## **SCHOOL**

A **school** is both the <u>educational</u> institution and <u>building</u> designed to provide <u>learning</u> spaces and <u>learning environments</u> for the <u>teaching</u> of <u>students</u> under the direction of <u>teachers</u>. Most countries have systems of formal <u>education</u>, which is sometimes <u>compulsory</u>. In these systems, students progress through a series of schools that can be built and operated by both government and private organization. The names for these schools vary by country (discussed in the <u>Regional</u> <u>terms</u> section below) but generally include <u>primary school</u> for young children and <u>secondary school</u> for teenagers who have completed <u>primary education</u>. An institution where <u>higher education</u> is taught is commonly called a <u>university</u> college or university.

In addition to these core schools, students in a given country may also attend schools before and after primary (elementary in the U.S.) and secondary (middle school in the U.S.) education. Kindergarten or preschool provide some schooling to very young children (typically ages 3–5). University, vocational school, college or seminary may be available after secondary school. A school may be dedicated to one particular field, such as a school of economics or dance. Alternative schools may provide nontraditional curriculum and methods.

Non-government schools, also known as <u>private schools</u>, [4] may be required when the government does not supply adequate or specific educational needs. Other private schools can also be religious, such as <u>Christian schools</u>, <u>gurukula</u> (Hindu schools), <u>madrasa</u> (Arabic schools), <u>hawzas</u> (Shi'i Muslim schools), <u>yeshivas</u> (Jewish schools), and others; or schools that have a higher standard of education or seek to foster other personal achievements. Schools for adults include institutions

of <u>corporate training</u>, <u>military education and training</u> and <u>business schools</u>.

<u>Critics of school</u> often accuse the school system of failing to adequately prepare students for their future lives, <sup>[5]</sup> of encouraging certain temperaments while inhibiting others, <sup>[6]</sup> of prescribing students exactly what to do, how, when, where and with whom, which would suppress <u>creativity</u>, <sup>[7]</sup> and of using <u>extrinsic</u> measures such as <u>grades</u> and <u>homework</u>, which would inhibit children's natural <u>curiosity</u> and desire to learn. <sup>[8]</sup>

In <u>homeschooling</u> and <u>distance education</u>, teaching and learning take place independent from the institution of school or in a <u>virtual school</u> outside a traditional school building, respectively. Schools are organized in several different <u>organizational models</u>, including departmental, small learning communities, academies, integrated, and schoolswithin-a-school.

## **Etymology**

The word *school* derives from <u>Greek</u> σχολή (*scholē*), originally meaning "leisure" and also "that in which leisure is employed", but later "a group to whom lectures were given, school". [9][10][11]

#### History and development

See also: History of education



<u>Plato</u>'s academy, <u>mosaic</u> from <u>Pompeii</u>

The concept of grouping students together in a centralized location for learning has existed since Classical antiquity.

Formal schools have existed at least since ancient

Greece (see Academy), ancient Rome (see Education in

Ancient Rome) ancient India (see Gurukul), and ancient

China (see History of education in China). The Byzantine

Empire had an established schooling system beginning at the
primary level. According to Traditions and Encounters, the
founding of the primary education system began in 425 AD and

"... military personnel usually had at least a primary
education ...". The sometimes efficient and often large
government of the Empire meant that educated citizens were a
must. Although Byzantium lost much of the grandeur of Roman
culture and extravagance in the process of surviving, the
Empire emphasized efficiency in its war manuals. The
Byzantine education system continued until the empire's
collapse in 1453 AD.

[12]

In Western Europe, a considerable number of <u>cathedral</u> <u>schools</u> were founded during the <u>Early Middle Ages</u> in order to teach future clergy and administrators, with the oldest still existing, and continuously operated, cathedral schools being <u>The King's School, Canterbury</u> (established 597 CE), <u>King's School, Rochester</u> (established 604 CE), <u>St Peter's School, York</u> (established 627 CE) and <u>Thetford Grammar School</u> (established 631 CE). Beginning in the 5th century CE, <u>monastic schools</u> were also established throughout Western Europe, teaching religious and secular subjects.



