Guidance on
Active Learning at Home
during Educational Disruption

Promoting Student's Self-regulation Skills in COVID-19 Outbreak

March, 2020. Version 1.0

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Please cite the work as follows:
Huang, R.H., Liu, D.J., Amelina, N., Yang, J.F., Zhuang, R.X., Chang, T.W., & Cheng, W. (2020). Guidance on Active Learning at Home During Educational Disruption: Promoting student's self-regulation skills during COVID-19 outbreak. Beijing: Smart Learning Institute of Beijing Normal University.

Guidance on Active Learning at Home during Educational Disruption:

Promoting student's self-regulation skills in COVID-19 outbreak

March 27th, 2020

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Acknowledgement

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Executive summary

With COVID-19 rapidly spreading worldwide, several countries have initiated several strategies to contain this virus, including school closures. China was the first to adopt the policy of "Disrupted Classes, Undisrupted Learning".

With the advocate of technology infusion in education by the Chinese government, real achievements have been made in the ICT infrastructure, digital learning resources, and teacher's ICT skills. In the last month on maintaining undisrupted learning, teachers used different blended both synchronous and asynchronous approaches for instruction by utilizing multiple online learning software and tools. Teachers and students are generally getting used to the new form of online teaching and learning.

However, when students learn at home by using online resources and tools, different kinds of challenges occur for students of different ages. For example, (a) children's capacity of self-control is poor; their homework delay; they are not willing to go to bed on time; (b) children have learning anxiety, especially for the students in the final year of junior and senior high schools; (c) children are not interested in studying; (d) children are addicted to electronic devices (mobile phones, tablets, etc.); (e) children are rebellious and always act contrary to the parents. Based on the problems, some tips are presented in the book.

Adolescences are the future of the world. Studying at home provides a good opportunity for students to promote their self-regulation skills. Self-protection and prevention from COVID-19, self-directed active learning, self-motivation, self-efficiency, and self-wellbeing could be trained in this critical moment, which is the guarantee for successful learning and life. Therefore, a SCIENCE model of learning actively at home during school closures is proposed for students. The SCIENCE model consists of seven elements: *Scheduling learning and playing in balance, Choosing learning resources on demand, Inspiring the study from playing, Engaged in learning by self-monitoring, Nourishing learning ability with e-assessment, Carrying out reflection on learning methods, Exercising daily and moderately.* Tips and stories on student's learning associated with active learning are presented. In the end, suggestions on how to maintain physical and mental health are also discussed.

Introduction

With the Coronavirus (COVID-19) rapidly spreading worldwide, lots of countries have initiated several strategies to contain this virus, including school closures. UNESCO stated that, as of 25 March, there are 1,524,648,768 affected learners.

With school closures, students have to study at home, however, it is found that both students and parents are facing challenges according to different types of family when kids study and parents work at home. Therefore, the "Guidance on Active Learning at Home in Educational Disruption: Promoting student's self-regulation skills during COVID-19 outbreak" is compiled to guide students' active learning at home.

When studying at home during educational disruption, there would be nine activities of three types, which consist of family living (eating, sleeping, and sporting), family entertainment (watching TV, gaming, and playing with mobile devices) and learning (studying, reading, and family chatting), as shown in Figure 1. The nine-patch lattice in Figure 1 can briefly describe the basic life scenario of the family in this special period, and the characteristics of each family can also be identified from the time and energy allocated to nine types of activities.
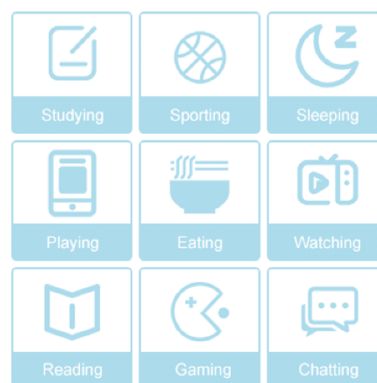
Figure 1. Nine typical home activities

As shown in Figure 1, there could be three typical learning scenarios at home during educational disruption. Firstly, some students would like to pursue higher-level knowledge and have good study habits, it would be a studying-centered home learning scenario, such as students who will attend the college entrance examination or high school entrance examination this year. In this case, the main activity would be studying except for eating and sleeping (as shown in Figure 2).

Secondly, some students may addict to playing with mobile devices, gaming and watching TV (as shown in Figure 3), using little   time for studying and reading, which is a dangerous home learning scenario. Thirdly, students may communicate with parents, brothers and sisters at home, also read books and do some sports at home, which is the third communication-based home learning scenario (as shown in Figure 4).
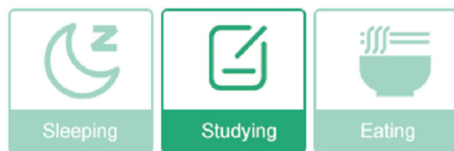
Figure 2. Studying-centered home life
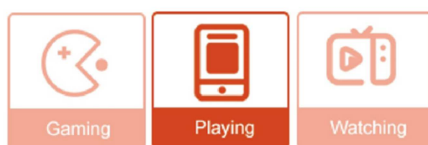
Figure 3. Playing-centered home life
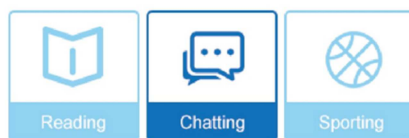
Figure 4. Communicating-centered home life

According to the culture and types of family, the listed three typical home learning scenarios may happen at different families. Different scenarios may have different impacts on student's learning at home, and it is recommended to pay special attention to the second type which is dangerous (as shown in Figure 3).

Promoting kids to learn at home actively does not only for this educational disruption period, but also for developing student's self-regulated skills. This guidance book will provide students suggestions and tips on how to become active learners, and also methods and tools for students to use to conduct self-plan, self-monitoring, self-assessment, and self-reflection.

1   Covid-19 Prevetion and Preparedness

1.1   Knowing the facts about COVID-19

(a) What is COVID-19?

