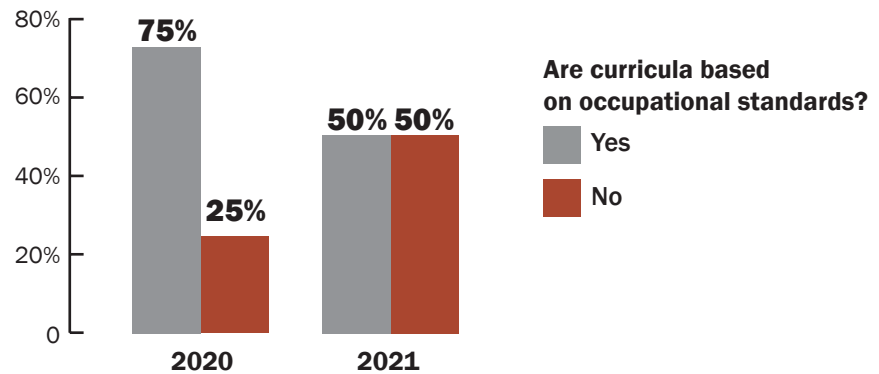
Source: ALLED2 School Survey, 2021

Well-developed curricula are very important because it affects the students' ease of transition from school to work. When the schools were asked whether the existing curricula is important for labour market, only 55% said they have curricula relevant to the labour market needs, and the remaining 45% responded that they do not have curricula relevant to labour market needs. In the 2020/2021 survey for VTCs, same as the previous survey, all VTCs answered that their curricula in relevant to the needs of the labour market.

Figure 34. Relevance of curricula for labour market

Are exicting curricula relevant to the need of the labor market in the 20 ALLED2 schools?

Yes
No
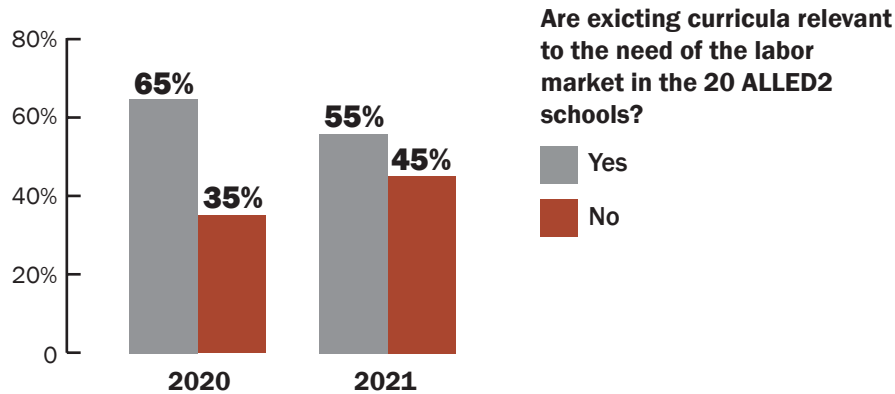
Source: ALLED2 School Survey, 2021

Based on a European Union report for Kosovo, the growth of Kosovo's digital economy will enable economic growth and generate new employment[4]. The figures below show how digital and soft skills are included in existing curricula. When it comes to digital skills being included in the curriculum, there has been a significant change in the responses from ALLED2 schools compared to last year's responses, when 80% said they are included, while in the 2021 survey, only 15% said the digital skills are included. Also, when the VTCs were asked this question in the 2020/2021 survey, all 4 of them said the digital skills were not included in the curriculum. This might be due to the pandemic, however, schools need to include digital skills as much as possible in their curriculum. On the other hand, regarding the question if soft skills are included in the curriculum, 80% said yes, which is a slight decrease from last year by 6%.

Figure 35. Digital skills inclusion in curricula

Are digital skills included in the curriculum?

Yes
No
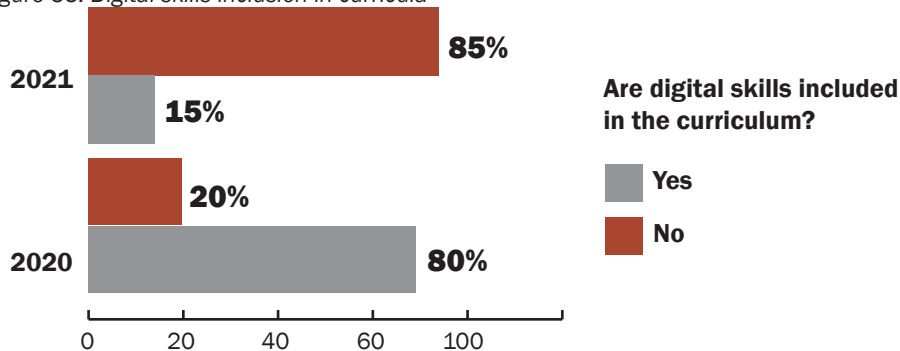
Source: ALLED2 School Survey, 2021

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4   https://ec.europa.eu/neighbourhoodenlargement/sites/near/files/ipa_2017_040506.08_ks_eu_support_ for_t he_competitiveness_of_kosovos_ict_sector.pdf

Figure 36. Soft skills inclusion in curricula

Are soft skills included in the curriculum?

■ Yes	
■ No	

2021: No 20%, Yes 80%
2020: No 15%, Yes 75%
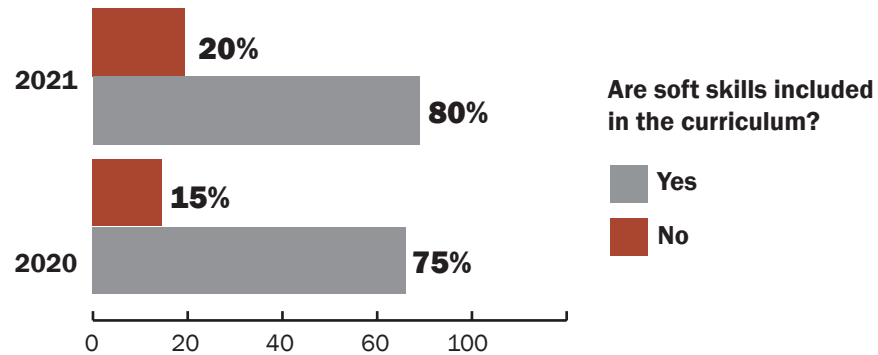
Source: ALLED2 School Survey, 2021

One of the major concerns regarding schools in Kosovo is the ratio between theoretical and practical learning. Vocational schools need to offer practical learning as much as possible rather than theoretical one. In order to achieve this, they must have conditions and facilities where practical learning takes place. When the schools were asked how the practical prat of teaching is organized, 89% said in both cabinets and businesses while the rest of schools or 11% said only in cabinets. In order to carry out practical activities, schools need support with adequate equipment, facilities, workshops with tools and equipment.

Figure 37. How is the practical part of teaching organized in ALLED2 schools?