Mental calculations. In the school of S.

Rachinsky by Nikolay Bogdanov-Belsky. Russia, 1895.

In Europe, universities emerged during the 12th century; here, scholasticism was an important tool, and the academicians were called schoolmen. During the Middle Ages and much of the Early Modern period, the main purpose of schools (as opposed to universities) was to teach the Latin language. This led to the term grammar school, which in the United States informally refers to a primary school, but in the United Kingdom means a school that selects entrants based on ability or aptitude. The school curriculum has gradually broadened to include literacy in the vernacular language and technical, artistic, scientific, and practical subjects.

Obligatory school attendance became common in parts of Europe during the 18th century. In <u>Denmark-Norway</u>, this was introduced as early as in 1739–1741, the primary end being to increase the literacy of the <u>almue</u>, i.e., the "regular people". Many of the earlier public schools in the United States and elsewhere were <u>one-room schools</u> where a single teacher taught seven grades of boys and girls in the same classroom. Beginning in the 1920s, one-room schools were consolidated into multiple classroom facilities with transportation increasingly provided by <u>kid hacks</u> and <u>school buses</u>.

Islam was another culture that developed a school system in the modern sense of the word. Emphasis was put on knowledge, which required a systematic way of teaching and spreading knowledge and purpose-built structures. At first, mosques combined religious performance and learning activities. However, by the 9th century, the madrassa was introduced, a school that was built independently from the mosque, such as al-Qarawiyyin, founded in 859 CE. They were also the first to make the Madrassa system a public domain under Caliph's control.

Under the <u>Ottomans</u>, the towns of <u>Bursa</u> and <u>Edirne</u> became the main centers of learning. The Ottoman system of <u>Külliye</u>, a building complex containing a mosque, a hospital, madrassa,

and public kitchen and dining areas, revolutionized the education system, making learning accessible to a broader public through its free meals, health care, and sometimes free accommodation.

#### **Regional terms**

The term "school" varies by country, as do the names of the various levels of education within the country.

#### **United Kingdom and Commonwealth of Nations**

In the United Kingdom, the term *school* refers primarily to pre<u>university</u> institutions, and these can, for the most part, be
divided into <u>pre-schools</u> or <u>nursery schools</u>, <u>primary</u>
<u>schools</u> (sometimes further divided into <u>infant school</u> and <u>junior</u>
<u>school</u>), and <u>secondary schools</u>. Various types of secondary
schools in England and Wales include <u>grammar</u>
<u>schools</u>, <u>comprehensives</u>, <u>secondary moderns</u>, and <u>city</u>
<u>academies</u>. [14] While they may have different names in
Scotland, there is only one type of secondary school. However,
they may be funded either by the state or independently
funded. Scotland's school performance is monitored by <u>Her</u>
<u>Majesty's Inspectorate of Education</u>. <u>Ofsted</u> reports on
performance in England and <u>Estyn</u> reports on performance in
Wales.

In the United Kingdom, most schools are publicly funded and known as <u>state schools</u> or maintained schools in which tuition is provided for free. There are also private schools or <u>private schools</u> that charge fees. Some of the most selective and expensive private schools are known as <u>public schools</u>, a usage that can be confusing to speakers of <u>North American English</u>. In North American usage, a <u>public school</u> is publicly funded or run.

In much of the <u>Commonwealth of Nations</u>, including Australia, New Zealand, India, <u>Pakistan</u>, Bangladesh, Sri Lanka, South Africa, Kenya, and Tanzania, the term *school* refers primarily to pre-university institutions. [16]

#### India



Loyola School, Chennai, India – run by the Catholic Diocese of Madras. Christian missionaries played a pivotal role in establishing modern schools in India.