Coronaviruses (as shown in Figure 5) are a large group of viruses that can cause illnesses as minor as a cold, or as serious as a severe pulmonary infection, such as Middle East Respiratory Syndrome (MERS) and Severe Acute Respiratory Syndrome (SARS). The COVID-19 is a new type of coronavirus not previously found in humans. On March 11, the WHO officially classified COVID-19 outbreak as a pandemic, in other words, a worldwide outbreak of a new disease.
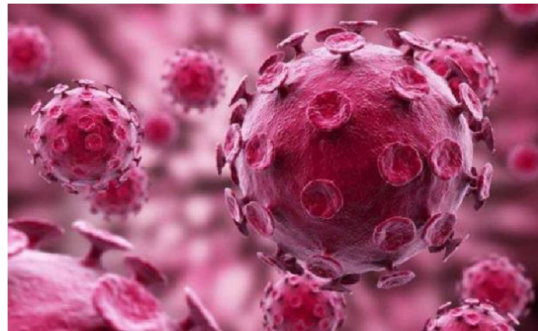
Figure 5. COVID-19

(source：www.thepaper.cn)

(b) Transmission routes of COVID-19

The transmission routes of COVID-19 include direct transmission, aerosol transmission, and contact transmission.

- **Direct Transmission**

    Direct transmission means that the droplets that appear after the sufferer sneezes, coughs and talks can be inhaled directly via close contact, which will cause infection. The virus is thought to spread mainly from person-to-person between people who are in close contact with one another (within about 6 feet) or through respiratory droplets produced when an infected person coughs or sneezes. Also, these droplets can land in the mouths or noses of people who are nearby or possibly be inhaled into the lungs. People are thought to be most contagious when they are most symptomatic (the sickest).

- **Aerosol Transmission**

    Aerosol transmission may occur when people are exposed to a high concentration of virus-laden aerosols in a relatively closed environment for a long time. It is not the main transmission route.

- **Contact Transmission**

Contact Transmission refers to that it may be possible that a person can get COVID-19 by touching a surface or object that has the virus on it and then touching their own mouth, nose, or possibly their eyes, but this is not thought to be the main way the virus spreads. (Source in Figure 6)
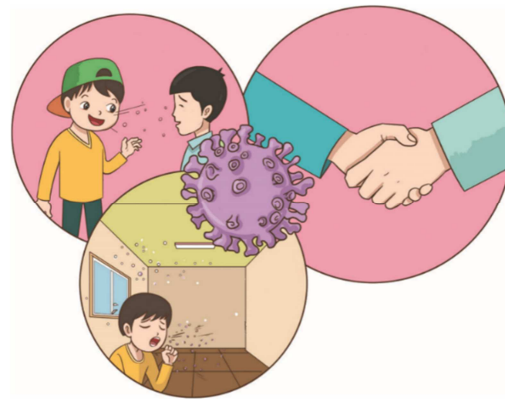
Figure 6. Virus Transmission

（*source:http://www.moe.gov.cn/jyb_xwfb/gzdt_gzdt/s5987/202003/t20200312_430163.html, Chinese Version*）

(c) Symptoms of COVID-19 Pandemic

The common symptoms of COVID-19 include fever, fatigue, dry cough, and gradual dyspnea. Some patients start with mild symptoms or even no significant fever. Severe symptoms include Acute Respiratory Distress Syndrome (ARDS), septic shock, hard-to-correct metabolic acidosis, and coagulation disorder. From the current cases, most patients have a good prognosis and only a few patients are in critical condition, or even dead.

In addition to the above symptoms, there may be some "atypical" symptoms, for instance:

- The symptoms of digestive system as the first manifestation, such as a mild loss of appetite, weakness, low spirits, nausea and vomiting, diarrhea, etc.

- The symptoms of neurological system as the first manifestation, such as headache.

- The symptoms of cardiovascular system as the first manifestation, such as palpitation and oppression in chest.

- The ophthalmic symptoms as the first manifestation, such as conjunctivitis.

- Only mild muscle soreness in limbs or lower back. (Source in Table 1)

Table 1. Symptoms of COVID-19 Pandemic

Symptoms	Common Cold	COVID-19 Pandemic
Breath	No difficulty or shortness of breath	Increased frequency and even the difficulty of breath
Cough	Late appearance	The symptom is serious with dry cough,

Symptoms	Common Cold	COVID-19 Pandemic
		accompanied by cough sound and gasps, affecting sleep.
Fever	In general, patients will feel better after 48 to 72 hours and the febrifuge is effective.	The fever will last over 72 hours.
Body	There is little change in spirits, appetite, and sleep.	Low spirits and loss of appetite
Others	--	The incubation period ranges from 2 to 14 days, with an average of 7 days.

1.2 Protecting yourself

1.2.1 Using masks properly

Please wear a mask to protect yourself and others, especially in taking care of a person with suspected infection, and you must know how to use it and dispose of it properly.

(a) How to wear and take off masks correctly?

Before putting on a mask, clean hands with alcohol-based hand rub or soap and water. Cover your mouth and nose with a mask and make sure there are no gaps between your face and the mask. You should avoid touching the mask while using it; if you do, clean your hands with alcohol-based hand rub or soap and water. It is better to replace the mask with a new one as soon as it is damp and do not re-use single-use masks. When you remove the mask, you should remove it from behind (do not touch the front of the mask), discard immediately in a closed bin, and then clean hands with alcohol-based hand rub or soap and water. While taking off the mask, you shall try not to touch the outside of it and do remember to wash your hands properly and promptly. (Source in Figure 7).

Figure 7. Wear and remove masks properly

(source:http://www.moe.gov.cn/jyb_xwfb/gzdt_gzdt/s5987/202003/t20200312_430163.html)

(b) When to wear masks?