Cabinets and businesses	Only in cabinets	Only in businesses	Outside the municipality or country
75% / 89%	15% / 11%	5%	5%
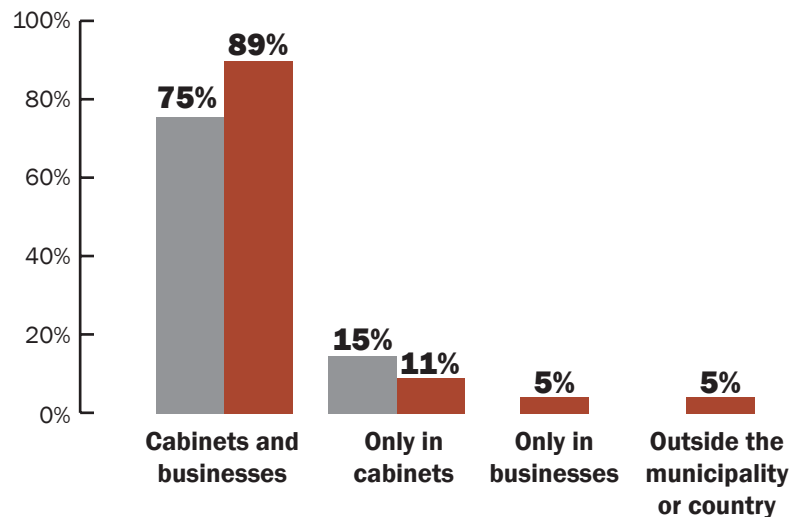
Source: ALLED2 School Survey, 2021

4.5. Infrastructure

In order for schools to make it possible to do frequent practical learning, they must have well-established infrastructure with adequate facilities, equipment, tools, and so on, and this will enable students to obtain more easily vocational training. Without adequate infrastructure and equipment, teachers cannot properly develop students' professional skills and as result they will face lack of these skills in the labour market. This in turn, will impose companies with another burden and cost in training new employees to compensate for the deficit of skills. For this reason, in the questionnaire we included questions about school infrastructure to investigate if schools have adequate facilities to support practical learning of their students. An important dimension of the practical learning of students is the school safety. Regarding the question whether the conditions of health and safety are in accordance with the legal provisions, 65% or 13 of the schools said "yes" and 35% or 7 said "no". Regarding the question if there is proper signage for health and safety, 75% or 15 schools said "yes" and 25% or 5 schools said "no". Another type of security is the protective equipment that every student should have during practical work, especially those students who are in the study programmes that involves work with dangerous machinery and tools. Of the 20 schools in total, 12 of them or 60% use protective equipment during practical work while 40% or 6 schools do not use protective equipment. Compared to last year, based on the 2020/2021 survey, there has been an improvement in the safety conditions of ALLED2 schools. When it comes to VTCs, all 4 of them answered "yes" to the three questions regarding the health and safety.

Figure 38. Safety conditions in 20 schools

Safety conditions in ALLED2 schools

Legend:
- Are the health and safety conditions in accordance with the legal provisions?
- Is the proper signage for health and safety?
- Is the protective equipment regulary used by the students in cabinets?
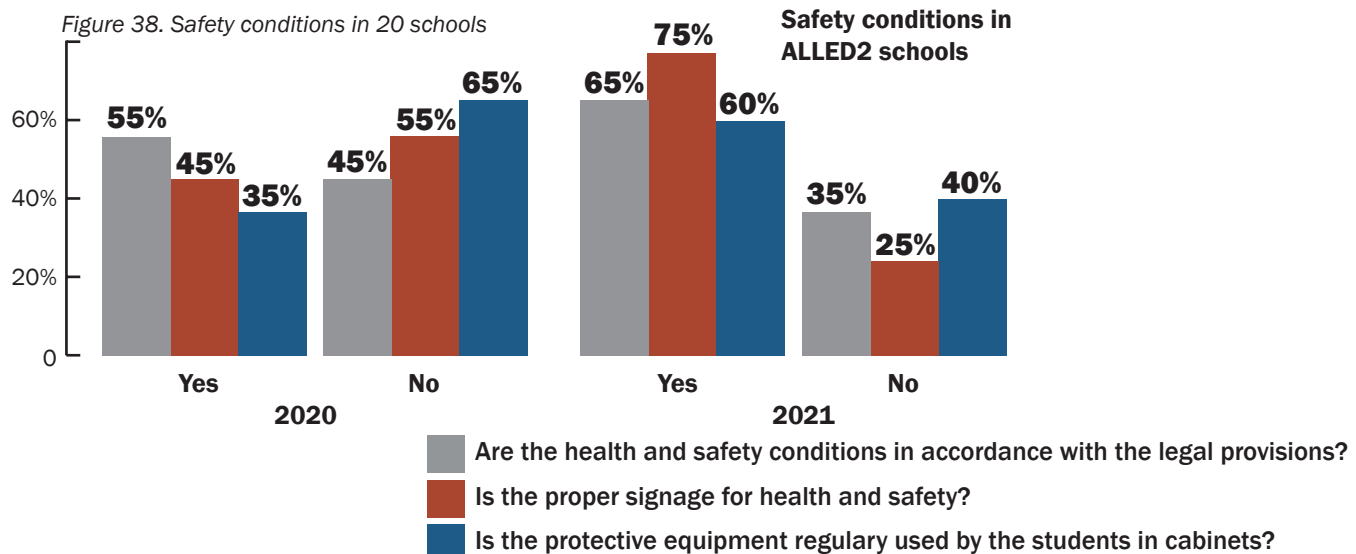
Source: ALLED2 School Survey, 2021

In order for practical teaching to be more efficient and effective, cabinets must be supplied regularly with raw materials. Out of 20 ALLED2 schools, in 2020/2021 survey, only 30% are regularly supplied with raw materials, which is a decrease by 45% compared to 2019/2020 survey data. All VTCs on the other hand, answered that their cabinets are regularly supplied with raw materials.

Figure 39. Are raw material cabinets regularly supplied?
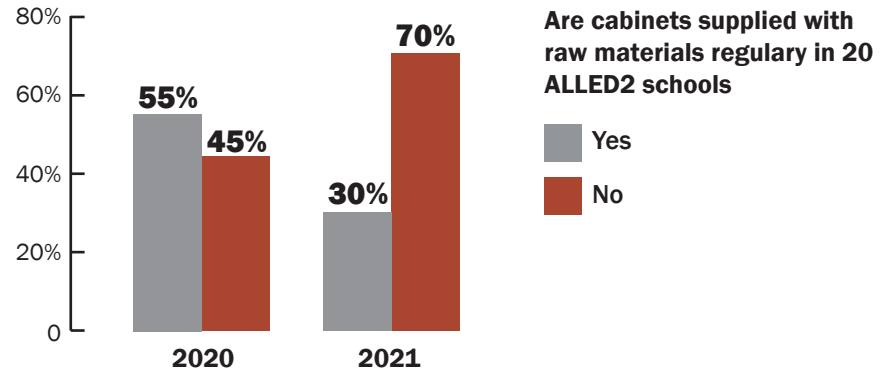
Source: ALLED2 School Survey, 2021

The following figure shows how well the cabinets are aligned to the needs of the study programmes in ALLEED2 schools. Out of 20 schools, 5% or 1 school has cabinets that are not in line with the study programmes, 70% or 14 schools' cabinets are partially aligned and 25% or 5 schools have fully aligned cabinets to the needs of study programmes. This data suggests that the existing infrastructure in general is not adequate for the study programme, and this has a direct effect on the development of professional skills of students, especially practical skills. In the 2020/2021 survey for ALLED2 VTCs, all the VTCs answered "yes" to the question if their cabinets are aligned with the needs of the study programmes.