In ancient India, schools were in the form of <u>Gurukuls</u>. Gurukuls were traditional <u>Hindu</u> residential learning schools, typically the teacher's house or a monastery. Schools today are commonly known by the Sanskrit

terms *Vidyashram*, *Vidyalayam*, *Vidya Mandir*, *Vidya Bhavan* in India. In southern languages, it is known as *Pallikoodam* or *PaadaSaalai*. During the Mughal rule, *Madrasahs* were introduced in India to educate the children of Muslim parents. British records show that indigenous education was widespread in the 18th century, with a school for every temple, mosque, or village in most regions. The subjects taught included Reading, Writing, Arithmetic, Theology, Law, Astronomy, Metaphysics, Ethics, Medical Science, and Religion. [18]



A school building in **Kannur**, India

Under British rule, Christian missionaries from England, the United States, and other countries established missionary and boarding schools in India. [19] Later as these schools gained popularity, more were started, and some gained prestige. These schools marked the beginning of modern schooling in

India. The syllabus and calendar they followed became the benchmark for schools in modern India. Today most schools follow the <u>missionary school</u> model for tutoring, subject/syllabus, and governance, with minor changes.<sup>[20]</sup>

Schools in India range from large campuses with thousands of students and hefty fees to schools where children are taught under a tree with a small / no campus and are free of cost. There are various boards of schools in India, namely <a href="Central Board for Secondary Education">Central Board for Secondary Education</a> (CBSE), Council for the Indian School Certificate Examinations (CISCE), Madrasa Boards of various states, Matriculation Boards of various states, State Boards of various boards, Anglo Indian Board, among others. Today's typical syllabus includes language(s), mathematics, science – physics, chemistry, biology, geography, history, general knowledge, and information technology/computer science. Extracurricular activities include physical education/sports and cultural activities like music, choreography, painting, and theatre/drama. <a href="[21]">[21]</a>

## **Europe**

Albert Bettannier's 1887 painting La Tache noire depicts a child being taught about the "lost" province of Alsace-Lorraine in the aftermath of the Franco-Prussian War – an example of how European schools were often used in order to inoculate Nationalism in their pupils.

In much of continental Europe, the term *school* usually applies to <u>primary education</u>, with primary schools that last between four and nine years, depending on the country. It also applies to <u>secondary education</u>, with secondary schools often divided between <u>Gymnasiums</u> and <u>vocational schools</u>, which again, depending on country and type of school, educate students for

between three and six years. In Germany, students graduating from Grundschule are not allowed to progress into a vocational school directly. Instead, they are supposed to proceed to one of Germany's general education schools such as <u>Gesamtschule</u>, <u>Hauptschule</u>, <u>Realschule</u> or <u>Gymnasium</u>. [22] When they leave that school, which usually happens at age 15–19, they may proceed to a vocational school. The term school is rarely used for <u>tertiary education</u>, except for some *upper* or *high* schools (German: Hochschule), which describe colleges and universities. [22]

In <u>Eastern Europe</u> modern schools (after <u>World War II</u>), of both primary and secondary educations, often are combined. In contrast, secondary education might be split into accomplished or not. The schools are classified as middle schools of general education. For the technical purposes, they include "degrees" of the education they provide out of three available: the first – primary, the second – unaccomplished secondary, and the third – accomplished secondary. Usually, the first two degrees of education (eight years) are always included. In contrast, the last one (two years) permits the students to pursue <u>vocational</u> or specialized educations.

#### North America and the United States



One-room school in 1935, Alabama

In North America, the term *school* can refer to any educational institution at any level and covers all of the following: <u>preschool</u> (for <u>toddlers</u>), <u>kindergarten</u>, <u>elementary school</u>, <u>middle school</u> (also called intermediate school or junior high school, depending on specific age groups and geographic region), high school (or in some cases senior high school), college, university, and <u>graduate school</u>.[23]

In the United States, school performance through high school is monitored by each state's <u>department of education</u>. <u>Charter schools</u> are publicly funded elementary or secondary schools that have been freed from some of the rules, regulations, and statutes that apply to other public schools. The terms <u>grammar school</u> and *grade school* are sometimes used to refer to a primary school due to British colonial legacies. [24] In addition, there are tax-funded <u>magnet schools</u> which offer different programs and instruction not available in traditional schools.

#### **Africa**

In West Africa, "school" can also refer to "bush" schools, Quranic schools, or apprenticeships. These schools include formal and informal learning.

