

**How Emergency Remote Teaching has Helped Students Aged 18-21 Improve
their Learning During the COVID-19 Pandemic in Armenia**

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Abstract

The purpose of the research is aimed to answer the following: How Emergency Remote Teaching (ERT) helped students aged 18-21 improve their learning during the COVID-19 pandemic in Armenia. To that end, a survey was conducted among Armenian students and educators in Armenia, the United States of America, the Russian Federation as well as Canada. The survey helped get a better understanding and elaborate more on the learning and teaching situation during the pandemic equally as it helped understand how effective Emergency Remote Teaching (ERT) turned out to be both for students and educators. The survey helped fill the gaps of the yet not-so-well researched topic of ERT in Armenia, while it also helped dig deeper into the situation of the inability of going to campus which has brought up an all new way of education known as Emergency Remote Teaching (ERT).

Introduction

COVID-19 drastically changed the life of all of us. It deprived people of attending school, higher education institutions as well as commuting to work and in general living their normal lives. COVID-19 deprived students all over the world of attending their classes face-to-face and it made many higher education institutions shift their classes and the whole university teaching workload online in a matter of a night. The following study shows how both students and educators coped with the inability to access campus for education purposes and whether students and educators found ERT an improvement and what were its drawbacks. The following research paper explores the already widespread topic of distance learning and teaching, which was enforced by the COVID-19 pandemic in Armenia. The following research shows how ERT was implemented in Armenia and states the best practices of the universities all over the world, which might eventually help design the teaching curriculum using ERT in the universities in Armenia and make it easier and more enjoyable for students to attend classes online, while both learning and getting the most out of their experience.

Key Terms and Definitions

ERT - Emergency Remote Teaching: a way of conducting online learning and teaching remotely and a means of teaching, which can be applied to any educational institution specifically in a tight time management and a way of conducting teaching and learning which might include online teaching software. ERT is a measure that is not planned in advance.

Literature Review

The COVID-19 pandemic has been a challenge for quite a while now. It disrupted the life cycle of everyone. It deprived people of commuting to work as usual and it also hugely affected the lives of students all over the world (Affouneh, Salha, Khlaif, 2020).

Due to the COVID-19 pandemic most universities, starting from China where the pandemic had started, switched to Emergency Remote Teaching (ERT). ERT was quite a challenge for many universities since most students were deprived of the equality to attend classes online. Many students were deprived of internet connection or did not have the needed resources to purchase a laptop and were deprived of basic accommodations to attend their classes and keep up with the workload and class schedule as normal. Even though ERT was a challenge to accommodate, many higher education institutions adapted to it quite fast. Overnight many universities designed ways to both assess students and implement their education fully online.

Many universities conducted surveys among students which showed that most of the students were quite satisfied with the new way of learning and evidence showed that there were quite a lot of students who preferred ERT to the traditional way of learning and could concentrate on the learning material better during online class sessions (Zhang, n.d.).

There is also a fact that has to be considered while talking about Emergency Remote Teaching. It is quite different from e-learning since ERT is a measure that is not planned in advance whereas online learning in most cases is scheduled quite before the learning starts (Affouneh, Salha, Khlaif, 2020). For instance, the case of online courses and research shows that people still cannot quite differentiate between e-learning and Emergency Remote Teaching.

According to a study done by Eric Liguori and Christoph Winkler (2020) universities worldwide shifted from face-to-face learning to ERT overnight. Even though many higher education institutions were first reluctant about shifting from a traditional way of teaching to ERT and underestimated the power of online learning and teaching, it is of no question now as to how important ERT is. It is also of equal importance how online learning can effectively be implemented and deliver the students their education to improve their academic standing and keep up with their studies even in this time of crisis (Liguori & Winkler, 2020).

Saida Affouneh, Soheil Salha and Zuheir Khlaif's research (2020) states that "according to UNESCO statistics more than 1.5 billion children and youth in 188 countries" were deprived of face-to-face education and had to stay home and work from home which as mentioned earlier on was quite a challenge for many students (Affouneh, Salha, Khlaif, 2020, p. 135).

The research study also states that ERT is not a technique which is planned in advance and that a sudden shift from traditional face-to-face learning to remote teaching is quite a new level in education and is far away from being the e-learning we had already been used to (Affouneh, Salha, Khlaif, 2020).

While the COVID-19 pandemic made both students and educators face difficulties with their workload and educational process, according to the study done by Johannes König, Daniela J. Jäger-Biela & Nina Glutsch "digital technologies may enable new opportunities for teaching and learning" (2020, p. 609). As the study mentions, it can lead the students into the digital world and have an impactful and drastic role in leading them into improvement of their academic progress both career and study wise. The study also brings up the fact that educators got used to

online assessment quite fast and they were leading online discussions and online assessment better than expected (König, Jäger-Biela & Glutsch, 2020).

In his study, Charles Hodges (2020) argues that people should start understanding the difference between Emergency Remote Teaching and Online Learning. Emergency Remote Teaching is the measure that is nowadays implemented in many universities worldwide in order for students to be able to attend their classes normally due to the fact that face-to-face communication and traditional ways of learning may pose danger now due to the COVID-19 pandemic. What about online learning - it is simply the way for people to take online courses and complete online education in their interested field. Online learning is optional and not imposed by pandemic circumstances or any other emergency measures (Hodges, 2020).

Tianhong Zhang implemented a study in China which states that even though Emergency Remote Teaching seemed to solve the problem of “suspending schools without stopping teaching-learning” (2020, p. 2,) , surveys, interviews and open-ended questionnaires which were implemented in 16 provinces in China showed that it is still quite debatable whether or not ERT has helped out students in their studies. It is stated in the research that parents thought ERT was an effective way of teaching only for those students who did not lack discipline and did not need additional assistance in learning. The implemented research showed that there still needs to be an evaluation about ERT in order to ensure a quality education (Zhang, 2020).

In contrast, a study conducted by Mohmmmed, Khidhir, Nazeer, and Vijayan at the Middle East College in Oman, shows that ERT has been quite an effective way of teaching and learning both for students and professors since the implemented surveys among students and educators

brought up the fact that education implemented by ERT turned out to be more versatile and “vibrant” (Mohammed, Khidhir, Nazeer, Vijayan, 2020).

Even though schools and higher education institutions had to shift to ERT nearly overnight and the curriculum and the whole course workload had to be adjusted to online learning needs quite fast, qualitative and quantitative data collected during the study showed that student attendance was quite improved during online sessions since most of the students did not have to overcome the distance to get to university or procrastinate with the assignments. The study also showed that even due to the “time constraint” educators adapted to online teaching quite fast and mentioned the fact of online education being more “convenient and dynamic” (Mohammed, Khidhir, Nazeer, Vijayan, 2020).