If you are healthy, you only need to wear a mask if you are taking care of a person with suspected COVID-19 infection. Also, wear a mask if you are coughing or sneezing. Masks are effective only when used in combination with frequent hand-cleaning with alcohol-based hand rub or soap and water. If you wear a mask, then you must know how to use it and dispose of it properly. Replace the mask with a new one as soon as it is damp and do not re-use single-use masks. (WHO, 2020)

1.2.2 Washing your hands frequently

Handwashing is one of the best ways to protect yourself and your family from getting sick. You can clean your hands regularly. Wash your hands with soap and water, and dry them thoroughly. Use alcohol-based hand rub if you don't have immediate access to soap and water. (WHO, 2020)

(a) How to wash your hands correctly?

Washing your hands properly takes about as long as singing "Happy Birthday" twice, and follow steps.

Step 1: Wet your hands with running water.

Step 2: Apply some liquid hand soap (or soap) and distribute it evenly on the whole palms, the back of the hands and fingers.

Step 3: Keep washing your hands for at least 15 seconds. Specifically:

Keep palms facing each other and rub your hands together.

- Use one hand to rub the back of the other hand and clean it in between the fingers. Do the same with the other hand.

- Rub your hands together and clean in between your fingers.

- Rub the back of your fingers against your palms.

- Rub the thumb of the left hand with the right hand. Do the same with the other thumb.

- Rub the tips of your fingers on the palm of the other hand. Do the same with the other hand.

Step 4: Rinse your hands thoroughly with running water.

Step 5: Dry your hands and apply some hand lotion. (as shown in Figure 8)
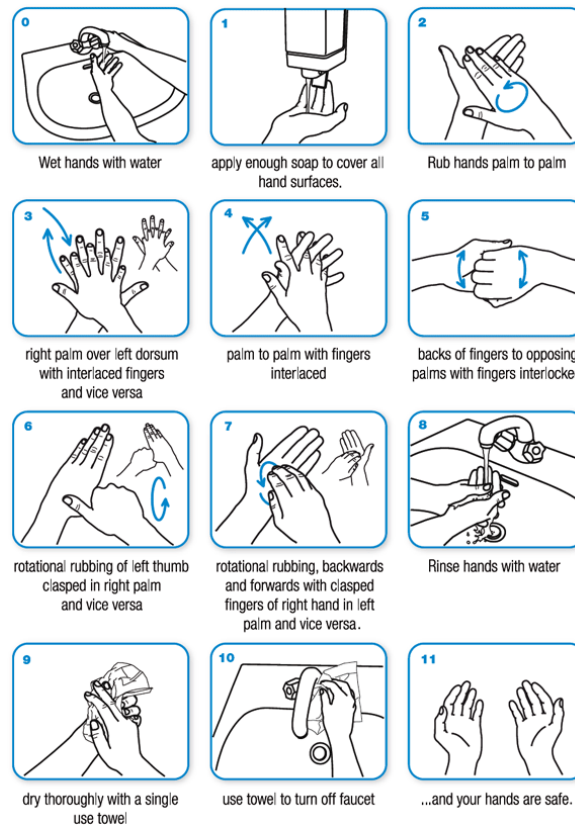
Figure 8. Recommended hand washing methods

(source: https://www.who.int/gpsc/clean_hands_protection/en/)

(b) When to wash hands?

You should wash your hands, especially during these key times when you are likely to get and spread germs:

• after returning from the outside,

• using the toilet,

• coughing or sneezing,

• leaving elevator, restaurant,

• touching animals and handling their feces,

• touching public items, such as door handle, etc.

Also, you should wash your hands before, during and after preparing food, and before having meals. Keep hands away from your mouth, eyes, and nose. (Source in Figure 9)

Figure 9. In these cases, you need to wash your hands

(source:http://www.moe.gov.cn/jyb_xwfb/gzdt_gzdt/s5987/202003/t20200312_430163.html)

1.2.3 Protecting yourself at home

Clean frequently touched surfaces and objects daily using regular household detergent and water. For instance, tables, countertops, light switches, doorknobs, and cabinet handles. If surfaces are dirty, they should be cleaned using a detergent and water. Always follow the manufacturer's instructions for all cleaning and disinfection products.

Continue practicing everyday preventive actions. Cover coughs and sneezes with a tissue and wash your hands often with soap and water for at least 20 seconds. If soap and water are not available, use a hand sanitizer that contains at least 60% alcohol.

Use the separate room and bathroom you prepared for sick household members (if possible). Avoid sharing personal items like food and drinks. Provide your sick household member with clean disposable facemasks to wear at home, if available, to help prevent spreading COVID-19 to others. Clean the sick room and bathroom, as needed, to avoid unnecessary contact with the sick person.

Stay in touch with others by phone or email. If you live alone and become sick during COVID-19 outbreak, you may need help. If you have a chronic medical condition and live alone, ask family, friends, and health care providers to check on you during an outbreak. Stay in touch with family and friends with chronic medical conditions.

Take care of the emotional health of your household members. Take breaks from watching, reading, or listening to news stories about COVID-19. Connect with family and friends. Share your concerns and how you are feeling with others.

1.2.4 Reminding yourself while going out

While going to public places or taking public transport. People going out for daily necessities or work should wear masks when going to public places such as supermarkets or taking public transportations. Please avoid close contact with others and wash your hands immediately after returning home. Perform hand hygiene frequently includes either cleaning hands with soap and water or with an alcohol-based hand rub, particularly after contact with respiratory secretions.

While visiting medical institutions. Ensure to wear a mask when visiting medical institutions for professional help after showing suspicious symptoms. Cover your nose and mouth with a flexed elbow or paper tissue when coughing or sneezing. Remember to dispose immediately of the tissue and perform hand hygiene; Also, refrain from touching mouth and nose; Please avoid public transport such as the subway or bus. And stay away from the crowds. Voluntarily inform the medical staff of your travel or residence history in the epidemic area as well as your contact with others and cooperate with the medical institutions in related investigations.