Figure 40. Alignment of the cabinets to study programmes

Are cabinets supplied with raw materials regulary in 20 ALLED2 schools

- 2020
- 2021
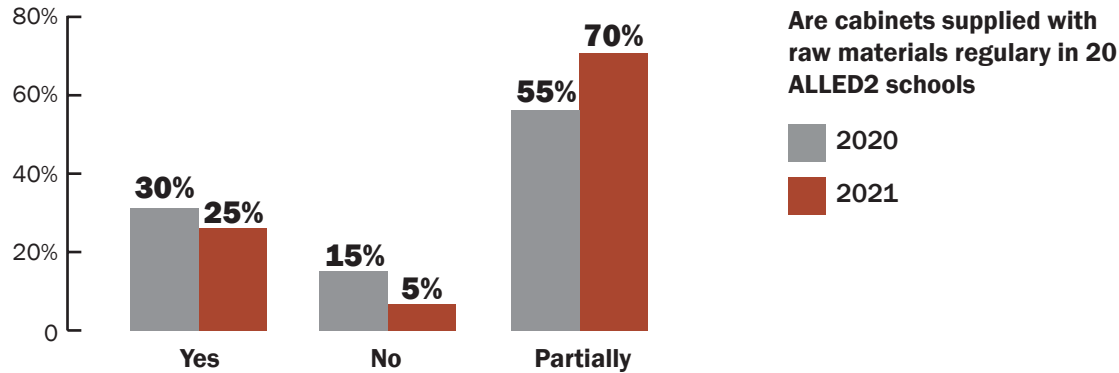
Source: ALLED2 School Survey, 2021

4.6. Information technology

In order to make teaching and learning more effective, each school should have information technology developed. Compared to last year when all the schools said that they have internet access in the school, in the 2020/2021 survey, one out of 20 ALLED2 schools (Ali Hadri) claimed that it didn't have internet access. As far as VTCs are concerned, all 4 of them claimed that they have internet access. When technology is integrated into the learning process, it can be more interesting for students as they can have access to knowledge, stories, cases and practical examples of similar schools.

Figure 41. Do the 20 schools of ALLED2 have internet access?

Is there internet access in ALLED2 schools?

- Yes
- No
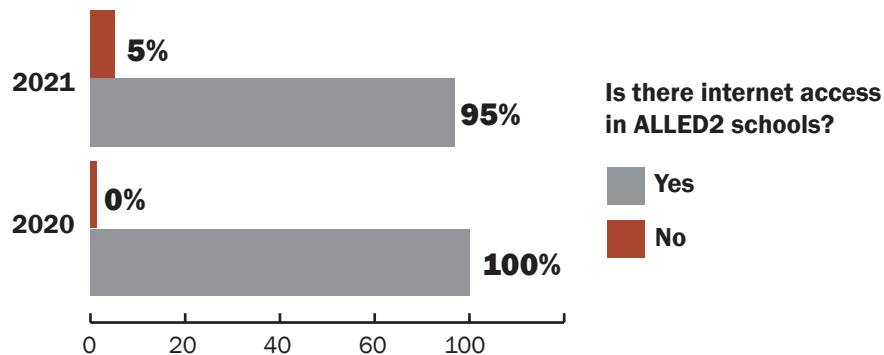
Source: ALLED2 School Survey, 2021

The number of computers is an indicator of the level of ICT development at school level. Availability and use of computers in schools can increase the student performance. Schools will face difficulties meeting the needs of the curriculum in the future if they do not provide access to computers and computer labs. The 2020/2021 survey findings suggest that the average number of computers per school is 43 which is 4% less than the previous survey response, while for VTCs, the average is 40 or 5% less than the previous year. In terms of recommended average number of students per computer, in European Union this ratio is 8[5], while the ALLED2 2020/2021 survey data shows that in ALLED2 schools, the average number of students per computer is 27, which is much higher compared to the EU's. If we analyse schools individually, however, we find that the ratio of students per computer varies by school, as it can be seen in Figure 37. For VTCs, the student per computer ratio is 13, which is closer to the one in the EU. When it comes to digital teaching, the average number of hours of digital instruction per week per profile for 20 ALLED2 schools is 17 hours or about 3 times more than last year (Figure 36). For VTCs, the average number of digital hours per profile per week is 84, with the highest number of hours is in Prizren (200), followed by Gjakova (120), Peja (10) and Pristina (6). Special focus should be given by schools on teaching and learning the digital skills. The situation with the pandemic has demonstrated the importance of digital solutions to providing online teaching and learning and emphasized the existing weaknesses.

Figure 42. Average computer and digital teaching in 20 schools

Avarage number of computers and digital classes taught per ALLED2 school?

How many computers are available on avarage per school to students?

How many digital/IT classes are taught on avarage per week per profile?