ERT evaluation which has been conducted in Aguilera-Hermida’s study (2020) shows that many students had quite a lot of hardships and stress to overcome during the online learning process imposed by the COVID-19 pandemic. Evidence which was the result of qualitative and quantitative data collected among students showed that students needed extra motivation in order for them to start working and they had to put up with a higher amount of self-discipline in order to go on with their studies. According to the author, “The findings present how attitude, motivation, self-efficacy, and use of technology play a significant role in the cognitive engagement and academic performance of students” (Aguilera-Hermida, 2020).

Another study conducted by Natalie B. Milman in March 2020 when the COVID-19 outbreak was at its peak, demonstrates how difficult it can be to teach and learn in times of crisis. The author explains that in times of crisis the communication distance between the professor and

the student needs to be effectively measured to collaborate and reach an effective result while overcoming hardships together (Milman, 2020).

In times of ERT there should be communication, understanding and self-determination in order both for students and educators to achieve their academic goals and be satisfied with the result in the long run. Milman had to teach in times of the H1N1 virus as well as Hurricane Isabel, which made her understand that “It takes a lot of time and effort to design and develop effective, engaging online education” (Milman, 2020, para. 4).

Milman also talks about the fact that course structures and course workload have to be adjusted to student needs and there should be highly structured plans and designated schedules for student-teacher communication (Milman, 2020).

To conclude, ERT has been quite a useful tool in communicating students’ and educators’ needs and that Emergency Remote Teaching, even though still being a not so well analyzed sphere and method of teaching, should not be underestimated since it glues together students and educators, greatly helping out to maintain a normal academic life and work schedule both for all.

Research Questions

My research is aimed to find the answer to the question: In what way specifically has Emergency Remote Teaching (ERT) helped improve the academic standing and overall learning outcome of the students aged 18-21 in Armenia during the COVID-19 pandemic?

By answering this question my capstone attempts to fill the gaps of the research of the yet debatable question of whether Emergency Remote Teaching is effective and whether it can be applied in future times of crises?

The second question answered in my research is: Has ERT helped students overcome the difficulty of communicating with each other during class time? Answering this question, I have attempted to clarify whether the educator-student relationship has been in any way affected adversely and whether the communication of the students and their interaction has improved with the help of ERT.

Methodology

In order to understand how Emergency Remote Teaching (ERT) has helped students aged 18-21 improve their learning and academic standing during the COVID-19 pandemic in Armenia, I conducted an online anonymous survey among students aged 18-21 as well as middle-aged professors from different universities in Armenia, the USA, Canada, Syria and Russia.

I have used the mixed methods methodology which includes both qualitative and quantitative data collection from a given amount of people who have taken the survey. I have analyzed both qualitative and quantitative data, the former being textual analysis and the latter being statistical information about the respondents. The reason I decided to use mixed methods is the fact that it helped me combine different opinions, ideas and data at the same time. Simultaneously, its advantage includes the idea of combining statistical data along with qualitative research and getting the bigger picture of the whole study at once.

The survey was conducted with students from different higher education institutions such as the American University of Armenia (Armenia) Yerevan State Medical University (Armenia), Russian-Armenian University (Armenia), Yerevan State University (Armenia), National Institute of Health (Armenia), National Academy of Sciences of Armenia (Armenia), Touro College New

York (USA), Glendale Community College (USA), as well as Russian State University for the Humanities (Russia). (Please see Appendix B for more details.)

The survey included multiple choice as well as open-ended questions. It started with questions on demographic information, gender, as well as which university the student was from, in order to sketch a better portrait of the person taking the survey and to have more accurate results.

The survey continued with questions about the field the student studied, their hobbies and fields of interest in order to get a more defined sketch of the person taking the survey. There were also questions about how the instructor of the specific university the student studied at reacted to ERT being implemented in a very short time scale and how the students themselves reacted to the shift to online learning in a very short period of time. There were questions about how well the instructor dealt with the difficulty of ERT being implemented.

The survey continued with questions as to whether or not online assessment and online interaction with their peers as well as their professors were effective and whether or not there was a lack of concentration and lack of perceived class teaching while teaching and learning. The survey also included questions on how the students thought ERT had improved their learning, if they would advise online communication to their future co-workers and whether or not they ultimately preferred online learning to that of face-to-face.

The survey continued with the questions on how well ERT had been implemented in the specific institution and if there were glitches with Zoom or any of the software used to conduct the classes. There were questions on communication techniques and tools used to teach classes. The survey concluded on students giving advice to their peers about Emergency Remote Teaching and on how to deal with its difficulties and/or its possible shortcomings.

The survey for faculty included professors from all of the above-mentioned higher educational institutions in addition to Yerevan Brusov State University of Languages & Social Sciences (Armenia), Chadron State College (USA), and Reed College (USA). The survey designated for professors started on questions about demographic information, their gender and field of teaching. The next set of questions focused on whether online assessment had been as effective as face-to-face, whether exams and tests held online had been effective and whether they had helped improve students' learning or helped educators with the design of the curriculum and learning outcomes. All of these questions have been important to understand how well Emergency Remote Teaching helped improve the students' need for studying and the instructors' way of delivering the course workload.

There were two different surveys conducted – one specifically for students and the other one for instructors. The survey conducted was completely anonymous and the participants of the survey were informed that the data collected through the survey was meant to be used as aggregated data and that they could discontinue their participation in the survey at any moment without negative consequences. The total number of respondents both for the student survey and the instructor survey was 58, out of which 38 respondents were students and 20 were instructors. The surveys were conducted both in English and in Armenian.

Research Findings and Analysis

The main aim of my research study is to discover whether Emergency Remote Teaching (ERT) has helped students aged 18-21 in Armenia improve their learning during the COVID-19 pandemic and to ascertain if ERT has proven itself to be a useful tool of both learning and teaching.

A portrait of the student body

The prevailing gender of the respondents of the student survey was female. Out of 38 students who responded to the survey 29 were female students and 9 were male students. The demographics of the respondents of the survey was the following: 81.5% was from the Republic of Armenia while both the United States of America and the Russian Federation respondents' number was equal: 7.4% each. There was also one respondent from Syria, making up 3.7%.

59.3% of the student respondents were from the American University of Armenia, while the remaining percentage of students was divided evenly between the other universities including Yerevan State Medical University (Armenia), Russian-Armenian University (Armenia), Yerevan State University (Armenia), National Institute of Health (Armenia), National Academy of Sciences of Armenia (Armenia), Touro College New York (USA), Glendale Community College (USA), as well as Russian State University for the Humanities (Russia), amounting to one student from each university or college.

