



# THE IMPACT OF COVID-19 ON GLOBAL CONTACT LENS EDUCATION

**JULY 2020** 

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## INTRODUCTION

The effects of the COVID-19 pandemic continue to be felt in many aspects of our everyday lives. Education has been especially affected with reports of institutions worldwide closed to students and moving towards online teaching.

IACLE already has a wide range of online resources and programs available to educators worldwide. Our 967 members in 79 countries (as of 30 June 2020) teach a total of more than 25,000 students each year in 726 institutions.

To determine the impact of COVID-19 on contact lens education, and how educators and institutions plan to adapt in future, IACLE conducted a survey among its members. The results will be used to provide further resources and support to contact lens educators around the world as recovery from the pandemic continues.

#### THE SURVEY

An online survey was sent to 546 of our Educator Members in May 2020. The survey was conducted in English and in Spanish, and translated versions in Simplified Chinese, Korean and Bahasa were available.

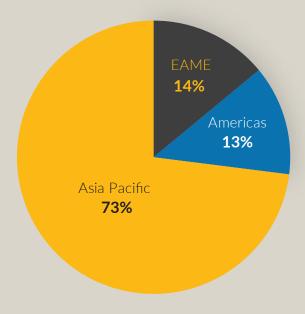
A total of 214 responses were received from educators in 32 countries by the cut-off date of 31 May, representing a 39% response rate. Results were analysed globally, by region (Americas, Asia Pacific and Europe / Middle East – Africa) and for countries with the highest numbers of members (China and India). The base for results is 214 unless otherwise stated.

#### **RESPONDENTS AND THEIR INSTITUTIONS**

Almost three in four educators responding were from the Asia Pacific (APAC) region. Americas (Latin America, USA and Canada) and Europe / Middle East - Africa (EMEA) contributed 13% and 14% of responses respectively.

APAC was over-represented among respondents, since 58% of all Educator Members are located in this region. A total of 32 countries were represented (Base: 184 who stated the country in which they were based and 154 who supplied contact details).





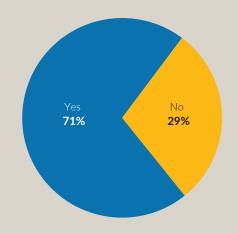
Teaching was the principal activity for a majority of respondents (65%), with nearly one in three (29%) working mainly in clinical practice. About three-quarters (73%) said their principal location was a university/college and others cited clinical practice (13%), industry (8%) or hospital settings (5%).

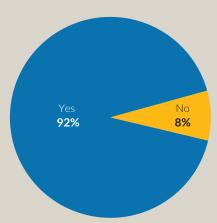
#### **CURRENT EDUCATION PROVISION**

Globally, about seven in 10 respondents said their institutions were currently closed to students to attend in person. But most expected their institution to be open to students to attend before the end of 2020.

#### INSTITUTION CURRENTLY CLOSED





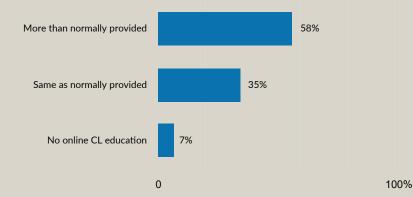


EXPECTED TO OPEN IN 2020

In Americas and in EMEA, a high proportion of institutions (93%) were closed when the survey was conducted. Within APAC there were wide differences between countries depending on the progress of the pandemic at that time: in India 92% of institutions were closed, compared to 41% in China. Almost all institutions in EMEA (97%) expected to open by the year end, compared to 76% in APAC countries other than China (93%) and India (94%), such as Korea, Malaysia and Indonesia. One institution in China had not been open at all in 2020, and the latest anticipated opening date was February 2021 for a university in Colombia.

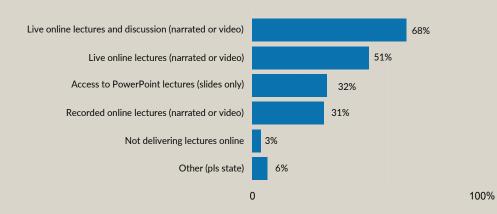
A majority of educators responding were already delivering more online education than they would normally provide and only a small proportion were providing no online education at all.