While traveling. When you are traveling, please first find out whether your destination is an epidemic area. If you cannot cancel the trip, please prepare the masks, portable hand sanitizers, thermometer, and other essentials. Avoid close contact with others during the trip, wear masks, and change them timely. Please properly keep the ticket stubs of the public transport in case of any inquiry. In addition, follow proper food hygiene practices. Pay attention to food safety, as well as recommendations to reduce the risk of transmission of emerging pathogens from animals to humans in live markets. It is recommended that all people, especially older adults and people with serious chronic medical conditions defer travel on cruise ships, including river cruises, worldwide for the high risk of COVID-19 on cruise ships.

While returning from other cities. When returning from other cities, please register at the neighborhood committee of the local community immediately, and conduct medical observation for 14 days. Monitor your conditions, such as temperature and signs during this period. Live in isolation or a well-aired separate room, and avoid contact with your family. If symptoms occur, such as fever, cough or difficulty breathing, please contact local health care providers, preferably by phone, and inform them of their symptoms and their travel history.

1.3   Seeking medical care for suspected infection

(a) What symptoms require medical attention?

Fever, fatigue and dry cough are the main symptoms of COVID-19. Nasal obstruction, runny nose, and diarrhea may occur in a few patients. Most severe patients, on the other hand, develop dyspnea after one week, and the severe cases develop rapidly into ARDS, septic shock, hard-to-correct metabolic acidosis, and coagulation disorder. People showing respiratory symptoms, fever, chills, fatigue, diarrhea, or conjunctival congestion should immediately seek medical care.

(b) What to do if you suspect you are infected with COVID-19?

If you suspect that you are infected with COVID-19, please avoid crowded places, wear a mask, keep your distance from your family, keep good ventilation, maintain personal hygiene, and seek

medical care at the hospital nearby. Inform your doctor of your contact with others and cooperate with them in their investigation.

(c) What to do if you suspect that others around you are infected with COVID-19?

If you suspect that others around you are infected with COVID-19, please wear a mask and keep your distance from them. Also, advise them to wear a mask and seek medical care at the hospital nearby.

If you want to get more information, please CLICK "the Multi-language public prevention of pneumonia caused by COVID-19": http://sli.bnu.edu.cn/en/Courses/Webinars/Coronavirus_Prevention/

2   Becoming Active Learner During School Closures

2.1   Self-regulated learning – characteristics of active learners

2.1.1 Active learning and self-regulated learning

With widespread school closures, children in the world are being given alternate resources, including some online resources, to start active learning outside of the classroom. Temporary solutions being devised for distance education range from online classroom tools, like Google Classroom, to Zoom and podcasts by teachers. While parents are adjusting to this new scenario, it's also important to help kids stay focused on active learning and avoid overuse of games, social media, and videos.

Term 1. Active Learning

Active learning is a method of learning in which students are actively or experientially involved in the learning process and where there are different levels of active learning, depending on student involvement. (Bonwell & Eison 1991). It is also defined as any instructional method that engages students in the learning process. In short, active learning requires students to do meaningful learning activities and think about what they are doing (Prince, 2004).

In active learning, students will engage in small or large activities centered around writing, talking, problem solving, or reflecting. It stands in contrast to "traditional" modes of instruction in which students are passive recipients of knowledge from an expert and asks students to engage in the learning process.

In this guidance, we use active learning to emphasize the form of learning in which students participate in the process actively with metacognitive skills for monitoring, evaluating, and reflecting on their learning process.

Story 1: A female college student, from Sichuan Province, sits stiffly in the snow for 2 hours, looking for signal for online course from 3800 meters high mountain

> Hu Zhiping, a second-year student of the ABA Vocational College, Sichuan Province, lives in Gaoka Village, Fubian Town, Xiaojin County, Aba Tibetan Autonomous Prefecture, Sichuan Province. On the morning of March 17th, Hu Zhiping found that the line had been damaged by the heavy snow last night, and the power had been cut off and the network had been shut down.

The college requires the students to fill in the health information form every day, and Hu Zhiping had an online course that morning, but she couldn't find the network signal anywhere near home. "What should I do? I went around and found the signal on the snow mountain more than 800 meters away from home."

Originally, Hu Zhiping was going to find a place with a signal to fill in the form first. If there is no Internet, she can only ask for leave and can't attend online courses. To her surprise, there not only can receive the phone call, but also has stable 4G signals on the mountain. "I'll go home and pick up my notebook and go to that place for online courses." Hu Zhiping's younger brother and sister and several neighbors also came to that mountain for online courses later.

Source: https://new.qq.com/omn/20200319/20200319A0AOZ300.html?pc

Story tips:

Active learning comes from the inner yearning for learning. Even without good learning conditions, we can create learning conditions through our own efforts. In the process of learning, don't give up as soon as you encounter difficulties. Facing difficulties bravely and trying to solve problems will make you gain more.

Learning is a process that brings together personal and environmental experiences and influences for acquiring, enriching or modifying one's knowledge, skills, values, attitudes, behaviors, and worldviews. According to cognitivism, learning is not a stimulus-response sequence, but the formation of cognitive structures. The learners do not simply receive stimuli mechanically and react passively, but, rather, learners process stimuli and determine appropriate responses. (Huang, Spector, & Yang, 2019)

When you become a master of your own learning processes, you are in self-regulated learning. Neither a mental ability nor a performance skill, self-regulated learning is instead the self-directed process through which learners transform their mental abilities into task-related skills in diverse areas of functioning, such as academia, sports, music, and health (Zimmerman, 2015).

Term 2. Self-regulated Learning

Self-regulated learning is learning that occurs largely from the influence of students' self-generated thoughts, feelings, strategies, and behaviors, which are oriented toward the attainment of goals (Schunk and Zimmerman, 1998) , which is also the ability of students to develop essential knowledge, strategies, and behaviors to increase learning (Zimmerman, 2001).