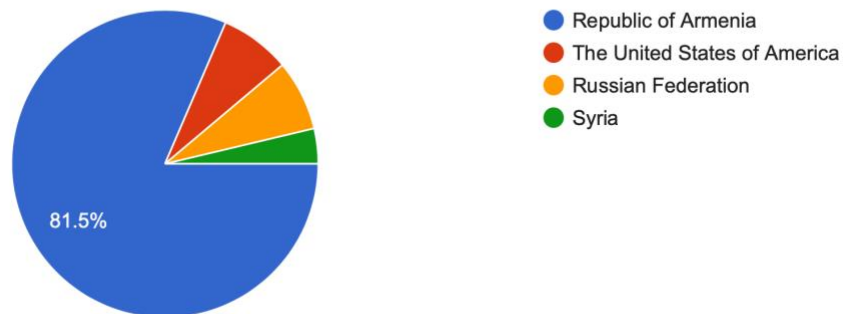
The students' majors included Anatomy and Physiology, Applied Mathematics, Business and Management, Computer Science, Communications and Political Science, English & Communications, General Medicine, Informatics, Linguistics, Management of Health, Physics,

Public health and Teaching English as a Foreign Language. The hobbies and fields of interest of the students were quite versatile. There were students whose field of interests and hobbies included hiking, different genre of sports such as volleyball and portable tennis, computer games, reading, mountain biking, politics, writing, digital marketing, linguistics, literature, history, creative writing, photography, traveling, social media marketing, interpretation, translation, dancing, singing, data science, business analytics, music and programming. 11 students were sophomores, 3 were juniors, 4 were seniors and the rest were either in their sixth year of studies (medical students) or freshmen.

Below is the statistical data of the above mentioned information in charts.

Some respondents completed the English and others the Armenian version of the survey.

Where are you from?
27 responses

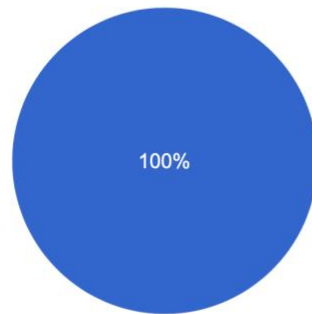


Same question in Armenian: Please state your country of origin.

- Republic of Armenia
- United States of America
- Russian Federation

Նշեք Ձեր բնակության երկիրը

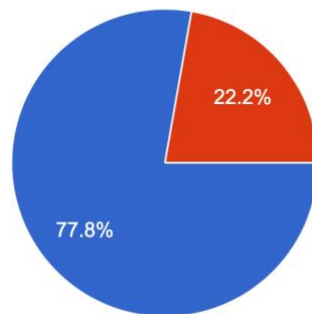
11 responses



- Հայաստանի Հանրապետություն
- Ամերիկայի Միացյալ Նահանգներ
- Ռուսաստանի Դաշնություն

What is your gender?

27 responses

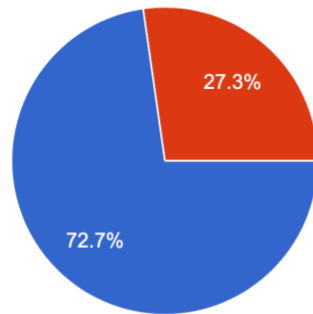


- Female
- Male
- Prefer not to say

What is your gender? (Question formulated in Armenian)

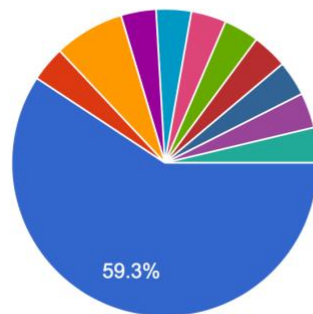
- Female
- Male

Նշեք Ձեր սեռը
11 responses



● Իգական
● Արական

Please choose your university.
27 responses



● American University of Armenia (AUA)
● Russian-Armenian University of Arme...
● Yerevan State Medical University afte...
● Armenian State Pedagogical Universi...
● Russian State University for the Hum...
● National Institute of Health
● RSUH (Russian State University for t...
● Yerevan State University

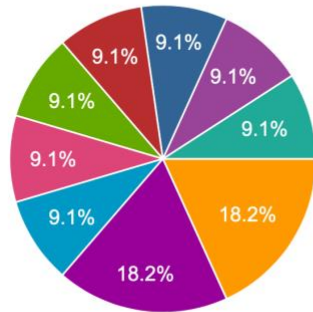
▲ 1/2 ▼

Please choose your educational institution (Question formulated in Armenian)

Answers in percentages are as follows:

1. American University of Armenia (AUA) (Armenia)
2. Russian-Armenian University (Armenia)
3. Yerevan State Medical University after Mkhitar Heratsi (Armenia)
4. Yerevan State Pedagogical University after Khachatur Abovyan (Armenia)
5. 118 High School (Armenia)
6. Mkhitar Sebastaci College (Armenia)
7. National Institute of Health (Armenia)
8. National Polytechnic University (Armenia)
9. Brusov State University of Humanities and Social Sciences (Armenia)

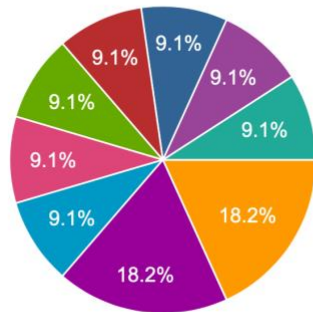
Նշեք Ձեր ուսումնական հաստատությունը
11 responses



- Հայաստանի Ամերիկյան Համալսարան
- Հայ-Ռուսական Համալսարան
- Երեւանի Մխիթար Հերացու Անվ...
- Խաչատուր Աբովյանի Անվան Պե...
- 118 Ավագ դպրոց
- Մխիթար Սեբաստացի կրթահամ...
- ՀԱՊՀ
- Առողջապահության ազգային ինս...

▲ 1/2 ▼

Նշեք Ձեր ուսումնական հաստատությունը
11 responses



- ԱԱԻ
- Национальный политехнический университет Армении
- Բրյուսովի պետական համալսարան
- Aroxjapahutyayn Azgayin Institut

▲ 2/2 ▼

In my research and findings I noticed two main thematic categories. The first category is about the student body adaptation to Emergency Remote Teaching (ERT) and the second one is about the pedagogical adaptation to ERT.

Student Body Adaptation To Emergency Remote Teaching (ERT)

Most of the students stated that the reaction of their instructors to the switch to Emergency Remote Teaching was either positive or neutral, nevertheless, there were some opinions including some instructors' reactions that were negative (Survey for students, 14.03.2021).

Students mentioned that there were quite mixed feelings, reactions and opinions about the switch to ERT. They stated that there were instructors who preferred offline teaching, there were also instructors who were quite alright and just went with the flow, adapting to online teaching quite fast (Survey for students, 14.03.2021).

Taking into account the fact that the instructors wanted to be on the safe side and surely prioritized their own and the students' safety in the face of the quickly spreading pandemic, they surely preferred to stay online and did not oppose the fact of off-campus learning and teaching: "They obviously preferred offline teaching but for the sake of safety agreed that online is better for now" (Survey for students, 14.03.2021).