#### HOW MUCH ONLINE EDUCATION IS YOUR INSTITUTION CURRENTY PROVIDING?



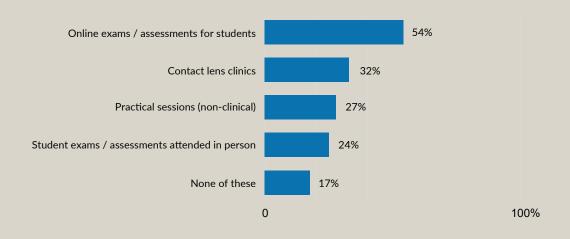
Most respondents were using live lectures to deliver online education, especially when combined with discussion. PowerPoint and recorded lectures were used by about one in three educators. Very few were not delivering any online lectures.

#### HOW IS YOUR INSTITUTION CURRENTLY DELIVERING CONTACT LENS LECTURES TO STUDENTS ONLINE?



Just over half of educators said their institutions were running online exams or assessments. Only about one in four were holding these for students to attend in person or conducting practical sessions. Surprisingly, nearly a third were running contact lens clinics although some institutions were already open and others were where members were involved in clinical practice.

#### IS YOUR INSTITUTION CURRENTLY RUNNING ANY OF THE FOLLOWING?

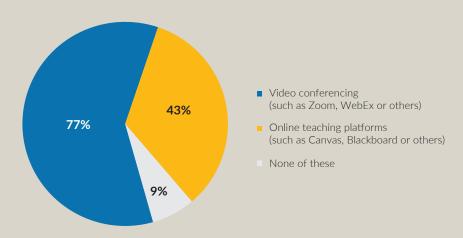


All EMEA respondents were providing some form of online education and these educators were likely to be teaching more online already (79%). In this region online student exams and assessments were also more commonly running (79%). Practical sessions and clinics were less likely to be taking place (both 17%), reflecting the high proportion of institutions in the region that were closed to students.

#### **USE OF TECHNOLOGY**

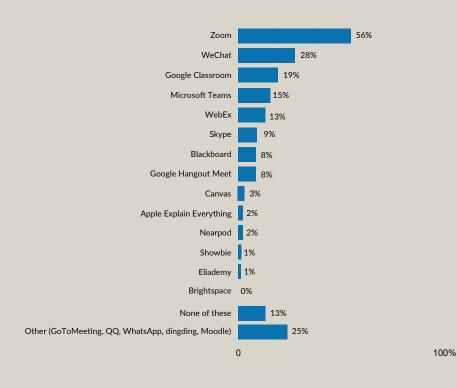
More than three in four respondents were currently using video conferencing technology such as Zoom, WebEx or others in their teaching, and nearly half were using an online teaching platform such as Canvas or Blackboard. Fewer than one in 10 were not using any of this technology.





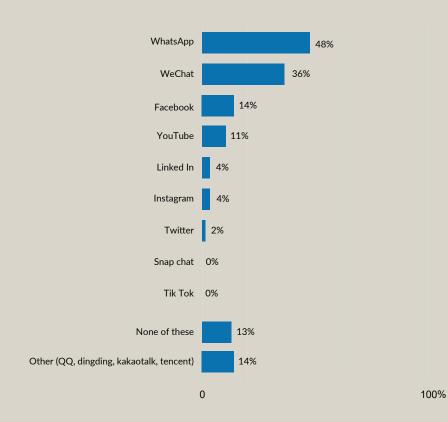
When asked about specific platforms, the most popular was Zoom - used by more than half of educators - followed by WeChat, which is a Chinese option and is similar to WhatsApp. The third most common technology was a variety of other platforms, principally QQ - a Chinese version of Facebook - and WhatsApp. Google Classroom, Microsoft Teams and WebEx were the next most commonly used.

#### WHAT VIDEO CONFERENCING OR ONLINE TEACHING TECHNOLOGY ARE YOU CURRENTLY USING TO DELIVER CONTACT LENS EDUCATION TO STUDENTS?



Through this lockdown period constant communication with students has been important. Most respondents seemed to be comfortable using social media platforms such as WhatsApp, WeChat and Facebook, while some regional and local apps, such as QQ and others, played a role. It was surprising that some educators chose YouTube to communicate with their students and about one in eight used no social media platform for this purpose.

#### WHICH OF THE FOLLOWING SOCIAL MEDIA DO YOU CURRENTLY USE TO COMMUNICATE WITH YOUR STUDENTS?



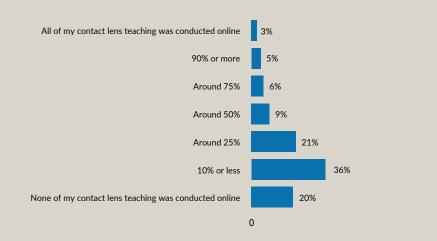
When educators were questioned about their social media preferences for personal rather than professional use, WhatsApp (56%) and Facebook (48%) were most popular, followed by YouTube (42%) and WeChat (36%). While preferences overall were similar to those for communicating with students, LinkedIn, Instagram and Twitter were more widely accessed for personal use.