Bush schools are training camps that pass down cultural skills, traditions, and knowledge to their students. Bush schools are semi-similar to traditional western schools because they are separated from the larger community. These schools are located in forests outside of the towns and villages, and the space used is solely for these schools. Once the students have arrived in the forest, they cannot leave until their training is complete. Visitors are prohibited from these areas. [25]

Instead of being separated by age, Bush schools are separated by gender. Women and girls cannot enter the boys' bush school territory and vice versa. Boys receive training in cultural crafts, fighting, hunting, and community laws among other subjects. [25] Girls are trained in their own version of the boys' bush school. They practice domestic affairs such as cooking, childcare, and being a good wife. Their training is focused on how to be a proper woman by societal standards.



A *madrasah* in the Gambia

Qur'anic schools are the principal way of teaching the Quran and knowledge of the Islamic faith. These schools also fostered literacy and writing during the time of colonization. Today, the emphasis is on the different levels of reading, memorizing, and reciting the Quran. Attending a Qur'anic school is how children become recognized members of the Islamic faith. Children often attend state schools and a Qur'anic school.

In Mozambique, specifically, there are two kinds of Qur'anic schools. They are the tariqa based and the Wahhabi-based schools. What makes these schools different is who controls them. Tariqa schools are controlled at the local level. In contrast, the Wahhabi are controlled by the Islamic Council. Within the Qur'anic school system, there are levels of education. They range from a basic level of understanding, called chuo and kioni in local languages, to the most advanced, which is called ilimu. [27]

In Nigeria, the term *school* broadly covers <u>daycares</u>, <u>nursery schools</u>, <u>primary schools</u>, <u>secondary schools</u> and <u>tertiary institutions</u>. Primary and secondary schools are either privately funded by religious institutions and corporate organisations or government-funded. Government-funded schools are commonly referred to as public schools. Students spend six years in primary school, three years in junior secondary school, and three years in senior secondary school. The first nine years of formal schooling is compulsory under the Universal Basic Education Program (UBEC). [28] Tertiary institutions include public and private universities, polytechnics, and colleges of education. Universities can be funded by the federal

government, state governments, religious institutions, or individuals and organisations.

## Ownership and operation

Many schools are owned or funded by <u>states</u>. <u>Private</u> <u>schools</u> operate independently from the government. [29][better source needed] Private schools usually rely on fees from families whose children attend the school for funding; however, sometimes such schools also receive government support (for example, through <u>School vouchers</u>). Many private schools are affiliated with a particular religion; these are known as <u>parochial schools</u>.[30]

## **Components of most schools**

See also: <u>Learning environment</u> and <u>Learning space</u>



A school entrance building in

#### Australia

Schools are organized spaces purposed for teaching and learning. The classrooms where teachers teach and students learn are of central importance. Classrooms may be specialized for certain subjects, such as laboratory classrooms for science education and workshops for <u>industrial arts</u> education.

Typical schools have many other rooms and areas, which may include: [31]

- <u>Cafeteria</u> (Commons), dining hall or canteen where students eat lunch and often breakfast and snacks.
- Athletic field, playground, gym, or track place where students participating in sports or physical education practice
- Schoolyards, all-purpose playfields typically in elementary schools, often made of concrete.

- Auditorium or hall where student theatrical and musical productions can be staged and where all-school events such as assemblies are held
- Office where the administrative work of the school is done
- Library where students ask librarians reference questions, check out books and magazines, and often use computers
- Computer labs where computer-based work is done and the internet accessed
- <u>Cultural activities</u> where the students uphold their cultural practice through activities like games, dance, and music

#### Architecture

This section is an excerpt from <u>Educational architecture</u>.[edit]

Educational architecture, school architecture or school building design is a discipline which practices architect and others for the design of educational institutions, such as schools and <u>universities</u>, as well as other choices in the educational design of learning experiences. The design of building can significantly influence the learning experience of students. Additionally, because schools are important sources of traffic, employment and community activities, school buildings often act as anchor institutions in neighborhoods or communities. The decline of a school can have significant impact on local communities.