Source: ALLED2 School Survey, 2021

[5] *https://data.europa.eu/euodp/data/storage/f/2019-03-19T084831/FinalreportObjective1-Benchmarkprogress inICTinschools.pdf*
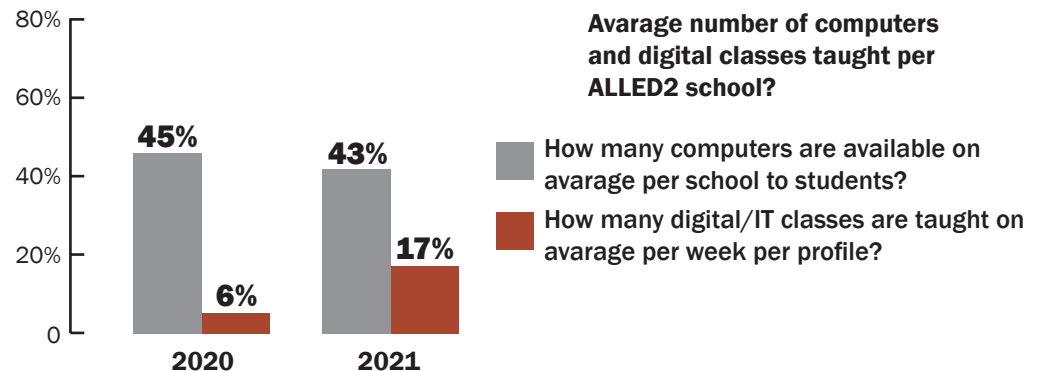
Figure 43. The ratio of students per computer
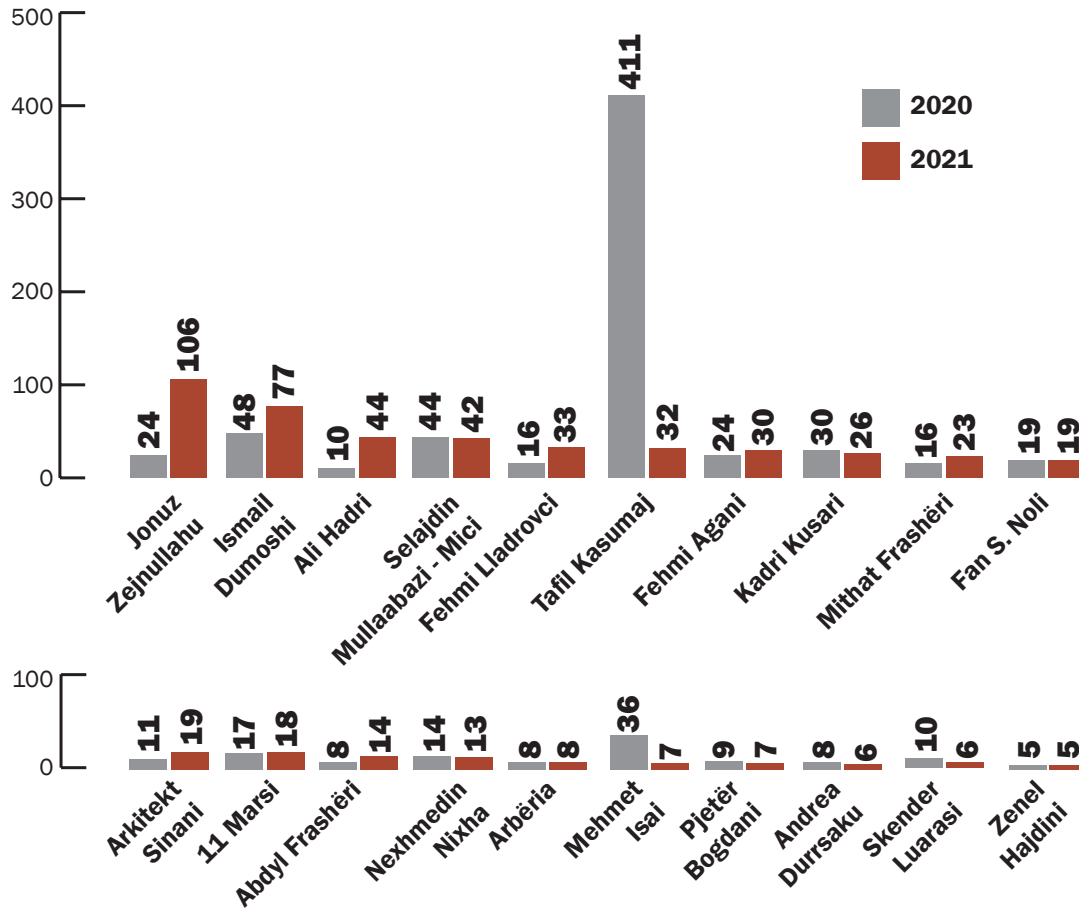
Source: ALLED2 School Survey, 2021

Regarding maintenance of the IT equipment in the 20 ALLED2 schools, 90% responded that they were maintained, an increase of 6% from last year. When the VTCs were asked this question, only one of them (VTC Peja) answered "no", while three others said that their IT equipment was maintained. This maintenance continues to be done by teachers mostly since the schools don't have IT professionals hired.

Figure 44. IT equipment maintenance
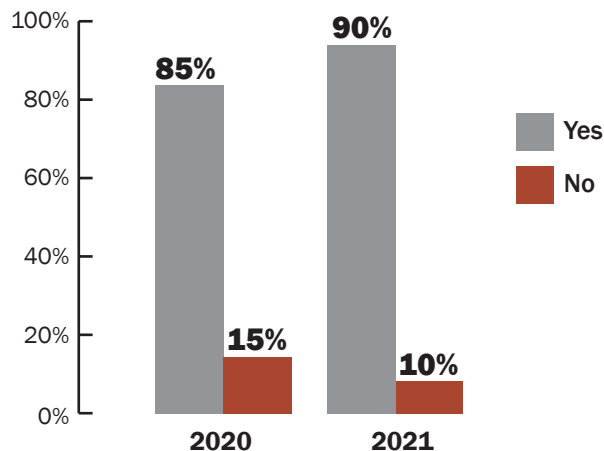
Source: ALLED2 School Survey, 2021

4.7. Business cooperation

Building and expanding partnerships with the business sector is important as it adds value to the school education system. Being able to offer students apprenticeships in vocational schools, the schools must have at least some type of business partnerships in their study programmes and profiles. The close cooperation with the private companies and public institutions enables students to develop internships professionally. This part of the questionnaire is focused on the collaboration of 20 ALLED2 schools with businesses, nature of their collaboration, and the challenges involved. The figure below provides the number of memorandums of cooperation (MoU) for each school 261 in total, which is 17% less than last year. From the 2021 survey data, currently the schools with the highest number of memorandums are "Zenel Hajdini", "Nexhmedin Nixha", "Skender Luarasi", and others with less memorandums. When it comes to VTCs, in general, there has been a devrease in the number of memorandums, except in the case of VTC Peja where based on the 2020/2021 ALLED2 survey, there are 50 memorandums of cooperation, compared to only 6 the previous year.

Figure 45. Number of memorandums of cooperation for each ALLED2 school

Chart legend:
- 2020
- 2021

Top chart values:
- Zenel Hajdini: 24, 45
- Nexhmedin Nixha: 29, 38
- Skender Luarasi: 20, 37
- Fehmi Lladrovci: 32, 28
- Jonuz Zejnullahu: 40, 23
- Mehmet Isai: 14, 15
- 11 Marsi: 40, 13
- Mithat Frashëri: 11, 12
- Fan S. Noli: 12, 9
- Ali Hadri: 14, 8

Bottom chart values:
- Tafil Kasumaj: 4, 8
- Selajdin Mullaabazi-Mici: 16, 7
- Abdyl Frasheri: 4, 5
- Pjetër Bogdani: 5, 5
- Arkitekt Sinani: 6, 3
- Fehmi Agani: 8, 3
- Ismail Dumoshi: 2, 2
- Andrea Durrsaku: 1, 0
- Kadri Kusari: 11, 0
- Arbëria: 20, 0