"Self-regulated" describes a process of taking control of and evaluating one's own learning and behavior. Self-regulated learning emphasizes autonomy and control of the individual who monitors, directs, and regulates actions toward goals of information acquisition, expanding expertise, and self-improvement. Self-regulated learning is a cyclical process, wherein the student plans for a task, monitors his performance, and then evaluates and reflects on the outcome. The cycle then repeats as the student uses the reflection to adjust and prepare for the next task. (What is Self-Regulated Learning, 2020)

Story 2: Grade 1 students, from Zhuzhou Octopus Elementary School, Hunan Province, became self-regulated learners

Luo Yanyan, grade 1 student from Zhuzhou Octopus Elementary School ,

Hunan province, gets up on time every day and takes online courses during educational disruption. In the process of learning, she has the good habit of "Today's business should be done today", such as preview before class, review after class and finish her daily homework. Tang Aoxin, the same grade with Luo Yanyan in different classes, also gets up on time and then begins to study online, exercise, practice writing, help mom and dad do housework, has developed a good habit of self-regulated learning.

Story tips:

During educational disruption, it is not only about doing a good job when learning the course content, but also about developing good living habits for self-regulated learning. For example, getting up on time, exercise every day, and communicating with parents, so as to promote the all-round development of morality, intelligence, physical fitness, arts, and labor.

In the event of school closures, students and teachers may be presented with opportunities for remote teaching and distance learning. Distance learning allows students to continue to follow the guidance instruction of their teacher outside of the physical classroom and away from their peers.

Modern distance learning courses employ Web-based course-management systems that incorporate digital reading materials, podcasts (recorded sessions for electronic listening or viewing at the student's leisure), e-mail, threaded (linked) discussion forums, chatting rooms, and test-taking functionality in virtual (computer-simulated) classrooms. Although most systems are generally asynchronous, allowing students to access to most features whenever they wish, synchronous technologies, involving live video, audio, and shared access to electronic documents at scheduled times, are also used. The learning under this circumstance can be called technology-enhanced learning.

The objective of technology-enhanced learning is to provide social-technical innovation in learning practice for an individual or an organization in a way that is independent of learning time, place and progress, which enhances learning efficiency and input-output effectiveness. Therefore, technology-enhanced learning can be interpreted as providing support to any learning activity through technological means. The term can be used to describe both analogue and digital technologies, but more recently, we see that digital technology-enhanced learning is taking over education in the form of different types of educational software，and transforming and enhancing education and educational institutions beyond recognition. (Cullen, 2018)

Alongside the growth of distance learning in modern institutional has come the Web-based or facilitated personal educational services, including online learning. Online learning is a term used to describe distance or correspondence courses that are offered over the Internet. Online learning has to be the greatest revolution in contemporary education. It made a huge change in the system and opened great opportunities for everyone who wants to learn something, and has changed the way we impart knowledge to students all over the world. (Norman, 2016)

In technology-rich learning environments, knowledge connected learning is the process by which the learners start from the understanding of knowledge sources and knowledge structures of the same learning objectives and gradually master within the key knowledge contents so as to master the whole learnt knowledge within the specified period of time (Huang, et al., 2013). Knowledge connected learning is generated from the requirements of social informatization, accompanied by the changes in people's lifestyles. It does not necessarily start from previewing materials; it may start from a problem or task.

More and more students are getting access to devices at a younger age. In order to keep students safe, it's important for them to become good digital citizens and learn how to use technology responsibly. Digital citizenship is a way to prepare students for a society full of technology. During the school closure, you can build and practice digital citizenship alongside academic learning.

Term 3: Digital citizenship

Digital Citizenship can be defined as the safe, ethical, responsible, and informed use of technology. This concept encompasses a range of skills and literacies that can include Internet safety, privacy and security, cyberbullying, online reputation management, communication skills, information literacy, and creative credit and copyright. (U.S. Department of Education, & Office of Educational Technology, 2017)

2.1.2 Ways to promote active learning

To be an active learner, you need to use a range of strategies to regulate your behaviors and try to form good habits on metacognition. You should regulate your study by yourself. Self-regulated learning involves establishing goals and then choosing the right strategies to reach them. Once chosen, you have to monitor your progress and restructure your techniques if you're not meeting your goals. You also have to use your available time efficiently, evaluate the methods you've chosen, and adapt your methods to future learning. There are three main stages when you regulate your own learning: planning, monitoring, and evaluating. These stages aren't necessarily

successive and you can pass through many cycles throughout the course of a learning task. (Self-regulated-learning-important, 2019)

When studying at home during school closures, the abundant learning resources and technologies offer children a different learning life. You can learn by watching online classes on the Internet synchronously or asynchronously and take part in all kinds of interesting activities. This type of learning gives different learning experiences and is a great time to develop good learning habits at home. Studying at home emphasizes the combination of work and leisure. You should not only keep up with the curriculum, but also leave enough time to play and communicate. You can also contribute your collective wisdom through group and family cooperation.

As a result, we summarize the six elements of scheduling your learning and playing, selecting learning resources on demand, studying and playing in a team, making learning process effective, checking the quality of learning by yourself and reviewing what you have learnt should be considered by you or your parents when you learning at home to become an active learner, as shown in Figure 10. These strategies will be elaborated in the following sections.
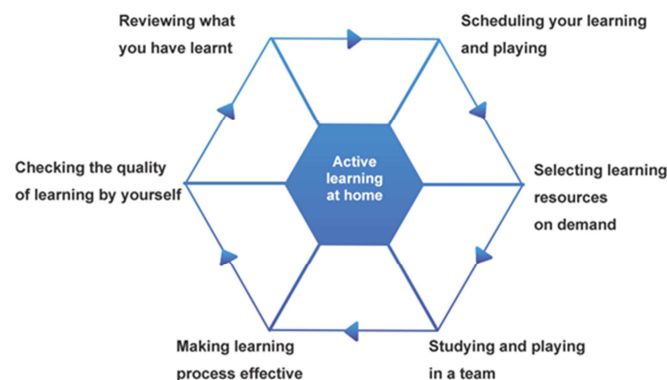
Figure 10. Six key elements for active learning at home

2.1.3 Challenges encountered when students studying at home, and tips to help parents deal with the challenges

Many kids are feeling anxious and confused right now. Schools are closed with little notice, and the daily routine looks very different right now (or is missing altogether). As parents, it is important to find time in a day to communicate with children and use strategies and activities to help them express their feelings and de-stress, help them relax and be present in the moment.