Online teaching technology and social media platforms differ around the world and are influenced by availability in individual countries. In China, WeChat was by far the most used for these purposes, at 68% and 84% of respondents respectively, since many other platforms are not accessible.

#### **EDUCATION BEFORE AND AFTER COVID-19**

Asked about their contact lens teaching prior to COVID-19 restrictions, the highest proportion of educators estimated that online education had made up just a tenth or less of their total teaching. One in five responding said that none of their teaching was conducted online prior to the pandemic.

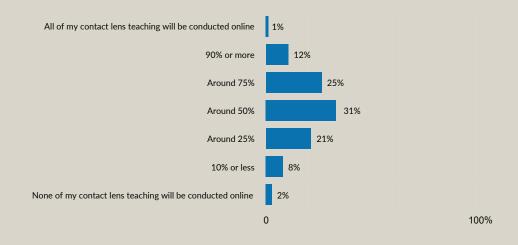
#### WHAT PERCENTAGE OF YOUR TOTAL CONTACT LENS TEACHING WOULD YOU ESTIMATE WAS CONDUCTED ONLINE PRIOR TO COVID-19 RESTRICTIONS?



When questioned on how much of their teaching would be online by the end of 2020, two-thirds of respondents (68%) estimated they would be conducting more than half of their total teaching online and one in eight expected that 90% or more of their teaching would be online, representing a major shift in the educational landscape.

100%

#### WHAT PERCENTAGE OF YOUR TOTAL CONTACT LENS TEACHING WOULD YOU ESTIMATE WILL BE CONDUCTED ONLINE BY THE END OF 2020?

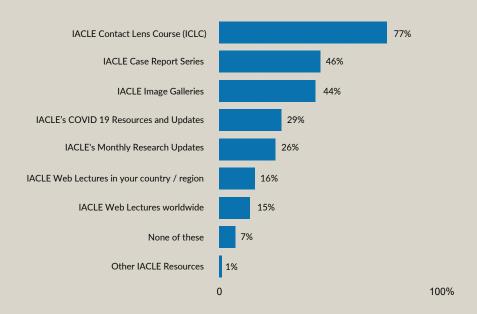


While the move towards more teaching online was general across all regions and countries, some were starting from a higher base. In Americas, more than four in 10 educators (44%) were already conducting around 75% of their teaching online.

#### **USE OF IACLE RESOURCES**

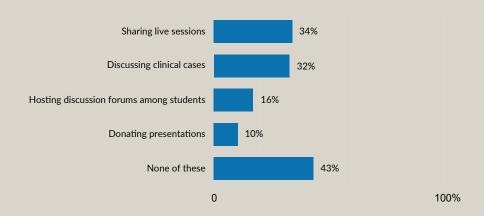
As a global organization, IACLE offers a wide range of resources and programs online. Among the IACLE resources that educators were currently employing, the IACLE Contact Lens Course (ICLC) was the most used for online education. The Case Report Series and IACLE Image Galleries were the next most widely used. At a time when universities and colleges may not have access to clinics, these resources can be used as tutorials to explain clinical cases and diagnosis.

#### WHICH IACLE RESOURCES ARE YOU CURRENTLY USING FOR ONLINE EDUCATION?



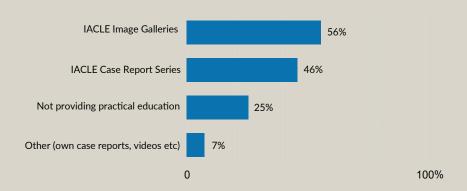
Some members were collaborating across institutions and with colleagues. About one in three were sharing live sessions and a similar proportion were discussing clinical cases together.