Students also mentioned the fact that there were professors who were a bit unwilling or at times even unable to get used to the online teaching in terms of the fact that whole universities switched to ERT practically within a day. There were opinions about the fact that occasionally for the instructors it was pretty hard to adapt to the new workload and the new schedules since for the most part it was the majority's first experience with Emergency Remote Teaching. One respondent mentioned: "they weren't super happy with the inability to be able to work on campus, but the situation in the country didn't leave other choices" (Survey for students, 14.03.2021).

Some respondents mentioned that it depended on the instructors themselves stating that some of them found the drawback of online teaching the fact that they could not physically work from home or they needed to go to campus to work more effectively (Survey for students, 14.03.2021). On the other hand, there were also positive opinions about the instructors' opinions on ERT being implemented: "Some were really open to the change, the professors did their best to adapt to the new system, the lecturers of our university responded positively to distance learning" (Survey for students, 14.03.2021).

Moving forward, to the question on how was the reaction of the students themselves to Emergency Remote Teaching, the vast majority of opinions stated that the reaction at first was quite negative since for instance students stated that the degree program is meant to include a social component and an experience of hanging out with your peers as well in addition to the ability to work on campus. They found the student service fee mandatory to pay for some universities was unjustified since they were not using the university on site services (Survey for students, 14.03.2021).

However, there were also positive thoughts, points of views and opinions about the fact of switching to ERT in students' eyes such as: "Some were happy because they knew it would be easier and less stressful to take tests and get the grades they wanted. Others hated it because they were more social people and the quarantine restrictions forced them to stay home." Another respondent mentioned : "Students' response was positive, as they had much free time to pursue their hobbies, and students from the provinces reported that distance learning classes were more convenient, and some students took advantage of distance learning opportunities and started to work full time" (Survey for students, 14.03.2021).

Further, the vast majority of students stated that they had little to no amount of difficulties while adapting to ERT but there were also students who mentioned that: “the professors who never held an online class gave us a great amount of tasks and projects and it turned out to be a process of challenging self-learning.”, or that: “deadlines were easier to miss. I missed many because everything is online and you don't pay the necessary amount of attention. It's harder to concentrate during the class since there are many things that can distract you at home. Some lectures are recorded so that means you don't really need to pay much interest. Therefore, it's harder to find that motivation to concentrate” (Survey for students, 14.03.2021).

There was specifically positive feedback from American University of Armenia (AUA) students on the smooth transition online, such as: “There weren't any difficulties because, at AUA, we were used to the online method as, mainly before the pandemic, we submitted our papers online/passed exams online/researched and read articles online/prepared for presentations online” (Survey for students, 14.03.2021).

To the question as to how had remote learning impacted the students' learning process students' answers were mostly positive, including statements concerning the fact that a lot of the students were self-learners or that for most of them it had become even easier to study since they could work both from home and at their workplace thus participating in classes while able to maintain a full-time job alongside being a full-time student. There were statements such as: “I found myself to be more productive and organised, because I had to balance work and studying and as both were remote, it turned out to be very easy and satisfying.”, or statements like: “I have always been a self-learner so it didn't really change mine. It helped me save time and energy, thus I had more time to study better and work full-time as well in a company” (Survey for students, 14.03.2021).

The majority of students in answer to the question as to what were the specific differences between online and offline assessment and learning showed that many of them preferred online learning to that of face-to-face stating that: “The difference is that when we study online, we do not spend time on transportation, which helps us save both time and energy. The quality of learning did not change since, in our university, AUA, even before the pandemic, everything was mainly online, from submitting homework assignments to preparing for presentations. The interaction with professors and peers did not change much when we transitioned to online in our university since our communication continued via Zoom, social media platforms, and emails” (Survey for students, 14.03.2021). There were also students who mentioned the fact that taking quizzes/exams from home and in general being assessed not specifically on campus made the overall assessment process way more relaxed and helped students concentrate on the learning process and material way better (Survey for students, 14.03.2021).

Many students’ response to the question as to in what way had the remote learning and teaching impacted the students’ interaction with their peers/professors, was quite positive. One person stated, “I did not have any face-to-face interaction with my professors and peers which was quite stressful at times. However, we kept in touch via phone, email or social media. During online learning, I was able to contact my professors much more easily (any time I wanted via phone) than I could during face-to-face learning” (Survey for students, 14.03.2021).

This answer goes to show and paves the way for the fact that the student-teacher relationship went onto a whole other level. For instance, students could at once contact their instructor via any social media and address the question that they had, in contrast with the fact that previously students had to write up a formal email while addressing them.

Moving on to the next question about what the students found the best and worst in distance learning, there was quite a lot of selection and variety of answers. Most of the students found the best aspect of ERT, the fact that they could study and connect to a class at their own convenience from wherever they were, including also the fact that they were saving time on traveling to class and not spending any money on transportation. On the other hand, some students found the worst in ERT to be the fact of a worsened eyesight, the constant immobility and that they had only 10-15 minutes to get out of their room and get back to their computer desks which was very tiring. Some students also found the worst that they were unable to hang out with their peers or get interaction with their instructors. Students also mentioned that there was a huge lack of communication and there were also distractions since if for instance they were connecting from home, and they had kids in their household or elderly people, it was quite a challenge for them to concentrate on their studies. In contrast, working on-campus meant being able to use the library for group projects or the collaborative study spaces that their universities would have provided them with (Survey for students, 14.03.2021).

However, there were also opinions that for those students who were parenting or working from home, it was a huge comfort not to be obliged to cross significant distances and for some introverted students it was also a huge help not to set classroom boundaries between instructors and students or their peers, since they could communicate with each other on a more personal and non-formal or friendlier manner and level (Survey for students, 14.03.2021).

To the question whether or not the students would recommend distance learning to their peers in the future there were quite mixed opinions but overall, most of the students thought that ERT had proved itself to be quite useful and that distance learning should be recommended to their peers (Survey for students, 14.03.2021).

There was a host of positive feedback on this last issue, such as: “ I love online learning. It is helpful for those who have busy schedules but wish to study alongside such as parents, working students, etc. Online learning, if organized properly, saves a lot of our time.” Another stated: “it saves time one usually spends in transport and it's possible to get learning from anywhere.” Or, “I would highly recommend online learning to my peers because it saves us a lot of time. Therefore, we can study better, spend time with family/friends, pursuing hobbies, and working full or part-time.” Yet another: “Online learning is helpful while studying not more than 3 or 4 main subjects. So you will concentrate on them and succeed” (Survey for students, 14.03.2021).

