

Debate on the return to face-to-face classes in Pandemic

Debate sobre el retorno a clases presenciales en Pandemia

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What do we know about the subject matter of this study?

Many publications and public opinion refer to the need for returning to school and of the necessary measures to avoid a higher level of contagion

What does this study contribute to what is already known?

It allows for an opportunity for informed and responsible reflection, providing a comprehensive view of the consequences of the return to face-to-face classes and how this challenges us to improve education.

Abstract

The implications of closing educational establishments during the COVID-19 pandemic and the discussion about the opening of them, invite and require us to consider, from different positions and responsibilities, the changes that we must make as a society at the educational level. In this article, a group of health professionals collects information and reflects on the repercussions of returning or not to school activities, in terms of physical and emotional health and academic education. Based on what is known to be protective factors and possible threats to return, it is possible to conclude that each local reality must make its own informed decision, with the participation of all its members, seeking the common good, which favors students, protects teachers, and privileges the role of the educational system in socio-emotional learning. School is a space for containing the emotions and adaptation needs that students and their families have experienced in these uncertain times. We all have a level of responsibility in building a new civilization around these issues that link education, physical and mental health, social collaboration, and individual responsibility. Differences in people's living conditions and unequal opportunities have become more visible than before (others are still hidden) and create an opportunity for changes that we must face together.

Keywords:

Mental Health;
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Introduction

During 2020, given the COVID-19 pandemic, there have been decisions worldwide on school closures, quarantines, the step-by-step release of restrictions, and discussions about a safe return to face-to-face classes. The return to in-person classes is more than just classes or academic training. It includes numerous activities and instances of relationships with others, which can be developed far more completely and comprehensively in the on-site modality. But this is not the only issue that worries experts, authorities, public opinion, parents, students, and education and health professionals.

Currently, we are thinking about the role of education and how to balance online education with face-to-face comprehensive education; how to reduce the gaps in educational quality between rich and poor; how to ensure that education does not jeopardize health; and how to ensure that education contributes to the mental health of families, teachers, children, and adolescents, as well as to the mental health of the community as a whole.

According to the Ministry of Education projections, there will be a significant number of students who will drop out of the school system, reaching a dropout rate 43% higher than the current one¹, which makes us think about the causes that lead students or their parents to this decision and on the consequences it will have, depending on how long this dropout lasts. The lack of motivation to study is multi-causal, not only the responsibility of the educational system, the unimportant content, or a bad teaching method. Attributing responsibility just to the pandemic or online classes is a risk that can lead to the adolescent or her/his parents fail to assume their share of the responsibility, especially in this situation, which will be extended and will keep more aspects than usual under uncertainty.

Since the decision to return to face-to-face school activities should not only consider scientific criteria but also social and cultural ones, an informed and deep reflection and a dialogue among all the agents involved in the educational process is essential, with the State and the authorities being responsible as well as each individual and the community as a whole. The objective of this work is to contribute to the reflection on these pandemic issues and to provide elements that allow us to make good decisions as individuals and as a society, outlining what is known until now, analyzing it, and proposing some recommendations.

Problem statement

There are advantages and disadvantages of returning or not to face-to-face activities at schools, of

trying the return or slowing it down, of focusing on health, economic, physical, or mental health aspects, or the different meanings given to education: if it is more academic, socioemotional, value-based, or spiritual.

Each country has its particular reality which makes drawing comparative conclusions very difficult³. Among these differences are the epidemiological behavior of Covid-19, the measures taken, the customs and relational styles of each culture, the resources to make changes in the teaching staff and educational infrastructure, and the diverse reality of the public, subsidized, or private education system⁴.

In Chile, there are wide gaps in education between the different education systems, especially between the better income and vulnerable sectors. This inequity may be even greater, as a result of online education and the low quality of internet access in Chile. Regarding the digital divide, according to a report by the Secretary of Telecommunications (SUBTEL) 2017⁵, 87.4% of households have connectivity, 29.6% of these only have a mobile connection, and in lower-income households, only 24% have a broadband connection.

The definition of the education gap will depend on what aspects of education are measured and which aspects our society considers as a priority. The assessment varies depending on whether education is measured according to the rankings of accessibility to higher education or whether there are other aspects and experiences that we expect to generate and preserve in the society we aim to build.

In Chile, although classes and other school activities during 2020 did not take place as usual, most of the schools and their teaching staff kept contact with their students either through online classes, pre-recorded learning capsules, radio classes, communication, and sending of guides by e-mail, and/or telephone communication. These tools have contributed not only to the academic training but also to the emotional, value, and spiritual support and follow-up of the children, along with a great commitment from their teachers and their resources and creativity. Thus, we cannot speak of a "lost year".

The school plays a role in mitigating the stress that the child may experience at home. However, it can also be a source of stress, since the child may be exposed to academic overexertion or have a bad relationship with peers and her/his teachers, either before the lockdown or having developed during the online activity.