Challenge1: During the period of home study, children's capacity for self-control is poor; their works delay; they are not willing to go to bed on time.

Tip 1: Helping children to stabilize their emotions and overcome learning anxiety (To parents)

- Three steps to teach children how to do self-control: (a) Stop, and calm down; (b) Think "is it a good choice or a bad one?" (c) Act and solve it in the best way. Let children think about what is the right choice.

- Developing the learning objectives with children together, according to SMART principles: Specific, Measurable, Achievable, Realistic, and Time-bound;

- Making good use of task list: inviting children to further process the task list together; letting children choose which time need to do which kind of homework and which time need to learn which content; developing diversified and interesting evaluation.

- Before children's learning and reading, parents need to clean up their desks and put all dolls, video games, mirrors, etc. into the drawers, leaving nothing to distract.

As parents, you need to listen to the children, and communicate with the children about the needs behind your children's behaviors, and interpret the reasons behind those behaviors such as "out of time, or procrastination". To understand their feelings and accept their emotions, instead of preaching, blaming and forcing them.

Challenge 2: How to deal with children's learning anxiety?

Tip 2: Helping children to stabilize their emotions and overcome learning anxiety (To parents)

- Changing the environment: finding a comfortable place to calm down.

- With the help of external forces: reading; painting; drinking water; sporting.

- Using a timer: giving your children 2 minutes to calm down.

- Don't put too much pressure on your children. It will increase children's learning burden and cause anxiety, if children do a lot of work additionally.

- As parents, you should be tolerant, allowing children to make mistakes, guiding children to treat success and failure correctly, and avoiding anxiety caused by failure.

Stress can be seen as the spice of life(Selye,1974). Unfortunately, most children cope with it poorly. They worry too much, criticize too much, get angry too often, and become too tense. But if children can deflect the stress that comes their way, if parents can help children learn how to handle the pressure that seems to be an inescapable part of academic life, they can thrive both as a student and as a human being.

Challenge 3: How can you do if your children are not interested in studying?

Tip 3: Helping children to experience the fun of studying (To parents)

- Through hands-on activities, letting children learn in life, explore and try in a safe environment, learn to use their brains in practice.

- Children can learn actively by playing and games. Playing and games can let them take the initiative, and learn to think and inspire creativity. Even if it's very hard, children can enjoy it. It's a good way to develop the brain.

- Each child has his/her time of concentration, especially when developing their interest. For example, when children read picture books or science magazines, what you should do at that time is staying away from them, trying not to disturb them, and letting them

focus in a quiet environment. If they switch their attention back and forth, they may lose energy and enthusiasm.

As a parent, there are countless things that you can do to help your child, even if he/she does not appear to want to learn. Exploring, learning and expanding knowledge are natural parts of the human experience. We do all have our own unique methods of expressing how we learn, we all thrive in different environments, and we all have different needs, but we all can learn. Encouraging your child to be motivated is important for excelling in school and beyond. Taking time to understand your child's unique methods, strengths, and needs, motivation is possible.

Challenge 4: Children are addicted to electronic devices (mobile phones, tablets, etc.)

Tip 4: Helping children to get rid of the addiction to using electronic devices (To parents)

- Strictly controlling the duration. It is irrational for children to play with electronic products, no matter they are overindulged or strictly forbidden. The right way to do is use them properly. As parents, you can set the time for your children to play. For example, according to the specific situation of each child, it is stipulated that they can play the mobile phone over X hours one day, and must be after the completion of their homework. With specific and clear goals, children are more likely to operate.

- Selecting high-quality content. Letting children stay away from the intricate and inferior content from the Internet, preparing some cartoons, music, and videos which are beneficial to their physical and mental health development, downloading some educational games, and letting children experience the fun from these contents.

- Accompanying your children can help them divert attention from the electronic devices. As parents, you can distract your children when they want to play with electronics or when they can't stop. For example, drawing with children, playing games with children, reading, etc. are good ways to transfer attention.

- Setting an example. As parents, you are children's role models. Each word and deed will be imitated. If you are 'Phone Freak' and often play mobile phones in front of your children, then naturally your children also want to play, so you should try to reduce the frequency of using electronic products in front of your children.

Overuse of screen can have adverse impacts on young brains, so it's essential in these special circumstances to be extra careful when it comes to the littlest ones. As much as possible, parents should encourage printed book reading. If available, request textbooks from your child's school along with other printed materials in order to offset the amount of online learning they will be doing. Stimulate self-expression by having discussions with your children about what they are doing, and also encourage creative writing and imaginative story telling.

Challenge 5: what should do if children are rebellious and always act contrary to you?

Tip 5: Helping you and your children communicate well (To parents)

- Attention: Paying attention to your children's current emotions and needs in life. If there is a conflict in the dialogue or action, please step back and give your children personal time and space.

- Participating: To engage in and support your children's hobbies or actions, and to care more about them than to be an outsider.

- Sharing: Sharing your inner thoughts with your children. Although sharing can't solve the problem, it can make them feel trust and love.

- Active listening: when talking with your children, please do not criticize or negate each other at will, but help them sort out the events and give them positive feedback.

- Accompanying: Accompanying is a kind of giving and support, and can let your children feel your care and love.

- Praising: Encouraging education can strengthen parent-children connection and cultivate children's confidence and inner-drive. (praise should refer to a specific action or thing.)