Source: ALLED2 School Survey, 2021

Figure 46. Number of memorandums of cooperation for each ALLED2 VTC
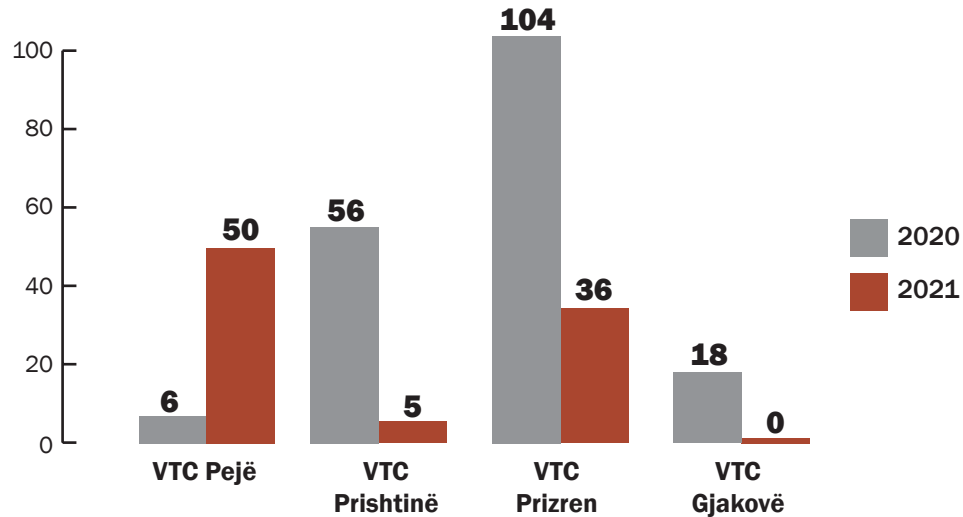
Findings show that to facilitate school collaboration with businesses, schools must have a specific teacher or a person responsible for developing and maintaining these partnerships. In the following figure, we see that 33% of schools said that persons responsible for coordinating cooperation with businesses are business cooperation coordinators, a 65% increase from last year. Even though, when asked if the schools have a business coordinator, 60% said yes, in this case, most schools said that people involved in coordinating cooperation with businesses included more than just the business cooperation coordinator, such as teachers, directors, deputy director, etc. Even though there has been an increase in schools that have a responsible person in charge of cooperation with businesses, they still need improvement in this area. Schools need have a responsible person that works full time for developing partnerships with businesses. The student placements through internships, practical work, apprenticeships and so on cannot be done by school director or deputy directors, considering the workload. It is recommended for each school to hire a business cooperation coordinator to be responsible for developing and maintaining collaboration with businesses.

Figure 47. Coordination of cooperation with businesses

Who is responsible for coordinating cooperation with businesses?

Legend: 2020 (grey), 2021 (red)

Role	2020	2021
Director	25	22
Deputy Director	5	11
Quality Assurance Coordinator	10	3
Business Cooperation Coordinator	20	33
Career Orientation Coordinator	10	3
Teachers	20	25
Don't have	10	3
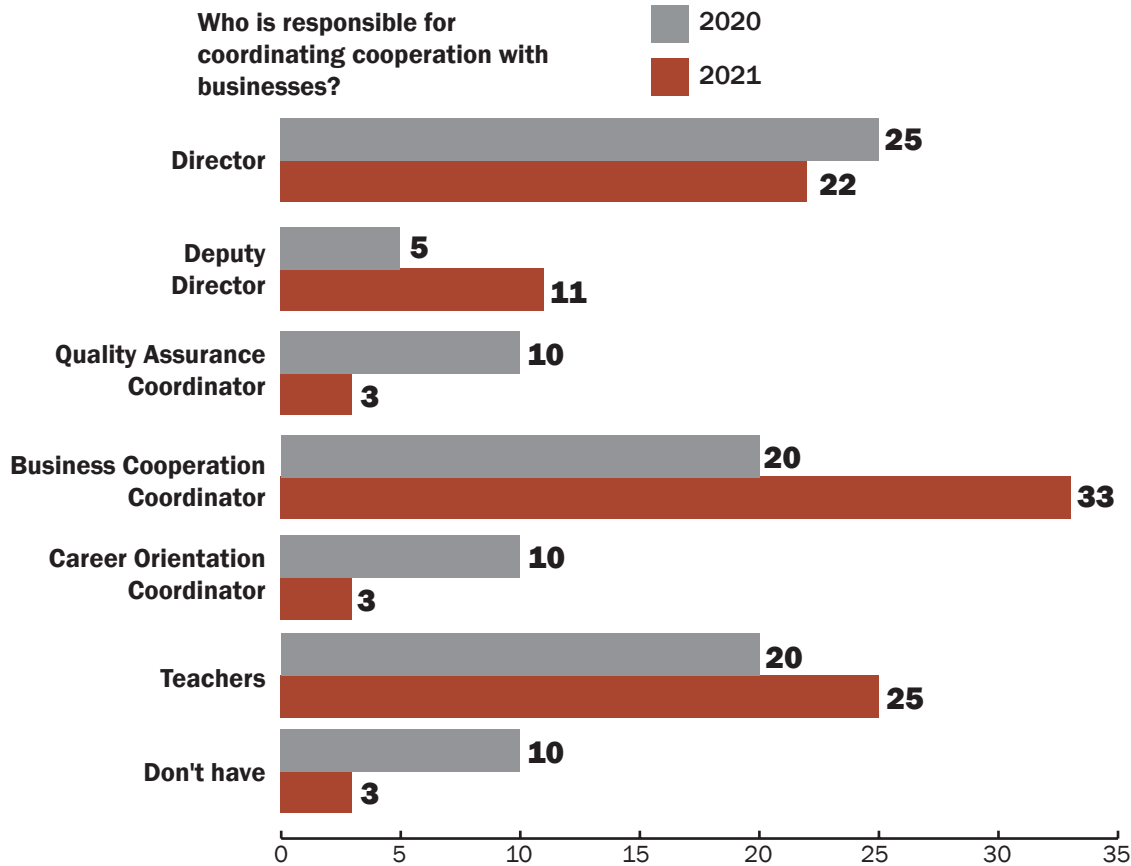
Source: ALLED2 School Survey, 2021

When it comes to the nature of school-business collaboration, it is mostly limited to practical work for students (51% of schools), followed by on the job training (30%), guest or company visits (11%), and 8% donations. The nature of co-operation between schools and businesses should be more related to practical work in businesses so that students have the opportunity to acquire knowledge, gain experience and develop their professional skills. At the same time, businesses will also benefit from this type of cooperation, because they will be able to have first access to potential skilled labour and use these internships to screen best potential employees for their company.

Figure 48. The nature of cooperation in the 20 ALLED2 schools
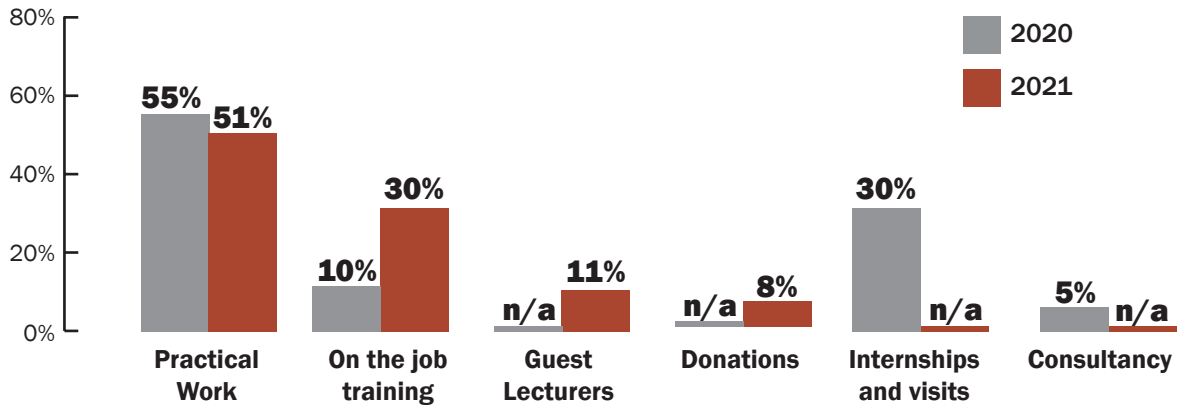
Source: ALLED2 School Survey, 2021

Businesses should cooperate with schools to provide proper conditions for the students' practical work. They should also express an interest in using the equipment that the schools own and use schools' equipment for their purposes and at the same time share work experiences with students. However, based on the figure below, when asked if businesses expressed interest in using the schools equipment, schools and VTCs responded that no business expressed such interest, while 55% of schools and 25% of VTCs (VTC Peja) responded "yes" to the question if schools presented the equipment to the business community. There is a need for more active role by schools' coordinators for cooperation with businesses to invite owners and managers of local companies to visit schools and to present what they do in order to build mutual trust which in turn can facilitate the cooperation on students' internships in these businesses.