The decisions of each family regarding the experience of the pandemic and the school issue are also influenced by the diverse reality of each one of them. Among the differences within families, the following

stand out, the presence of elderly adults, the level of involvement of parents in education and the possibility of affectively accompanying their children², having or not a job, overcrowding conditions, the obligation to attend the workplace, the possibility of online connection from home, the ability to adapt to change within each family, the experiences of stress due to different types of deprivation, the experience of grief due to death by COVID-19 or other causes, and the presence of support networks that may or may not be active during the pandemic.

Given such complexity and multiplicity of variables, it is very difficult to draw generalizable conclusions. We will describe what is known and what we still don't know until now, and base on this, we will draw some conclusions to allow the reader to make their own opinion.

Table No. 1 shows the evidence on physical and emotional health and the academic aspect that should be considered in the debate on the return to face-to-face classes.

About contagion and the risks of becoming ill

Meetings between groups of people, regardless of age, can increase the risk of contagion, especially of symptomatic cases and, to a lesser degree, of asymptomatic ones. Regarding this, the role of classroom attendance in increasing the number of cases in a specific population is not predictable, since there are no data that allow determining it with certainty.

In children, there is a lower prevalence of cases^{6,7}, a higher number of asymptomatic cases, and a lower risk of contagion, especially in children under 6 years of age, who are also less contagious than older children⁸. There are specific school communities where the infection has been higher just in younger students⁹, while in others, returning to school has increased the number of cases in students of all ages³.

Children aged under 6 years will presumably more difficult to comply with social distancing measures during both academic learning and play activities. On the other hand, it will be easier for teachers and parents to teach them hand washing and infection avoidance routines. Adolescents find it easier to understand the use of masks, distancing, and frequent hand washing, although adherence to the measures may not be fully complied with.

Attendance to face-to-face classes at any age will generate greater mobility of people and may decrease the perception of risk in the general population, which could eventually increase behaviors that favor contagion, both in students and in their families. A greater perception of safety would be associated with lower use

of masks, with the false sensation that it is less likely to be infected by someone they trust.

Regarding the need for face-to-face contact for the development of socialization

Schools are a space for socialization, distraction, entertainment, mitigation of emotional tensions, and a great offer of variability. These are some of the non-academic benefits, which are presumably more difficult to achieve remotely. The face-to-face encounter and the participation with peers and other adult figures such as teachers are role models for the student, mainly because of what she/he experiences through the relationship.

During adolescence occurs the development of aspects dependent on social relationships that influence neurodevelopment and the integration of personality traits. This healthy integration is facilitated to the extent that there is a greater richness in affective relationships. This is a particularly sensitive period for the maturation of the prefrontal cortex, which underlies higher-order functions such as self-regulation, behavioral planning, feedback, and social and even moral development¹⁰. Therefore, what the adolescent does during this period will define some aspects of her/his future performance and mental health.

During the pandemic period and the restriction of face-to-face activities, there has been an increased use of social networks, apps, and online video games as a means of socialization¹¹. It is hypothesized that lockdown increases the preponderance of such social networks when seeking validation and appraisal, which would increase the risks of their misuse. Some consequences are dependency, overexposure, cyberbullying, grooming, and sexting¹², along with the limitation of other sources of validation in the face-to-face relationship. Direct person-to-person validation could enhance a more comprehensive vision for the adolescent than the more biased information they usually receive through screens.

Regarding the need for face-to-face academic training

Online classes are useful and manage to replace face-to-face training, at least in some aspects, mainly in the programmatic content, however, it varies according to the age of the student and her/his emotional, motivational, and environmental (family and social) situation.

Regarding the lack of opportunity to learn reading and writing due to the lockdown, for children in the first cycle of primary education, it is not fully clear the

Table 1. Protective Elements and threats in the return to classrooms and face to face teaching