- Comforting: When your children experience pain, give them comfort and recognize their emotions and pain.

- Hoping: Putting hope on your child.

Due to school and work obligations, it's rare for parents and children to have much time together. It serves as an opportunity for them to improve parent-child communication by writing predictions for a TV show that the whole family watches together or organizing a tournament, family card games, charades, or chess. Follow your community's security guidelines, of course, but make sure you still find time for fun with your kids.

Story 3: Exchange of students' learning experiences during educational disruption in The Middle School Affiliated to Qingdao University, Shandong Province

This winter vacation is an extended and special one, and students from The Middle School Affiliated to Qingdao University, Shandong Province have shared their learning experiences to manage, grow and surpass themselves during educational disruption.

【Mei Yuxuan】In the process of learning, I will timely make notes of the key contents emphasized by the teacher. When there are many important knowledge points and contents, I will quickly record them by taking screenshots, and then focus on sorting them out after class. The efficient study, moderating exercise, regular work and rest, and sometimes housework, are my basic requirements for my self-regulated learning at home during educational disruption.

【Lu Zexuan】To prepare for the daily study, I will make a self-learning plan before each class to make my learning process effective and orderly. During online learning, sometimes there is a problem of distraction, so I will put things tend to attract my attention on the other side to keep me focused. In the 15 minutes during the break, I will first sort out what I have learned after class, and consult the teacher in time if there is any problem. I also pay attention to rest and protect my eyesight. Two minutes before class, I will tidy up my stationeries, sit up straight, and wait for the teacher.

【Chen Shuo】There is no shortcut to learning, and knowledge comes from the accumulation every day. In addition to strictly following the requirements of the school, such as preview in advance, listening to the teacher carefully, and summarizing notes after class, we also ask ourselves to complete the homework regularly, get up on time, enter the online class early and do not leave early, etc., to remain Shendu (self-discipline) and become a self-disciplined person. Besides, it is important to keep a good attitude towards study. We can not only read books to adjust the mentality, but also review the previous knowledge to find a sense of learning. For those subjects with a large amount of knowledge, we should also keep calm, review and preview with composure, and make notes after class.

Source 1：http://dy.163.com/v2/article/detail/F734D9D40516V0J9.html

Story tips:

There is no shortcut to learning, only a high level of self-discipline and hard work to harvest excellent results. For the course study, you should make a learning plan, preview before class, make notes in class, review after class, and develop good study habits and a regular life schedule. In terms of health and exercise, you should arrange a certain time to do exercise every day. It can be sports, housework, playing musical instruments, or communicating with parents and friends to maintain physical and mental health.

Motto 5: A journey of a thousand miles begins with a single step.——Lao Tzu, Ancient Chinese philosopher and poet)

2.2   Scheduling your learning and playing in balance

Learning is not only a daunting task, but also plagued by procrastination and external interference, especially during school closures. Therefore, a good learning plan is the first step in effective time management. In the planning phase, as a student, you have an opportunity to work on your self-assessment and learn how to pick the best strategies for success. When you move from being passive recipients to being much more active in the learning process, actively involved in the decisions about the learning, then you will have greater agency.

To develop a learning plan, you should first select a calendar or something like a notepad that can be scheduled. Either way, you should be able to easily view, modify, and label, and have enough space to schedule short- or medium-term daily learning. In this phase, you can plan your learning time or progress in the notebook, and for each learning task you complete, you can label it so that you can keep abreast of your learning progress.

Term 4: Agency in learning

Learners with agency can "intentionally make things happen by [their] actions," and "agency enables people to play a part in their self-development, adaptation, and self-renewal with changing times." To build this capacity, learners should have the opportunity to make meaningful choices about their learning, and they need practice at doing so effectively. Learners who successfully develop this ability lay the foundation for lifelong, self-directed learning. (U.S. DEPARTMENT OF EDUCATION, 2017)

Tip 6: Helping you create effective learning plans (To students)

- Keeping a calendar or printed schedule in a visible place for easy checking and following.

- When writing dates on your calendar, using a pencil so that you can easily change them as needed.

- Don't be overscheduled and allow extra time for emergencies.

- Making learning time consistent every day, so as to help develop good study habits.

- Scheduling your learning time for the least distractions.

- Coloring different learning content to make the schedule easier to check and follow.

Sticking to a learning plan is as important as creating a learning plan. No one will deliberately ignore the plan you have made, but in practice, some of you are often unable to stick to the plan. One important reason is that the schedule is too tight and there is not enough rest and recreation time, so you may be easily disturbed by the outside world and your attention is diverted, making it difficult to stick to your plans. It is important to arrange enough leisure, socializing and exercise time. On the other hand, after completing a day of study as planned, you should give yourself a small reward to motivate yourself to continue. Using blended learning approaches is more beneficial for students studying at home.

Term 5: Blended learning

In a blended learning environment, learning occurs online and in person augmenting and supporting teacher practice. Blended learning often allows students to have some control over time, place, path, or pace of learning. In many blended learning models, students spend some of their face-to-face time with the teacher in a large group, some face-to-face time with a teacher or tutor in a small group, and some time learning with and from peers. Blended learning often benefits from a reconfiguration of the physical learning space to facilitate learning activities, providing a variety of technology-enabled learning zones optimized for collaboration, informal learning, and individual-focused study. (U.S. DEPARTMENT OF EDUCATION, 2017)

Story 4: A Student, from the Educational Technology Department of Hangzhou Normal University, made a learning plan according to the learning cycle