Educational buildings are often purpose built: designed with architectural choices unique to schools, such as classrooms and centralized restrooms, and other purpose built features. When the schools are closed, its often hard to repurpose the buildings. For example, in 2013, Chicago closed 50 school buildings, and even in 2023, the government was struggling to identify new tenants and how to utilize the buildings. [35]

Various countries have gone through significant changes in philosophies associated with educational institutions, influenced

by trends in investment by governments as well as larger changes in <u>educational philosophy</u>.

#### **Education facilities in low-income countries**

In <u>low-income countries</u>, only 32% of primary, 43% of lower secondary and 52% of upper secondary schools have access to <u>electricity</u>. This affects access to the <u>internet</u>, which is just 37% in upper secondary schools in low-income countries, as compared to 59% in those in middle-income countries and 93% in those in high-income countries. [36]

Access to basic <u>water</u>, <u>sanitation</u> and <u>hygiene</u> is also far from universal. Among upper secondary schools, only 53% in low-income countries and 84% in middle-income countries have access to basic drinking water. Access to water and sanitation is universal in high-income countries. [36]

## **Security**

Main article: School security



To curtail violence, some schools have added <u>CCTV</u> <u>surveillance</u> cameras. This is especially common in schools with <u>gang activity</u> or violence.

The safety of staff and students is increasingly becoming an issue for school communities, an issue most schools are addressing through improved security. Some have also taken measures such as installing metal detectors or video surveillance. Others have even taken measures such as having the children swipe identification cards as they board the school bus. These plans have included door numbering to aid public safety response for some schools.[37]

Other security concerns faced by schools include bomb threats, gangs, and vandalism. In recognition of these threats, the United Nations Sustainable Development Goal 4 advocates for upgrading education facilities to provide a safe, non-violent learning environment.

#### **Health services**

Main article: School health services

School health services are services from medical, teaching and other professionals applied in or out of school to improve the health and well-being of children and, in some cases, whole families. These services have been developed in different ways around the globe. However, the fundamentals are constant: the early detection, correction, prevention, or amelioration of disease, disability, and abuse from which school-aged children can suffer.

#### Online schools and classes

Main article: Virtual school

Some schools offer remote access to their classes over the internet. Online schools also can provide support to traditional schools, as in the case of the <u>School Net Namibia</u>. Some online classes also provide experience in a class. When people take them, they have already been introduced to the subject and know what to expect. Classes provide high school/college credit, allowing students to take the classes at their own pace. Many online classes cost money to take, but some are offered free.

The Rim Cape

Th

A staged example of an online classroom using <u>Jitsi</u>. The teacher is sharing their screen.

Internet-based distance learning programs are offered widely through many universities. Instructors teach through online activities and assignments. Online classes are taught the same as in-person, with the same curriculum. The instructor offers the syllabus with their fixed requirements like any other class. Students can virtually turn their assignments in to their instructors according to deadlines. This being through via email or on the course webpage. This allows students to work at their own pace yet meet the correct deadlines. Students taking an online class have more flexibility in their schedules to take their classes at a time that works best.

Conflicts with taking an online class may include not being face to face with the instructor when learning or being in an environment with other students. Online classes can also make understanding the content challenging, especially when unable to get in quick contact with the instructor. Online students have the advantage of using other online sources with assignments or exams for that specific class. Online classes also have the advantage of students not needing to leave their house for a morning class or worrying about their attendance for that class. Students can work at their own pace to learn and achieve within that curriculum. [40]

The convenience of learning at home has been an attraction point for enrolling online. Students can attend class anywhere a computer can go – at home, in a library, or while traveling internationally. Online school classes are designed to fit a student's needs while allowing students to continue working and tending to their other obligations. Online school education is divided into three subcategories: Online Elementary School, Online Middle School, Online High school.