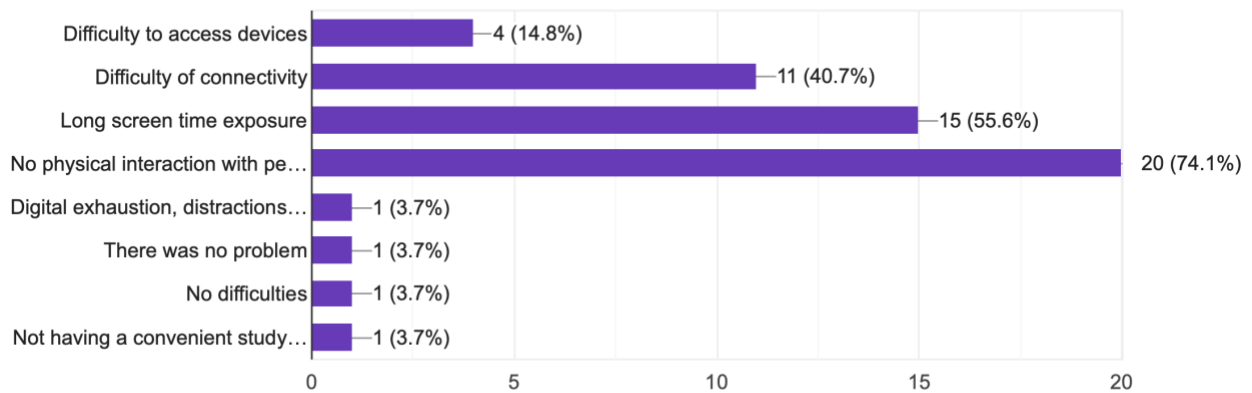
Last but not least, to the final question on the survey for students as to how the students perceived and saw the future of Emergency Remote Teaching and distance learning in general, the majority responded that it has already become a huge part of our education system mentioning the fact that it would definitely transform the educational syllabi as well as the workload given to students in the long run (Survey for students, 14.03.2021). The students’ answers included: “I believe it is getting more and more popular with online courses and university degrees. It is already a part of education!”; “I think it would be nice to have some classes online to see whether students can cope with them effectively. If that turns out well, I don't see any serious obstacles for remote learning.” However, there were also contradictory opinions such as: “A part of learning is having fun and meeting new people and interacting with your peers and remote learning deprives us of these rights.” There was also an opinion about the hybrid system being incorporated into the distance education process since it would give students a choice of education system whether they would prefer online learning or if they would be prone to the face-to-face one (Survey for students, 14.03.2021).

Statistical Data on Software Efficiency:

Here is some statistical data about the difficulty of concentration for students during online classes and the effectiveness of the software (which in most cases was Zoom and where 1 was the lowest efficiency and 5 was the highest) used by the students' universities. We first see the English responses, followed by the Armenian ones.

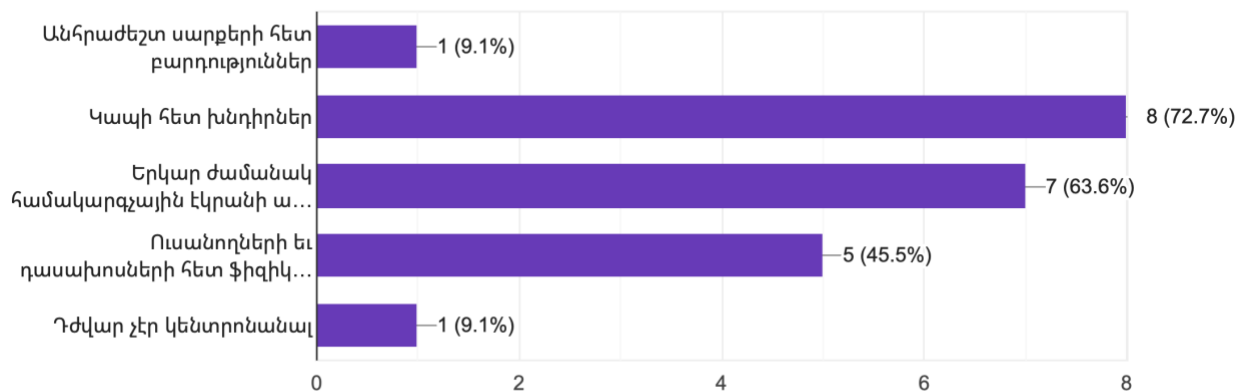
Was it hard for you to concentrate during online classes? Please mention what specific difficulties you have faced from the list below.

27 responses



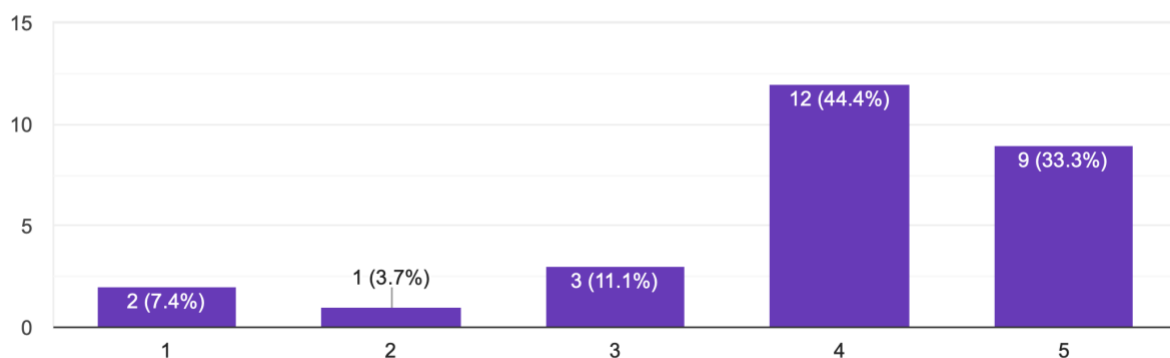
Արդյո՞ք Ձեզ համար դժվար էր կենտրոնանալ առցանց դասերի ժամանակ: Ստորև ներկայացված ցանկից նշեք, թե կոնկրետ ինչ դժվարությունների էք բախվել:

11 responses



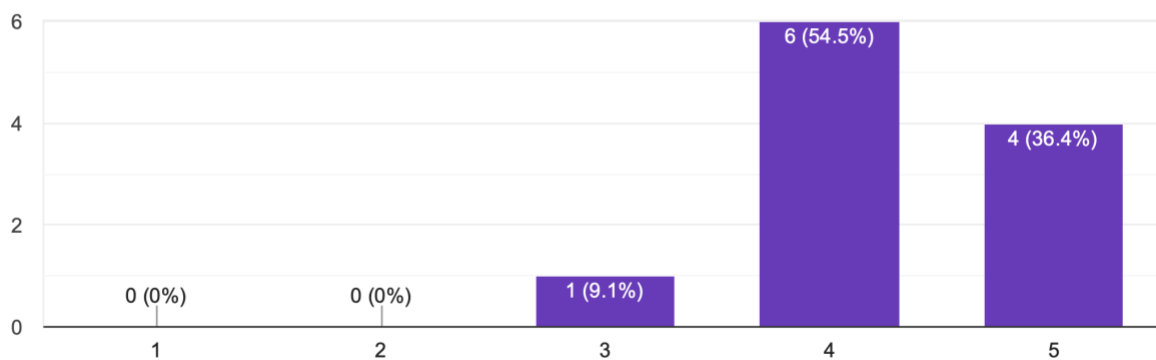
Please rate the effectiveness of the software used by your university.