#### ARE YOU CURRENTLY COLLABORATING WITH OTHER INSTITUTIONS OR COLLEAGUES IN ANY OF THE FOLLOWING WAYS?



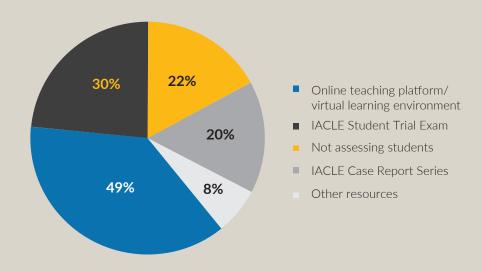
Teaching contact lens clinical skills is challenging in the absence of clinic facilities and practical sessions. The IACLE Image Galleries and Case Report Series are resources that can provide a method of practical education under these unusual circumstances. However, it is concerning that one in four of the educators were not currently providing contact lens practical training in any form.

#### WHAT RESOURCES ARE YOU CURRENTLY USING FOR PRACTICAL CONTACT LENS EDUCATION?



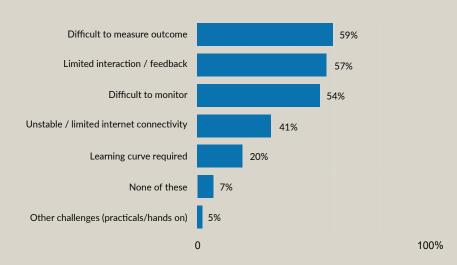
Assessment of student knowledge presents another set of challenges. Half of respondents were using the IACLE Student Trial Exam (STE) and the Case Report Series to assess students, while a similar proportion were using an online teaching platform or virtual learning environment for this purpose. The fact that nearly one in four of the educators were not currently assessing students is again a concern.

#### WHAT RESOURCES ARE YOU CURRENTLY USING FOR STUDENT ASSESSMENT IN CONTACT LENSES?



Although online platforms and teaching have now been available for more than a decade, some regions and countries still follow traditional education systems. The survey reveals a variety of challenges to online provision, from the difficulty in measuring learning outcomes and monitoring students, to limited interaction and feedback from students. Internet connectivity was also an issue for a substantial proportion of educators.

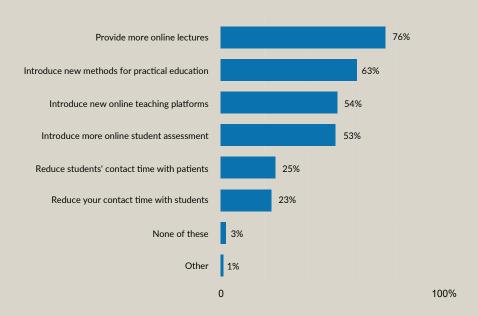
#### WHAT ARE THE CHALLENGES YOU CURRENTLY FACE IN PROVIDING ONLINE EDUCATION?



#### THE FUTURE OF CL EDUCATION

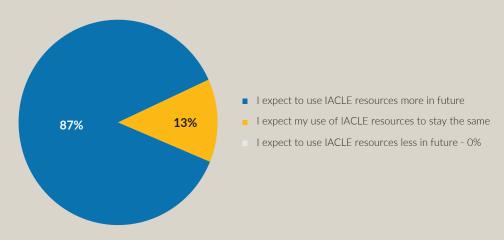
Most respondents expect to have to change their teaching in the post-COVID situation and in varying ways. The most common - cited by around three in four educators - is to provide more online lectures, followed by new methods to deliver practical education. More than half of educators are also looking at introducing new teaching platforms and more online assessment methods.

HOW DO YOU PLAN TO ADAPT YOUR CONTACT LENS TEACHING IN FUTURE IN LIGHT OF THE COVID-19 PANDEMIC?



IACLE's online resources and support will make its role even more essential in the future. Almost nine in 10 respondents said they expected to use IACLE resources more in future in light of the pandemic and none said they expected to use them less.



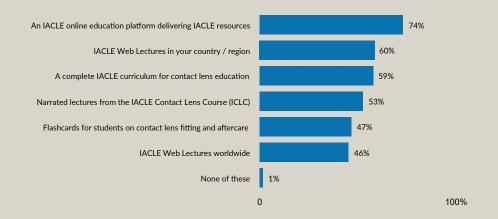


Almost all respondents in the Americas region (96%) said they anticipated using IACLE resources more in future.

Asked about specific resources for future use, there was support for a range of online resources. Three-quarters of the educators would be interested in using an IACLE online education platform delivering IACLE resources. There was also strong support for IACLE's Web Lectures and a complete IACLE contact lens curriculum.

The survey was conducted before the launch of the IACLE's new learning management system - IACLETOP - which is already hosting global, regional and country-specific webinars, an Online Student Trial Exam and a series of flashcards for students on practical skills. In response to the survey findings, most IACLE resources will be available via IACLETOP in the near future.