Figure 49. Cooperation with businesses in 20 ALLED2 schools
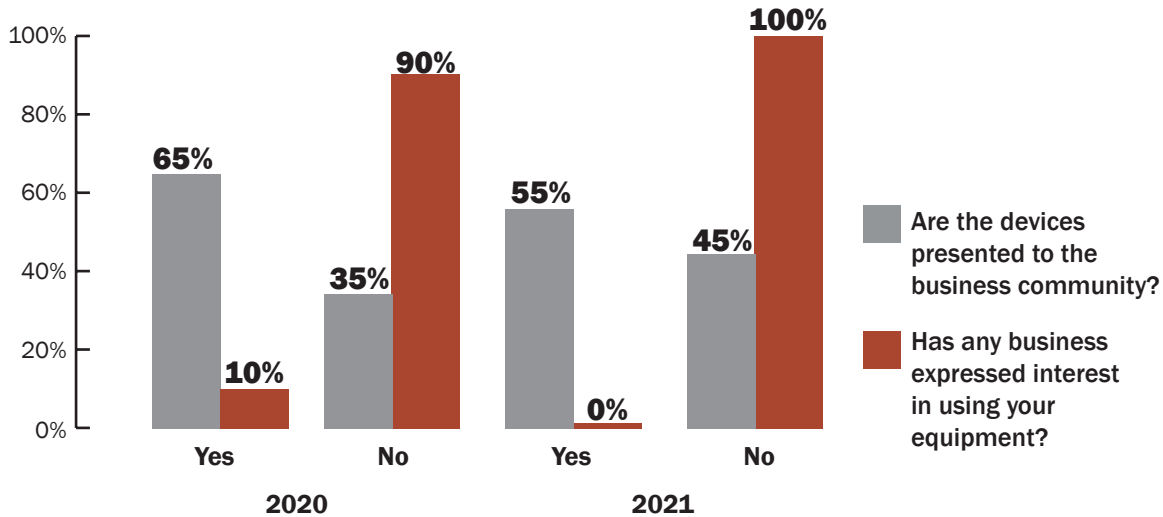
Source: ALLED2 School Survey, 2021

During the collaboration of schools with businesses, there are also challenges especially during internships and other forms of student placements in business. Some of the main challenges of cooperating with businesses in the 20 schools of ALLED2 are listed in the table below. These challenges include; lack of health insurance for students during internship, reluctance of businesses to collaborate on internships, lack of transportation for students, small facilities in businesses and large number of students, and legal shortcomings for dual learning. Compared to the previous survey, in the recent survey, the lack of health insurance for students during internship was mentioned as a new challenge. For VTCs, the main challenges include: difficulties in monitoring of students, lack of a mentor for mentoring during internship, mutual trust between businesses and schools, lack of logistics, difficulties in monitoring of students. The difference in challenges from last year for VTCs is the lack health insurance and inadequate workplace training which are not listed as challenges this year. This cooperation between vocational schools and businesses should be legally regulated by providing incentives for companies that offer opportunities for students' placements into their companies (fiscal and non-fiscal incentives).

Table 5. What are the main challenges of working with businesses?

What are the main schools challenges of working with businesses?
1. Lack of health insurance for students during internship
2. Businesses are reluctant to collaborate on internships
3. Lack of transportation for students
4. Small facilities in businesses and large number of students
5. Legal shortcomings for dual learning

Source: ALLED2 School Survey, 2021

Table 6. What are the main challenges of working with businesses?

What are the main VTC challenges of working with businesses?
1. Difficulties in monitoring of students
2. Lack of a mentor for mentoring during internship
3. Mutual trust between businesses and schools
4. Lack of logistics
5. Difficulties in monitoring of students

Source: ALLED2 School Survey, 2021

5. Dependency analysis of schools

The school distance calculator will be used based on google maps to calculate the distance between schools as well as between the key locations in which businesses are located. This will enable ALLED2 project team to identify the optimal solutions for study programs in VET schools and VTCs and match with the needs of labour market. For example, there is a study programme which is missing in schools in Prishtina, but this study program is offered by another school nearby, for example in Fushe Kosovo or Obilic. This type of analysis enables to have better insights of the study programs and provide direction in which areas the new study programs should go or in which areas there is need of expansion of the study programme. At the same time, will make municipalities more flexible in planning at regional level in terms of employment opportunities. Following indicators will be used

- Number of businesses per city, indicating demand for labour force
- Profiles covering each industry, indicating supply with labour force
- Distance in KM among schools in the region

Number of Businesses per Industry per City

| Businesses per industry per city	Cities															
Industries	Deçan	Drenas	Ferizaj	Gjakove	Gjilan	Istog	Kamenica	Klina	Mitrovica	Obiliq	Podujeva	Prishtine	Prizren	Rahovec	Suhareka	Vitia
Accommodation and food service activities	22	22	226	159	165	35	41	43	79	24	76	739	261	56	58	22
Activities of international troops and organizations	0	0	0	0	0	0	0	0	0	0	0	26	2	0	0	0
Administrative and support service activities	5	4	38	24	33	6	5	10	24	1	14	188	39	3	8	9
Agriculture, forestry and fishing	20	22	30	32	35	56	36	17	21	9	55	81	42	54	33	18
Arts, entertainment and recreation	2	2	15	25	25	0	6	2	14	2	6	86	20	3	10	5
Construction	40	91	171	134	125	48	43	47	85	9	68	515	145	49	100	52
Education	3	9	36	28	27	5	4	5	20	3	14	178	35	5	13	9
Electricity, gas, steam and air conditioning supply	0	0	1	1	1	1	0	0	0	0	0	11	2	0	1	1
Financial and insurance activities	1	0	12	9	10	0	1	3	2	0	0	81	10	3	3	4
Human health and social work activities	8	20	79	81	74	10	10	13	46	4	22	285	100	14	27	11
Information and communication	7	11	27	28	40	4	6	5	21	2	11	366	37	7	14	8
Manufacturing	61	85	426	242	204	71	62	66	99	25	106	564	437	110	122	99
Mining and quarrying	2	5	8	9	5	2	3	5	7	2	2	20	14	7	2	2
Other service activities	13	22	104	122	46	13	6	18	37	8	42	763	140	17	27	15
Professional, scientific and technical activities	8	13	96	62	63	15	8	12	37	9	13	808	94	21	39	15
Public administration and protection: compulsory social protection	0	1	4	20	11	1	0	0	1	1	4	107	11	1	1	1
Real estate activities	0	1	5	2	8	0	3	1	2	0	0	61	6	1	0	2
There is no activity	5	1	10	6	32	5	9	9	62	0	1	23	73	14	10	8
Transportation and storage	10	16	57	33	35	18	11	10	47	9	41	218	72	18	40	11
Water supply, sewage, waste management and remediation activities	3	3	9	7	6	0	1	0	9	3	3	23	4	0	1	3
Wholesale and retail trade, repair of motor vehicles and motorcycles	88	187	953	575	738	115	126	131	355	98	302	2614	1129	257	272	189