27 responses



Խնդրում եմ գնահատել Ձեր համալսարանի կողմից օգտագործվող ծրագրի արդյունավետությունը:

11 responses



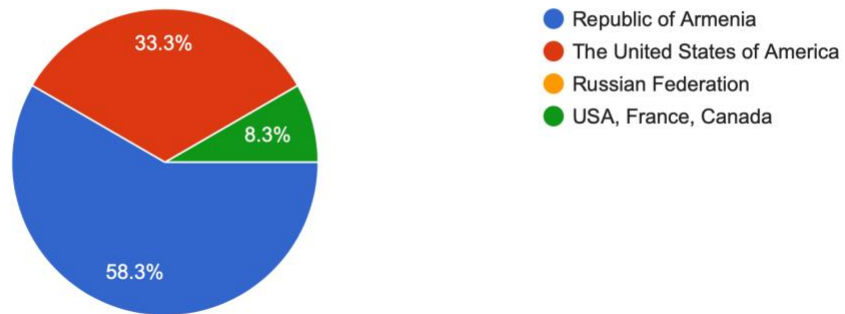
A Portrait of the Faculty Respondents

Moving on to the next part of my research which incorporates the survey for faculty here is the statistical data gathered in the result of the survey. The survey was conducted both in English and in Armenian. Once again, the survey was completely anonymous and the participants of the survey were informed that the data collected through the survey was meant to

be used as aggregated data and that they could discontinue their participation without any negative consequences at any moment.

Where are you from?

12 responses

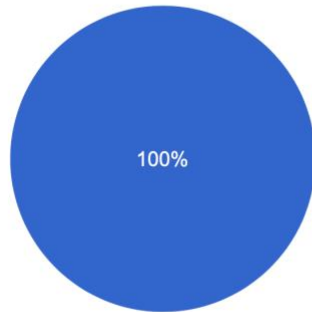


Same question formulated in Armenian.

Answers are as follows:

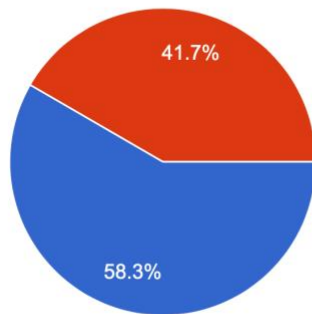
- Republic of Armenia
- United States of America
- Russian Federation

Նշեք Ձեր բնակության երկիրը
8 responses



- Հայաստանի Հանրապետություն
- Ամերիկայի Միացյալ Նահանգներ
- Ռուսաստանի Դաշնություն

What is your gender?
12 responses

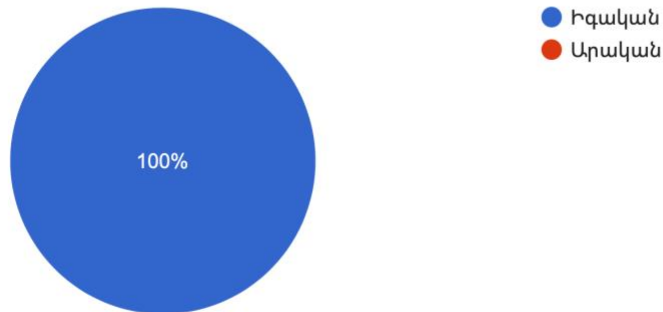


- Female
- Male
- Prefer not to say

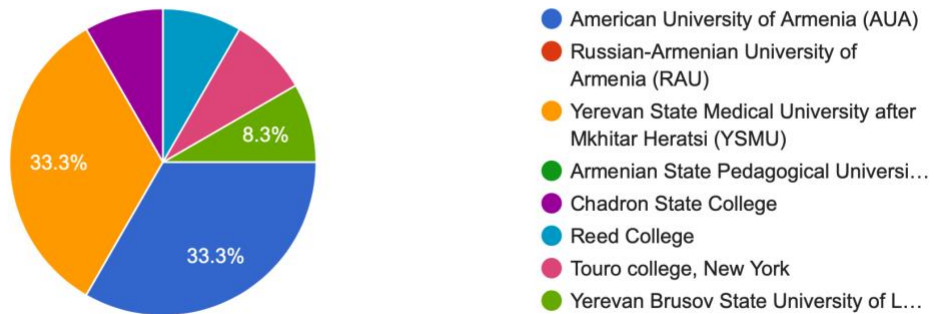
Same question in Armenian with answers:

- Female
- Male

Նշեք Ձեր սեռը
8 responses



Please choose your university.
12 responses

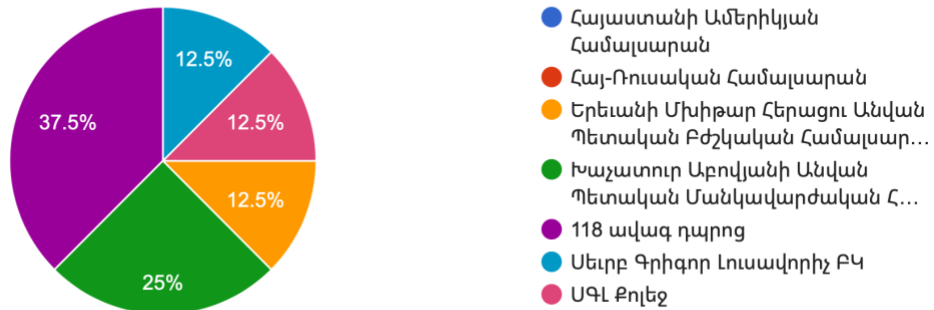


Same question in Armenian with answers as follow:

1. American University of Armenia (Armenia)
2. Russian-Armenian University (Armenia)
3. Yerevan State Medical University after Mkhitar Heratsi (Armenia)
4. Yerevan State Pedagogical University after Khachatur Abovyan (Armenia)
5. High School #118 (Armenia)
6. Saint Gregory Illuminator Medical Centre (Armenia)
7. Saint Gregory Illuminator College (Armenia)

Նշեք Ձեր ուսումնական հաստատությունը

8 responses



The field of specialization of the faculty included Anatomy and Physiology, Communications, English & Communications, International Political Economy, Music, Pediatrics as well as Political Science, Public Health, Psychology, Writing and Journalism.