#### **Stress**

See also: Cram school

As a profession, teaching has levels of <u>work-related</u> <u>stress</u> (WRS)<sup>[42]</sup> that are among the highest of any profession in some countries, such as the United Kingdom and the United States.<sup>[43]</sup> The degree of this problem is becoming increasingly recognized and support systems are being put into place.<sup>[44][45]</sup>

Stress sometimes affects students more severely than teachers, up to the point where the students are prescribed stress medication. This stress is claimed to be related to standardized testing, and the pressure on students to score above average. [46][47]

According to a 2008 mental health study by the Associated Press and mtvU, [48] eight in 10 U.S. college students said they had sometimes or frequently experienced stress in their daily lives. This was an increase of 20% from a survey five years previously. Thirty-four percent had felt depressed at some point in the past three months, 13 percent had been diagnosed with a mental health condition such as an anxiety disorder or depression, and 9 percent had seriously considered suicide. [48]

## Discipline towards students

Main article: School discipline

Schools and their teachers have always been under pressure – for instance, pressure to cover the curriculum, perform well compared to other schools, and avoid the stigma of being "soft" or "spoiling" toward students. Forms of discipline, such as control over when students may speak, and normalized behaviour, such as raising a hand to speak, are imposed in the name of greater efficiency. Practitioners of <a href="mailto:critical">critical</a> <a href="mailto:pedagogy">pedagogy</a> maintain that such disciplinary measures have no positive effect on student learning. Indeed, some argue that disciplinary practices detract from learning, saying that they undermine students' dignity and sense of <a href="mailto:self-worth">self-worth</a> – the latter occupying a more primary role in students' <a href="mailto:hierarchy">hierarchy</a> of <a href="mailto:needs">needs</a>.

## **ONLINE SCHOOL**

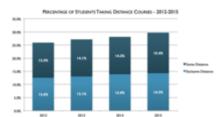
An **online school** (**virtual school**, **e-school**, or **cyber-school**) teaches students entirely or primarily **online** or through the **Internet**. It has been defined as "education that uses one or more technologies to deliver instruction to students who are separated from the instructor and to support regular and substantive interaction between the students.<sup>[1]</sup> Online education exists all around the world and is used for all levels of education (K-12 High school/secondary school, college, or graduate school). This type of learning enables the individuals to earn transferable credits, take recognized examinations, and advance to the next level of education over the Internet.



Number of Students Taking Distance

Courses by Level (2012-2015)<sup>[1]</sup>

Virtual education is most commonly used in high school and college. 30-year-old students or older tend to study online programs at higher rates.<sup>[2]</sup> This group represents 41% of the online education population, while 35.5% of students ages 24–29 and 24.5% of students ages 15–23 participate in virtual education.



Percentage of Students Taking Distance

Courses (2012-2015)<sup>[1]</sup>

Virtual education is becoming increasingly used worldwide. There are currently more than 4,700 colleges and universities that provide online courses to their students.<sup>[3]</sup> In 2015, more than 6 U.S. million students were taking at least one course

online, this number grew by 3.9% from the previous year.<sup>[1]</sup> In 2021, more than 53% of postgraduate students were taking at least some classes online. The total number of online students in the U.S. was 7.5 million in 2024.<sup>[4]</sup>

Instructional models vary, ranging from distance learning types which provide study materials for independent self-paced study, to live, interactive classes where students communicate with a teacher in a class group lesson. Class sizes range widely from a small group of 6 pupils or students to hundreds in a virtual school.

The courses that are independent and self-paced are called asynchronous courses. Typically for this type of learning, the students are given the assignments and information and are expected to complete the assignments by the due date. This is done on their own time. There is no scheduled time when the class meets. Usually, the only interactions that take place are through discussion boards, blogs, and wikis.

On the other hand, synchronous online courses happen in real-time. The instructor and students all interact online at the same time. This is done either through text, video, or audio chat. Therefore, these lessons are socially constructed. In addition to the scheduled class time, there are usually additional assignments to complete. A key to keeping Kindergartners engaged in distance learning can be challenging. Individualizing lessons and giving mini breaks can help students stay engaged during short synchronous sessions. As an educator you have to find creative ways to keep children attention on the screen especially since they're in the comfort of their home with all their toys and all the other luxuries within the house they desire. It is hard to keep their attention in the classroom so virtual learning now becomes extremely harder.