Most attended industries:
- Accommodation and food service activities
- Construction
- Manufacturing
- Other service activities
- Professional, scientific and technical activities
- Wholesale and retail trade, repair of motor vehicles and motorcycles

Supply of profiles and demand of industries per city

Industries	Suhareka	Kamenica	Prishtine	Vitia	Gjakove	Podujeva	Rahovec	Ferizaj	Gjilan	Istog	Peje	Mitrovica	Klina	Deçan	Prizren	Obiliq	Drenas
Accommodation and food service activities								covered	covered		covered			covered			
Activities of international troops and organizations																	
Administrative and support service activities		covered		covered							covered						
Agriculture, forestry and fishing			covered	covered	covered		covered	covered	covered		covered	covered	covered				covered
Arts, entertainment and recreation	covered			covered	covered										covered		covered
Construction	covered	covered			covered	covered	covered	covered	covered	covered				covered	covered		
Education																	
Electricity, gas, steam and air conditioning supply	covered	covered		covered	covered	covered	covered	covered	covered	covered		covered	covered		covered	covered	covered
Financial and insurance activities		covered			covered						covered		covered	covered		covered	covered
Human health and social work activities							covered			covered			covered	covered			covered
Information and communication	covered	covered		covered	covered	covered	covered	covered	covered			covered	covered	covered	covered	covered	covered
Manufacturing	covered	covered		covered	covered	covered	covered	covered	covered	covered		covered	covered	covered	covered	covered	covered
Mining and quarrying														covered		covered	
Other service activities																	
Professional, scientific and technical activities	covered	covered			covered	covered	covered	covered	covered	covered	covered		covered	covered	covered	covered	covered
Public administration and protection: compulsory social protection																	
Real estate activities																	
Transportation and storage					covered						covered						
Water supply, sewage, waste management and remediation activities		covered		covered				covered	covered				covered	covered	covered		
Wholesale and retail trade, repair of motor vehicles and motorcycles				covered	covered												

- Covered – means that there are profiles offered in that city for the corresponding industry
- Red coloured cell – means there is high demand (more than 40 businesses) in that city
- Yellow coloured cell – means there is medium demand (10-40 businesses) in that city
- White (no colour) cell – means there is no demand (no businesses serving that industry)
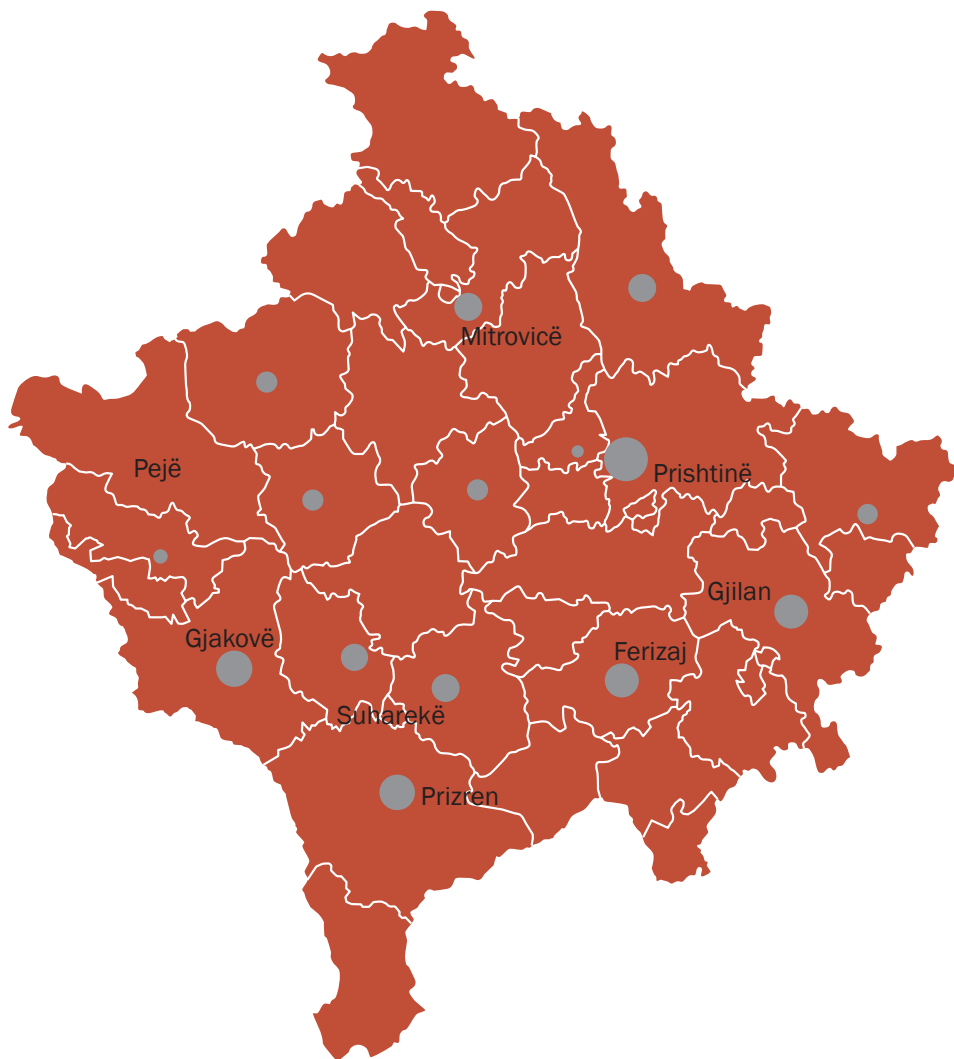
Concentration of businesses (demand) across Kosova

Distance in KM among schools per region

Ferizaj	Zenel Hajdini		Pjetër Bogdani
Zenel Hajdini	0		2.6
Pjetër Bogdani	2.6		0

Gjakovë	Nexhmedin Nixha	Kadri Kusari	Selajdin Mullaabazi-Mici	Tafil Kasumaj
Nexhmedin Nixha	0	1	1	43
Kadri Kusari	1	0	22	21
Selajdin Mullaabazi-Mici	21	22	0	43
Tafil Kasumaj	43	21	43	0

Pejë	Ali Hadri	Mithat Frashëri	Fehmi Agani
Ali Hadri	0	15	30
Mithat Frashëri	15	0	18
Fehmi Agani	30	18	0

Gjilan	Andrea Durrsaku	Jonuz Zejnullahu	Arbëria	Mehmet Isai
Andrea Durrsaku	0	46	28	25
Jonuz Zejnullahu	46	0	23	21
Arbëria	28	23	0	3
Mehmet Isai	25	21	3	0

Prishtinë	Abdyl Frashëri	Fan S.Noli	Ismail Dumoshi	Fehmi Lladrovci
Abdyl Frashëri	0	2	10	31
Fan S.Noli	2	0	11	34
Ismail Dumoshi	10	11	0	27
Fehmi Lladrovci	31	34	27	0

Prizren	Skender Luarasi		11 Marsi
Skender Luarasi	0		21
11 Marsi	21		0

6. Findings and Conclusions

In this section, key findings and conclusions regarding the possible areas of interventions are provided. The draft report identified needs of schools, ranging from the management and teachers training and capacity buildings to infrastructure and cooperation with business community. Here is the list of findings in the order of the report and areas of intervention:

Management

- There still continues to be a significant gender gap between males and females in managerial positions. Most of the top managerial positions continue to be help by males. Schools should work in the direction of reducing this gender imbalance in the future.