Pedagogical Adaptation To Emergency Remote Teaching (ERT)

To the question as to in what way ERT had impacted the instructors' teaching experience the questions were versatile including opinions such as: "It has been more time consuming to develop additional content and to set up Zoom sessions; also I spend more time with individual email messages and changes deadlines of coursework especially with students in quarantine or sick with COVID." Another person stated, "It has impacted me both positively and negatively. Positive sides are: more comfort, less rush, exploring new methods of teaching and assessment. The underside is: less interaction with students and peers, and as a result, slower professional development." Another commented, "It has required some extra work, designing Powerpoints when I'd normally come into the classroom with just a set of typed notes. However, being able to move some lecture material into the Powerpoints freed up more time for discussion. I also had to

spend far less time on classroom management (e.g. telling students to be quiet).”Or, “It has made me more robust and more focused on fundamentals. I have learned how to use useful tools like Hypothesis and surveys, yet I miss teaching in the classroom which I find more conducive to learning” (Survey for faculty, 16.03.2021).

On the question of online assessment efficacy for instructors, the respondents mentioned that: “Some of the assessment stayed the same. Papers are submitted and graded the same way as before. Participation assessment changes a bit, because in addition to talking, students can write in chat. This was good, because I discovered some silent students prefer to type, but it also made it hard, because sometimes they copy from the Internet or from reading. Online tests are the big difference, because I cannot make sure students don’t cheat” (Survey for faculty, 16.03.2021). So, as we can see there were areas in online assessment that still needed improvement but there were also some privileges in ERT assessment. There has also been a thought that there were difficulties in some areas of assessment of the student participation in classes since they were mostly connecting to class with their cameras off so the instructors had a hard time recognizing the students and giving them full credit for participation (Survey for faculty, 16.03.2021).

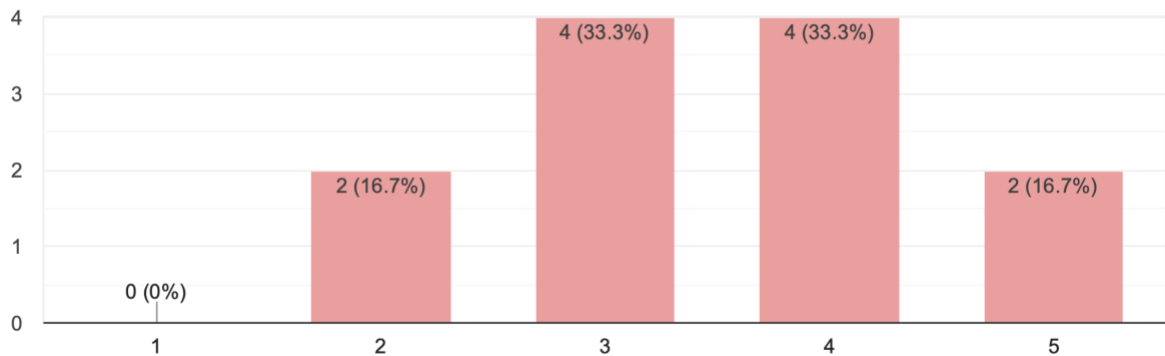
“It's been just as easy to assess things like class participation, if not easier. When I was teaching my American Lit class in Google Hangouts, it was very easy to review the text of the class discussion and see precisely who had participated. When I taught Intro to Communication on Zoom, the one drawback is that some students always had their cameras off (and were just showing up as black squares); I think I might have underestimated the participation of some of those students, because I had a harder time recognizing them by the end of the semester” (Survey for faculty, 16.03.2021).

On how ERT improved or affected the students' learning adversely there were opinions such as: "For some students—especially those who are very extroverted—remote teaching did adversely affect their learning process. For some others, it made it easier for them to focus and to attend classes. Attendance was, on the whole, much higher when I did Zoom classes than it usually is when I teach face-to-face." This goes to show that for most students it was way more convenient attending classes just connecting via their device and maybe more possible not to miss a class (Survey for faculty, 16.03.2021).

Faculty were also asked to rate the effectiveness of remote teaching, based on the use of online software to interact with students where 1 is the lowest and 5 is the highest. (The prevailing software was Zoom. The charts are in English and Armenian respectively.)

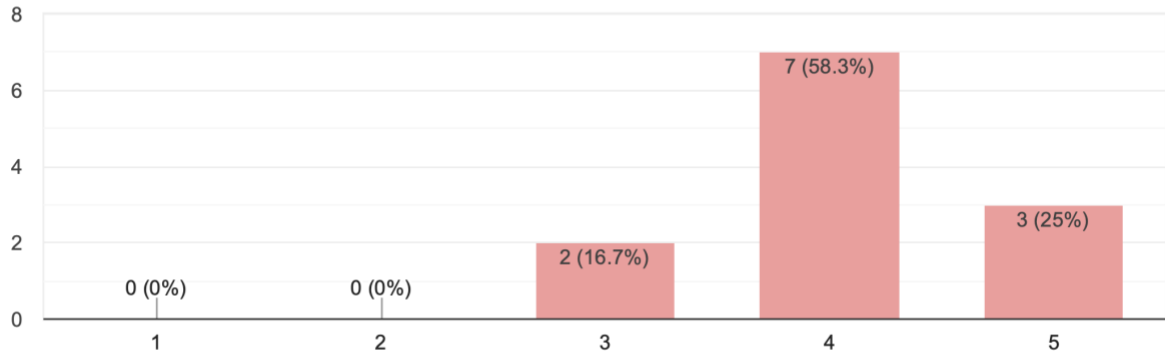
Please rate the effectiveness of remote teaching, based on the use of online software to interact with students.

12 responses



Please rate the effectiveness of the software used by your university.

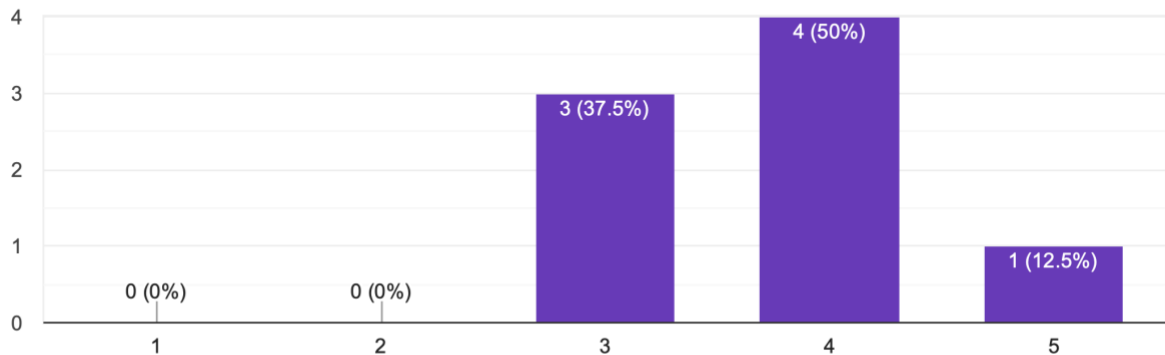
12 responses



Same question in Armenian: Please rate the effectiveness of the software used by your university.