Secondary school age students have to be extremely disciplined and focused in order to be successful in virtual learning. Just like being at an actual school, these pre-teens and teenagers have to make sure they are presentable/looking

good before logging onto their classes and have to greet all of their friends and turn off their cell phones before the lesson begins because that will be a big distraction for them just as it would in the classroom. Some of the same problems that exist at school have the potential of existing at home with virtual school.

Hybrid, sometimes also called blended, courses are when students learn and interact both in-person and online. These classes meet in-person during the semester in addition to computer-based communication.<sup>[5]</sup>

During the COVID-19 pandemic, students around the world were forced to attend school online, although not all students had access to tablets or computers to attend. The number of online students decreased in 2022 and 2023, but remained well above pre-pandemic levels.<sup>[4]</sup>

## Virtual school technology [edit]

Virtual classrooms are made possible through the use of educational technology with the help of the internet. [6] The internet itself can be credited on what enabled modern distance learning to be developed. [6] The internet plays a role in virtual classrooms with resources such as virtual test taking functions, systems that aide coursework that include electronic reading materials, video conferencing for lectures and chatrooms. [6] During the COVID-19 pandemic, the United States began to encourage social distancing in the education system.<sup>[7]</sup> One use of technology that was found to be resourceful in the collaboration of students and teachers in virtual learning was the use of video conferencing.[7] The utilization of web video conferencing allows students to communicate virtually with their teachers and simulate a classroom environment, with many using services such as Zoom and Cisco WebEx.[7] To engage virtual students even further, a process known as gamification can be used to teach a student learning material in a form of a game to bring more

enjoyment in a student's learning experience.<sup>[8]</sup> Secondlife, an online virtual world, is a type of gamification system that is used for online educational purposes.<sup>[9]</sup> Secondlife can be used as a substitute for face to face learning. It has qualities that resembles an in person curriculum such as class discussions, participation in lectures, and completing assignments.<sup>[9]</sup> Gamification can also serve as an aide to increase a student's intrinsic motivation.<sup>[10]</sup> The use of rewarding points while a student is using a gamification system can enhance internal motivation and motivate the student to accomplish learning goals from the game's objective.<sup>[11]</sup> During the COVID-19 pandemic, many schools turned to virtual learning.<sup>[12]</sup>

## Costs and accessibility

#### [edit]

Where online methods are integrated with State provision, costs follow state school standards. Otherwise, fees must be met by the student or parents. Many US school districts are now creating their own online services to avoid paying external providers. Such students can graduate from their home district without ever leaving home. In most of these cases, students are given computers, books, and even Internet service to complete coursework from home.

With the resources of the Internet as a library, and the ease of making online study materials, there is usually a comparatively small requirement for textbooks. Most courses will provide electronic materials free of cost, or included in the course fee. Textbooks are most often required for an exam syllabus course.

Students with cognitive and/or physical disabilities often times face issues accessing online schools. One of the groups of disabled students who have difficulty accessing online learning platforms is students with severe visual impairments. They most often use screen readers in order to use online school, but there are many instances where activities, files, etc., don't

support the use of screen readers. Another group of students who face accessibility issues when using online learning platforms is deaf and hard of hearing students. The most prevalent issue that this group of students face is lack of or inaccurate captioning on video and audio media. Another group that has issues accessing online schooling resources is students with motor impairments. These students often have a difficult time using a computer or tablet, and will sometimes use another technology in order to interact with the computer or tablet. This makes learning especially difficult when game-like activities are used for learning and when timed activities or realtime instruction is taking place. The last major group of students who face access issues due to a disability is students with cognitive disabilities. There are a wide range of cognitive disabilities which means that these disabilities can impact learning in a variety of different ways. Some of the accessibility issues that students with cognitive disabilities face include: busy/disorganized media, pages that are difficult to navigate, time constraints, flashing of the screen, pages or articles that lack proper titles and headings, and much more.[13]

# Advantages and disadvantages of online education [edit]

## Potential advantages:

- Personal circumstances or health disruptions, specifically contagious viruses such as COVID-19 and the common cold, or injuries will not halt learning since the physical demands are much less.
- Digital transcripts of lessons can additionally help absent students with learning missed curriculum.
- Online learning is ideal for students and families who need flexible arrangements. However, synchronous learning does impose limits due to time zones.
- The integration of Internet resources provides a huge library of content, and students quickly become proficient with online research, resources, and tools.