- As a result of the pandemic, like many other schools around the world, ALLED2 schools also had to provide online learning for students. From 20 schools, 65% said that they provide distance learning while 70% provided this form of learning for each profile. Taking into account that distance learning may continue to be provided even in a post-pandemic situation, schools need support in dealing with the challenges concerning this type of learning by providing them with digital equipment, better internet connection, and training on using online platforms.

- When it comes to school managers, in general they have good qualifications. Compared to last year, there has been a significant improvement from 25% managers with a master's degree to 65%. Nevertheless, there is still a need for additional trainings and capacity building in several areas.

- All the schools claimed that they have a quality assurance coordinator, 60% said they have a coordinator for business cooperation and 40% have a career orientation coordinator. VTCs have no coordinator for business cooperation. It is crucial for schools and VTCs to increase the number of coordinators that collaborate with the business sector, as well as career orientation coordinators which are very important to provide students with career guidance.

- Compared to the previous year, based on the 2020/2021 ALLED2 survey, it results that there has been an increase from 10% to 30% in the number of schools that have a webpage. Still there are 16 schools left that do not have a webpage or even a Facebook page. There should be continued support towards the creation of webpages and professional use and maintenance of the webpages.

- Regarding the involvement of the number of schools in activities for generating supplementary income, and schools to school collaboration, there has been quite an improvement from last year. There is still a need to support the schools in drafting of strategies for self-generating income activities and also in raising awareness for the mutual benefits of schools to school cooperation.

Teachers

- In order to facilitate efficient and effective implementation of the curriculum, there is a need for continuous training of teachers. Professionally trained teachers are a vital part of a functional curriculum during the educational development. Compared to last year's findings, which suggested that most of school teachers did not have Initial Teacher Training (ITT), the 2020/2021 survey findings show a substantial increase in these trainings, from 10% to 75%. Since teacher training should be a life-long process, the ALLED2 project in order to add to the sustainability of the project results, could continue to organize specialized training workshops for all teachers in selected school.

- In the 2020/2021 ALLED2 survey findings, the challenges and areas in need of improvement presented by schools included: lack of budget, lack of equipment and poor infrastructure, lack of training for teachers and management, difficulties in establishing collaboration with businesses, and the need of decentralisation on budgeting planning and execution.

Students

- Based on 2020/2021 ALLED2 findings, compared to the previous survey data, there has been an increase in the number of female students by 32%. However, despite this considerable increase, there is still a big gap between male and female students, where there are 40% less female than male students. For VTCs, the gap has increased even more compared to the previous year, where there are less female students this year.

- In most of the study programmes in vocational schools such as electrotechnics, machinery, mechanics, construction, mechatronics, etc. number of males continues to be predominantly higher compared to females.

- There is still a high dropout rate, especially among men both at ALLED2 schools and VTCs.

Curricula

- Compared to previous survey findings, where majority of schools claimed to have

study programmes in line with standards of profession, the 2020/2021 ALLED2 survey results show that only 50% of schools said that their curricula is based on occupational standards. High quality curricula aligned with standards of profession is essential for determining the success of students in their future professions, thus ALLED2 project could support schools in improving these curricula to make them compatible to professional standards according to the National Framework.

• Only 55% of schools said that their curricula is relevant to the needs of the labour market, 15% less than the previous survey data. This shows that it there is a strong need for schools to carefully identify their markets and then make sure that their educational programme matches the market needs.

• Schools and some of the VTCs need to include more digital skills in the curricula.

• In order to carry out practical tasks, schools need support with adequate equipment and materials, facilities, effective training for teachers, and workshops with tools and equipment.

Infrastructure

• Supporting ALLED2 schools and VTCs with adequate facilities, equipment, and supplies for performing practical activities, enable these schools carry out practical teaching more efficiently. Businesses may also be interested to contribute in this area.

• Maintaining student safety during practical work is essential. Regarding safety conditions and procedures, ALLED2 schools have shown quite an improvement from last year's findings while VTCs continue to have very good health and safety conditions same as last year. There is still a need for support in this area for all the schools to provide or further improve the health and safety practices during practical work and in turn provide students with a safe environment.

• Further support could be directed towards helping schools to better use their financial sources such as self-generating income from school activities in order to ensure the regular supply of raw material to cabinets for practical work and a sustainable functioning of the workshops.

• Data from the survey shows that the existing school infrastructure in general is not aligned to the needs of the study programmes. ALLED2 project could support the schools in making necessary adjustments to have cabinets fully aligned with the needs of study programmes so they can best serve to develop students' knowledge

and practical skills. The private sector could also see some benefit in offering their support in this area, as the results could provide them with access to a more skilled labour later on.

Information technology

- Based on the average ratio of students per computer in EU, the number of computers per school continues to be low. Schools should work towards increasing the number of these devices and making them available to all students, as well as provide an effective use of computer lab hours to develop their ICT skills. VTCs have a better computer to student ratio than ALLED2 schools.

- It is essential that schools and VTCs increase the digital skills component of the curricula. Students must continually learn new digital skills in order to adapt to the rapidly changing technological environment and meet the demands of the labour market. Schools and VTCs should offer new digital courses on use of specific software so the students can learn how to use software tools and understand how computers and the internet function.

Business cooperation

- The findings of this research show that there is a need for a more active cooperation between ALLED2 schools and VTCs with the business environment in order to align the teaching and curricula with the on-the-job needs. Besides, the business can benefit from stating closer to the academic field for research purposes, whereas schools and VTCs will benefit from this cooperation with the companies by giving the students the opportunity to acquire both theoretical and practical knowledge, which will help their future careers.

- In order to facilitate school and VTC collaboration with businesses, it is necessary to have a coordinator responsible for developing and maintaining collaborations with the businesses. ALLED2 project could support the schools and VTCs in capacity building of these coordinators through trainings to establish a more effective school-industry cooperation.

- To improve the effectiveness of the school-industry collaboration, schools and VTCs need to access the current situation with businesses and find methods for this collaboration to be improved. This could be done by involving more actively the business cooperation coordinators to promote mutual benefits of schools-industry collaboration and work on increasing MoUs for each school or VTC.

- In order to offer motivation for businesses so that they are willing to establish MoUs

with schools and VTCs and increase their collaboration, the government could introduce some fiscal and non-fiscal incentives.

The future
is in our
SCHOOLS
TODAY