Խնդրում եմ գնահատել Ձեր համալսարանի կողմից օգտագործվող ծրագրի արդյունավետությունը:

8 responses



To the question as to how was the course material delivery in times of Emergency Remote Teaching the summary of the responses is that the material delivery was somewhat at times adversely affected with the loss of engagement. “It is different, I have to convert everything to powerpoints and word documents, however there was an issue with students not having the foundation knowledge that the course assumes and remedial or enrichment materials

were needed; weaknesses appear on that basis and also students don't ask questions that they would have asked face to face” (Survey for faculty, 16.03.2021).

Finally, instructor responses on the future of ERT in the following five years indicated that they see ERT become an essential part of the curriculum design. “It will continue but much of it was established as course management support software and the delivery is added on this infrastructure which the students knew how to use already, Zoom use is the big change and that will continue especially for individual student needs,” explained one instructor (Survey for faculty, 16.03.2021).

Limitations and Avenues for Future Research

One of the limitations of my research study was the fact that I conducted the survey with a limited age range, focusing on students aged 18-21 so, if the focus had been also on students in their graduate studies the bigger picture and results might have been more accurate and clear.

The other limitation is the fact that the experience of the educators that took part in the survey was quite limited and not as versatile. There were mainly instructors of undergraduate school for instance. Also, the fact that the Emergency Remote Teaching (ERT) has definitely been still vague for the respondents of the survey since it is still quite new and is not taken that seriously as of the moment.

The other limitation is the fact that the majority of my respondents were from Yerevan, Armenia and that limits the avenue for research since the demographic information would be better if I had the opportunity to reach out to a larger demographic of respondents.

Last but not least, the other limitation of my conducted research is the fact that I have administered the survey with 58 respondents only, so the number of my participants is not that much, thus making it difficult to assess the final validity of the research itself.

It needs to be taken into consideration that further and future research should be conducted with different age ranges, with a bigger amount of audience, as well as with a variety of demographics.

Conclusion

To sum up, the aim of my conducted research was to answer the question as to how and in what possible way Emergency Remote Teaching (ERT) helped students aged 18-21 in Armenia overcome the difficulties and hardships faced by the COVID-19 pandemic and how ERT helped improve their learning during a huge time of crisis. Many of my peers and myself as well, had to deal with Emergency Remote Teaching as we shifted to distanced education instantly.

Many students faced difficulties with adapting to that change, others enjoyed it and found its privileges by concentrating better on their studies. Some instructors faced difficulties, while others found ERT a useful tool to escape the danger of the pandemic.

In my research, I conducted two different surveys with both instructors and students. The results showed that ERT, even though in the beginning quite a new phenomenon for Armenian students and educators, paved the way for distance learning and teaching, which in a very short span of time, already became a natural part of our daily lives.

I hope that further research will show the advantages of ERT in higher education including how it can make learning more focused and can at times be the cure and the go-to in

emergency situations. I also genuinely hope that my research study will have its useful contribution in understanding the myriad opportunities that Emergency Remote Teaching has to offer in teaching and learning.

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Appendices

Appendix A: The Consent Form (Disclaimer in the beginning of both surveys)

I have been informed that the purpose of the project is to find out how Emergency Remote Teaching (ERT) has helped students aged 18-21 improve their learning during the COVID-19 pandemic. Within the bigger context of the project, the survey conducted by Diana Hakobyan is meant to focus on filling the gaps in the yet new and not so well researched topic of Emergency Remote Teaching (ERT) while finding out whether or not ERT has been an effective tool both for students and instructors in Armenia.

This is to state that I agree to participate in the capstone project conducted by Diana Hakobyan. The capstone director is Dr. Hourig Attarian of the College of Humanities & Social Sciences at AUA (tel.: 060 612769, email: hourig.attarian@aua.am).

I understand that my participation in this study is anonymous, the data from this project may be published in print or digital format for academic purposes, the data collected in the following survey is only going to be published as aggregated data and that I am free to withdraw my consent and discontinue my participation at any time without negative consequences.

Appendix B: Survey Questionnaires (Student & Faculty)

Student Survey Questions

1. Where are you from?
 - Republic of Armenia
 - The United States of America
 - Russian Federation

2. What is your gender?
 - a. Male
 - b. Female
 - c. Rather not specify

3. Please choose your university.
 - a. American University of Armenia (AUA)
 - b. Russian-Armenian University of Armenia (RAU)
 - c. Yerevan State Medical University after Mkhitar Heratsi (YSMU)
 - d. Armenian State Pedagogical University (ASPU)
 - e. Other(Please specify.)

4. What is your field of study?

5. In what year of studies are you currently?
 - a. First

- b. Second
 - c. Third
 - d. Fourth
 - e. More
6. What are your hobbies/fields of interest?
 7. Was your university instructors' reaction positive or negative to the remote teaching and what was the reaction to the inability to be able to work on campus?
 8. Was your university students' reaction positive or negative to the remote teaching and what was the reaction to the inability to be able to study on campus?
 9. Were there any difficulties adapting to online classes? If yes please specify.
 10. How did remote teaching impact your learning process? (Describe in a few sentences.)
 11. Were there any difficulties adapting to online classes? Please explain.
 12. Please specify what were the differences between online and face-to-face assessment and how effective they turned out to be.
 13. Please specify what were the differences between online and face-to-face learning and how effective they turned out to be.
 14. How has remote teaching impacted your interaction with your peers/professors?
 15. Was it hard for you to concentrate during online classes? Please mention what specific difficulties you have faced from the list below
 - a. Difficulty to access devices
 - b. Difficulty of connectivity
 - c. Long screen time exposure
 - d. No physical interaction with peers/instructors

- e. Other (Please specify.)
16. What software did your university use during remote teaching?
 17. Please rate the effectiveness of the software used by your university. (up to 5 stars)
 18. Would you recommend online learning to your peers in the future and please specify why yes or why not?
 19. What did you find the best and the worst in remote learning and why?
 20. How do you see the future of remote learning and do you think remote learning would be a part of education in the next 5 years?

Faculty Survey Questions

1. Where are you from?
 - a. Republic of Armenia
 - b. The United States of America
 - c. Russian Federation
2. What is your gender?
 - a. Male
 - b. Female
 - c. Rather not specify
3. Please mention your field of specialization.
4. Please indicate your university.

5. In what way has remote teaching impacted your teaching experience?
6. Has online assessment been as effective as the face-to-face one? Please specify in a few sentences.
7. Please specify whether or not remote teaching has improved or affected the learning process and learning outcomes of students adversely. Please specify whether or not the remote teaching has improved or affected the overall teaching experience of instructors
8. Please rate the effectiveness of remote teaching, based on the use of online software to interact with students (Up to 5 stars rating)
9. Would you recommend remote teaching to your colleagues in the future and why?
10. Was your course material delivery better or worse during remote teaching? Why?
11. Do you think the students lacked concentration and self-discipline during remote teaching? Please explain.
12. How do you see the future of remote learning and do you think remote learning would be a part of education in the next 5 years?