Protective Elements	Threats
<p><i>Physical health</i></p> <ol style="list-style-type: none"> 1. It allows physical education and activities in larger spaces, more suitable to such activities 2. Physical activity at school may decrease the level of childhood obesity 3. Allows to resume healthier routines, suitable to a child in growth and development period. Especially regarding the use of screens and sleep hours 4. It improves nutrition program at schools, especially to the most vulnerable families who depends in that support 5. Ensures compliance to the vaccination program <p><i>Emotional and affective health</i></p> <ol style="list-style-type: none"> 1. Gives the opportunity to meet again with peers, teachers and other related figures from school environment 2. It provides a space for socialization, which is important for the children and adolescent emotional and affective development 3. Decrease tensions at home, in many cases, it relieves pressure from over demanded parents or families, who are working and studying at the same time, in small spaces 4. Decrease the time of screen use and all the risks associated with it <p><i>Academic Aspects</i></p> <ol style="list-style-type: none"> 1. Decrease the academic gaps due to the lack of access to technology and internet 2. Decrease the need for parent support during teaching time 3. Allows a better supervision from the teacher during sensible periods of learning, such as the beginning of reading and writing 4. Gives a better space for concentration, learning routines and supervision, especially for kids with attention deficit /hyperactivity disorder 5. It may increase the motivation for learning due to better interaction with teachers and better understanding of instructions. 	<p><i>Physical health</i></p> <ol style="list-style-type: none"> 1. It may increase the number of infected cases, in children and adult population: <ol style="list-style-type: none"> a. Greater mobility and a lower perception of risk in people b. Risk of contagion in school transport c. There could be a false sense of security and as a consequence of that, a lower use of basic rules, as the use of masks <p><i>Emotional and affective health</i></p> <ol style="list-style-type: none"> 1. It can generate differences between face-to-face and online students, between different establishments and within the same institution 2. Emotional destabilization for previously vulnerable boys and girls at the beginning of the returning to face to face activities 3. It may appear difficulties adapting to an uncertain and variable environment 4. It may exist a false feeling of less stress in parents (consider other aspects of face to face activities, longer travel times, greater academic demands) <p><i>Academic Aspects</i></p> <ol style="list-style-type: none"> 1. Risk of overstressing or oversizing of academics over emotional aspects 2. It can generate differences between face-to-face and online students, between different establishments and within the same institution

repercussions. Experts on this subject point out that although reading and writing are skills that can be learned even in adulthood, childhood is undoubtedly the most “sensitive” period for their acquisition, in both reading efficiency and the effects it produces on the anatomical-functional brain organization¹³.

The need for parental support for children is greater the younger the child is, regardless of whether they are in face-to-face or online mode, but parents certainly need to dedicate more time when the school day takes place at home². This situation is complicated by the work demands that parents are subjected to, which prevent them from being present or available at the times the children need.

Regarding the risks of being at home

Confinement during a prolonged quarantine, without face-to-face classes, has shown a direct rela-

tionship with decreased physical activity¹⁴, alteration of routine, increased screen time for recreational purposes, and even addiction, especially to online video games¹¹, increased rates of overweight, and sleep disorders¹⁵.

Some parents have felt overworked or have unexpectedly had to take on numerous roles that they are unable to handle properly, which creates more stress at home. Special attention must be given to the increase in domestic violence in the pandemic, which is attributable to an increased family tension and other external situations to which its members may be exposed and to the lesser public supervision or active networks capable of detecting and reporting such tensions^{16,17,18}.

Several studies have reported mental health effects related to the current pandemic and lockdown, especially in adolescents, describing an increase in pathologies such as Post-Traumatic Stress Disorder, Depression, and Anxiety Disorders^{19,20,21}. Children and adolescents with history of psychiatric conditions have

been especially affected, showing up to 83% worsening of mental health in this population²¹. In this situation, special consideration should be given to the effects of both confinement and the end of lockdown in children with Autism Spectrum Disorder, Eating Disorder, Obsessive-Compulsive Disorder, and Attention Deficit Hyperactivity Disorder, where the regulation previously achieved may be destabilized.

Possible advantages of being at home

Despite the multiple adverse circumstances of confinement within the household, the social context, and the risk of contagion, for many people, this time of pandemic has been an opportunity to know themselves better, to know more about each member of their family group, to accept limitations, to tolerate frustrations, to have new adult models and rules that come from an external reality and make them as their own, to discover new abilities, to postpone wishes, to share with those next to us, and to enjoy the simple or things that were invisible to us. Change thus prepares us for new experiences, makes us more flexible, and provides us with new learning.

Several children have felt comfortable at home either because they have felt contained, listened to, valued or because they have discovered the possibility of avoiding situations of discomfort and/or discrimination experienced at school. Some adults have been able to spend more time with their children² by participating in games or taking an active role in teaching, either because their work activity allows them to do so or because they have chosen to reduce their income and have rethought their priorities regarding the time they spend with them.

What we can conclude base on the available information

Table 2 summarizes the main conclusions regarding the different realities presented and the diverse factors involved.