- Greater flexibility enables independent students such as self-learners or gifted students to explore learning beyond the standard curriculum, pursue individual skills and ambitions, or develop at their own preferred pace using online resources. Part-time students with jobs or family commitments may benefit from the flexibility of online schedules.<sup>[14]</sup>
- Online schools can be equalizers, as age, appearance, and background are far less obvious, and therefore this can minimize harassment, prejudice, or discrimination. Instead, groups are categorized by personal ability.
- Students may benefit from exposure to others in different cultures of the world, which can enrich their understanding of history, geography, religions and politics, and develops social skills.
- Online education may collaboratively engage in or discuss universal or real-world issues, which are necessary skills for a successful career.<sup>[15]</sup>
- Increased accessibility to remote education for poor or rural areas where commuting to schools or lack of resources are concerns.<sup>[15]</sup>
- Increased opportunities may allow a student to take more courses they are interested in that are not offered near them.
- Cost-effective for schools or districts since it allows teachers to instruct more students than in a face-to-face classroom setting.<sup>[16]</sup>
- Online courses may be less expensive for students than traditional classes since less resources may be required. Additionally, many learning resources online are free, easy to access, self-paced, and beginnerfriendly.<sup>[17]</sup>

#### Potential disadvantages:

 Remote learning can reduce engagement and interaction and lead to a lack of socialization, which can

- potentially decrease a student's social competence or skills, such as their ability to cooperate with others.
- A home or online environment may potentially be more distracting or disrupting than a physical school environment.
- Organizing an online school may be more expensive and more complicated to organize or lead.
- Those without access to technology or devices would not have access to virtual education. Although some schools may offer students borrowed devices, those who do not have access can easily fall behind.
- Expert Teaching: Online schools employ well-trained educators who leverage digital platforms to deliver quality education.
- Interactive Doubt Sessions: They facilitate direct interaction between students and teachers, ensuring personalized attention.
- Digital Literacy: Students become proficient with digital tools, an essential skill in today's technology-driven world.
- Parental Engagement: Online education fosters a closer connection between teachers, students, and their families.
- Continuous Improvement: The competitive nature of online schools drives them to innovate and enhance their offerings constantly.
- Many virtual schools are relatively new and inexperienced, and therefore may be unfit for educating students properly.
- Technology or the Internet can be more unpredictable since it may be vulnerable to power outages, Internet outages, hacks, exploits, online trolling, glitches, or errors that can potentially be more difficult to fix or deal with when online.<sup>[17]</sup>
- Potential employers may be skeptical of the credibility of online degrees and virtual programs.<sup>[17]</sup>

- Cheating online may be easier or more tempting since online resources may be more accessible and restrictions or consequences may be more lenient.<sup>[17]</sup> The increased anonymity online may further encourage or allow the continuance of misbehavior such as trolling.
- Online schools may be too lenient or disengaging, thus may potentially encourage or harbor potentially damaging and undisciplined behavior that could threaten a student's future or career.
- Not using the physical tools might diminish a student's ability or competence.<sup>[18]</sup>
- Online can be potentially limiting since physical activities or hands on activities, specifically for courses like physical education, Art, and Chemistry, may be more difficult to engage in or occur less frequent. Online classes might take away the value of the active elements that some courses require, and do not offer the same teacher-student relationships. Students might also not experience the same critical thinking, observation, and creative skills.<sup>[19]</sup>
- Because online learning has 24-hour flexibility, work-life boundaries can be difficult to establish, which can cause mental and emotional health issues to arise.
- The immediate availability of AI technologies to assist with students' coursework leads to less interactions with course staff. This also leads to the student not properly learning the material and not properly developing study skills.<sup>[20]</sup>
- For students with certain intellectual and/or physical disabilities, online learning platforms can be difficult to access and use.<sup>[21]</sup>