#### WHICH OF THE FOLLOWING IACLE RESOURCES FOR ONLINE EDUCATION WOULD YOU BE INTERESTED IN USING IN FUTURE?



#### **FUTURE IACLE PROVISION**

We asked our educators what other resources and support IACLE could offer them or their institutions to help adapt to the effects of the COVID-19 pandemic.

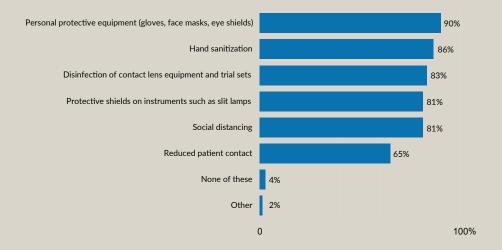
More webinars, discussions and debates, videos, case reports and images were requested, along with methods for teaching and assessing practical concepts remotely. There was also support for more collaboration between institutions in different regions and countries to benefit further from IACLE's global network of educators.

#### **CHANGING PRACTICES**

Re-opening institutions will require education providers to introduce new measures to minimize the spread of the virus. Questioned on precautions needed for students to attend in person, nine in 10 respondents expected to be using personal protective equipment.

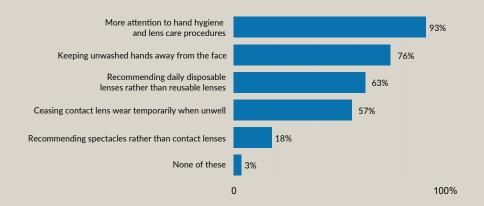
Hand sanitization and disinfection of contact lens trial sets and equipment were widely anticipated. Social distancing and use of slit-lamp shields were also envisaged. Reduced patient contact will challenge the teaching of practical skills and assessment.

#### WHAT PRECAUTIONS DO YOU EXPECT TO TAKE WHEN STUDENTS ATTEND YOUR INSTITUTION IN PERSON?



Almost all the educators expected to change their advice to students in light of the pandemic. More than nine in 10 said they would place greater emphasis on hand hygiene and lens care procedures. There was support for additional hygiene measures that COVID-19 had highlighted and a move towards recommending daily disposable lenses.

#### WHAT PRECAUTIONS DO YOU EXPECT TO TAKE WHEN STUDENTS ATTEND YOUR INSTITUTION IN PERSON?



Overall, fewer than one in five of our educators would anticipate a change towards recommending spectacles rather than contact lenses. But this figure masks some substantial regional differences: only 4% in Americas would change their advice to students in this direction, but in China 29% expected their recommendation to change in favour of spectacles.

## CONCLUSION

Conducted in May 2020 when countries around the world were at different stages in the COVID-19 pandemic, this survey reveals a wealth of information on the current and future impact on global contact lens education.

A majority of institutions were closed to students to attend in person when the survey was conducted. Most anticipate opening to students by the end of 2020, although expectations vary from country to country and will clearly depend on the progress of the pandemic in the months or years to come.

Contact lens educators have adapted their teaching towards more online education in light of the pandemic and anticipate substantial increases in the proportion of their total teaching time conducted online. Since education delivery was already evolving prior to COVID-19, changes that are currently occurring seem likely to lead to permanent differences in the way contact lenses are taught in future.

However, our survey reveals that major challenges remain with online delivery, particularly with respect to teaching practical skills, student assessment and interacting with students.

Our members are at an advantage since they already have access to a wide range of online resources and programs they can readily use - and are using - in these testing times. Recent initiatives mean that IACLE is ideally placed to meet the challenges ahead and more support will be added in response to the survey findings.

Our new learning management system IACLETOP will provide assessment tools such as a new Online Student Trial Exam and innovative ways to teach practical skills, as well becoming a central point for accessing our full teaching and learning materials.

The TLC (Teach. Learn. Connect.) Initiative is a new online education program and communications campaign to supplement our existing educational activities and support our members as the recovery from the pandemic continues.

The TLC Initiative is delivering global, regional and country-specific online events to help educators and students adapt to new ways of teaching and learning. Our first social media campaign will connect our community and provide essential information on all IACLE activities. And our virtual conference in September will 'Bring the focus back to contact lenses' to examine the way forward for education, practice and for the contact lens industry, in a post-COVID world.





### INTERNATIONAL ASSOCIATION OF CONTACT LENS EDUCATORS