1. Given the wide diverse reality, the return to school should be decided locally, with the participation of the different sectors of the community: ministry of education, principals, students, parents, teachers, and administrative personnel. Whatever the decision, there should be flexibility so that families who choose not to attend classes in person can have online alternatives for learning and evaluation.
2. The reopening of schools requires basic infrastructure to ensure hygiene and healthy physical distance among the school community, the universal use of appropriate masks²², operational changes such as reducing the number of students per class and distancing in class, screening of staff and students, and the exclusion of people at high risk from returning to school. In terms of hygiene, we recommend frequent hand washing and proper handling of food in the establishment^{23,24,25,26,27,28,29}.
3. The decision in each school may be different for different age groups²⁸, with two special considerations: first, in young children, contagion is lower and it is more feasible to educate in self-care, and also that excessive exposure to screens may be more harmful to them, and second, in older adolescents, there may be greater responsibility in using self-care measures and it should be considered that the last two years of school life play a transcendental role for the end of the school cycle.
4. Each educational establishment should prioritize the function of socialization and citizen training with sports, artistic, and socioemotional activities, which should be available both on-site and online. In the case of carrying out only some face-to-face activities or with few students, emotional support and social participation take priority over academics.
5. Given the challenge of new discussions on education in each community or educational establishment, there is an opportunity to redefine and redesign how the process of improving inclusion will continue, understanding that inclusion is much more than allowing children with different needs to be educated together, giving strength and value to the concept that each student needs certain adjustments according to her/his reality. We are all part of neurodiversity, where some require additional support, guidance, and adaptation of the curriculum and teaching-learning methods.
6. Teaching and learning in the social sciences and humanities should be strongly emphasized in order to favor reflexivity and discernment, a critical sense and responsibility towards others, and collaboration over competition, since listening among students and reciprocal attention between students and adults is indispensable to appropriately address new challenges associated with the high speed of change of the current order or disorder.
7. We should rethink the role and participation of families in psycho-emotional and academic education, whether with or without online activity, especially in the early years of education. The effort of countries to increase preschool education does not mean a search for advancing knowledge or replacing the family in socioemotional learning.

Table 2. Considerations for a better decision

Different Realities	<ol style="list-style-type: none"> 1. Between countries 2. Entre regiones dentro de cada país 3. Rural and urban zones 4. Between families in the same school
Adequate Infra-structure	<ol style="list-style-type: none"> 1. Consider appropriate spaces for the number of students and social distance 2. Consider appropriate sanitary facilities, supervised by the corresponding authorities 3. Assure soap, water and alcohol gel availability 4. Correct use of face mask by teachers, students and all school population 5. Considerer different schedules to accomplish the correct capacity
Transmissibility	<ol style="list-style-type: none"> 1. The transmission of the infection in children younger than 6 years, is less prevalent and with an important number of asymptomatic patients 2. It is necessary to keep traceability in all groups 3. Avoid meetings (teachers, parent's rooms) in closed spaces
Prioritized activities	<ol style="list-style-type: none"> 1. It is advisable at the beginning to prioritize sports and artistic activities with an accent on socioemotional aspects. Give more value to the social participation over the academic performance. Enhance integral education 2. Consider other spaces for education, as public squares, for outdoor activities
Flexibility	<ol style="list-style-type: none"> 1. Groups for returning to face-to-face activities 2. Academic performance 3. Consider special measures (including going back to online) in case of an increase of contagion 4. Consider a mix and organized education (face to face and online)
Continuous information	<ol style="list-style-type: none"> 1. Considerar información recolectada de experiencias en países en que ya existe retorno escolar 2. Mantener actualizada la información epidemiológica y científica sobre la pandemia
Care and Training for teachers	<ol style="list-style-type: none"> 1. Offer new tools to teachers for online education and mixed teaching (online and face to face groups) 2. Give emotional care for teachers. Try to avoid work overload

8. It is important to pay attention to the risk of the appearance of informal entities to care for and educate young children, mainly created by the parents themselves due to the lack of formal instances in order to be able to go to work, since neither education, nor care, nor traceability of possible contagions would be certified in these entities.
9. If a family or some of its members choose to stay at home more often and engage in more online activities, it is the responsibility of both the State -in offering the necessary alternatives and conditions- and of each family to reduce the risks. All actors are responsible for ensuring that routines are properly followed, to prevent overuse of screens, to provide spaces for interactive play among household members, and to create spaces for listening and dialogue. Physical activity is essential with daily exercise routines as far as possible, reading according to the areas of interest, and joint critical observation of movies or series. In addition, it is important that the family does not withdraw into itself but maintains open communication with the community, generating instances for reciprocal collaboration.

Conclusions

We should not just focus on the analysis of the variables involved in the return to school activities. The decision on the return -the form and the moment-, must be a reflexive one as shown by the high worldwide interest that has emerged on the subject. We then ask ourselves what kind of education we want to return to, what we expect from the educational and health systems, what is the role of the state, and what is the responsibility of each individual and family.

The differences in living conditions and the inequality of opportunities for people have become more visible than before (others are still hidden) and challenge each one of us to become aware of what must and can be changed. We have the opportunity to move forward with concrete actions towards the construction of the society we want, where education plays a fundamental role, a society in which teachers and students can comprehensively grow together, parents and children have more time to get to know each other and interact healthily, and the environment as a whole, generates the appropriate conditions for this, with greater participation and social integration.

Conflicts of Interest

Authors declare no conflict of interest regarding the present study.

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