Daily plan
- ✓ List what you want to do for today
- ✓ Give each of these TODO terms a specific time
- ✓ Divide TODO into a timeline and plan what you want TODO at each point/period
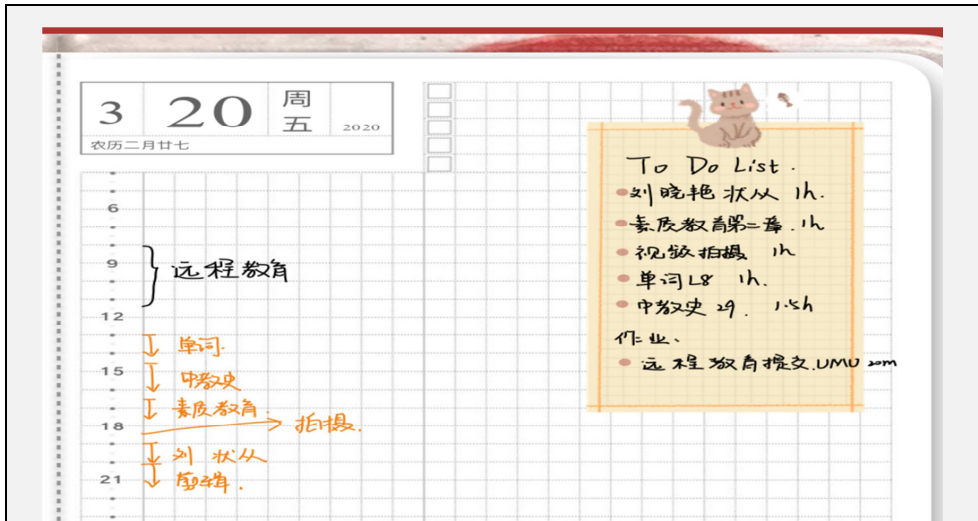
➕ Weekly plan

    ✓ On the weekend of last week, planning the major things to do in the next week, according to the completion of the previous week

    ✓ The left table is for tasks that are assigned from major things to roughly assigned to each day (every day, the weekly can be assigned to the daily plan according to the actual situation).

    ✓ The new task in the right table is used to add new tasks each week

    ✓ Summary is used for weekly summaries

Story tips:

There are 3 types of learning plans: short, medium and long term. The medium-term plan is a split of the long-term plan, while the short-term plan is a further split of the medium-term plan, forming a series of manageable small plans and goals, so that you can have a detailed and clear understanding and monitoring of daily, weekly and even monthly tasks.

Everyone—from astronauts to athletes, from merchants to musicians—appreciates the value of being able to focus on the task at hand. American poet and essayist Ralph Waldo Emerson wrote that "Concentration is secret of strength," while legendary book editor Michael Korda described it as "the magic key that opens the door to accomplishment." Although concentration does not appear at the snap of your fingers, some ways can help you improve your concentration.

**Tip 7: Helping you improve your concentration (To students)**

- For every 50-60 minutes of study, take a 10-15 minutes break.

- At the break, taking a snack for energy, going for a walk, or listening to a few favorite songs.

- At the end of one day or one week, reward yourself. A week's rewards should be more than a day's.

- Finding out your best hours for study. If you're more awake at night, schedule it in the evening.

Concentration is focused on thinking. Just as light waves can be focused into a single, powerful beam—a laser—concentration can focus the power of your thoughts, enabling you to think with greater precision and penetrate difficult ideas. People who can focus exclusively on the task can have a much better chance of completing that task more quickly and accurately than those who divide their attention even when they don't mean to do so.

Story 5: A girl, in the final year of senior middle school , prepared for the college entrance examination at home: writing the study plan in the notebook

During the educational disruption, Zuo Kunyu, a student from Xi'an, Shaanxi Province, prepared a detailed study plan at home for an online course. Zuo Kunyu is a student of liberal arts. For example, on March 11, 2020, her first plan is to memorize vocabulary and some articles. Because she was not at school, Zuo Kunyu thought that self-training was very necessary. So she must do some exercises every day. Zuo Kunyu's daily learning plan includes 6 subjects: English, mathematics, Chinese, politics, history, and geography. She has formulated a detailed learning plan for each subject.
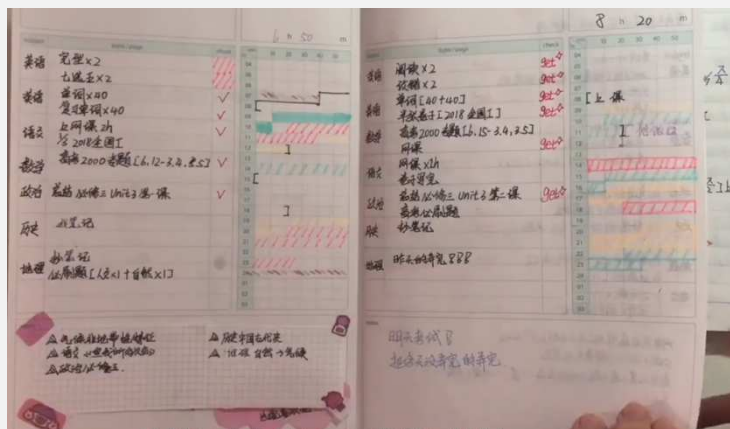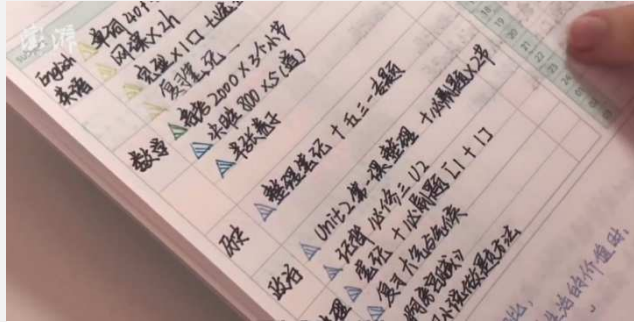
Story tips:

The notebook is the simplest tool to make the learning plan. No matter which stage or which subject, you can write down your short-term and medium-term learning plans on your notebooks, and can read them at any time to know your own learning progress. Sub discipline teaching is a major feature of China's education. Different disciplines have their own characteristics and rules, and the knowledge content is different. Therefore, the development of learning plans of disciplines is conducive for you to distinguish the primary and secondary importance, so that the learning plans are effective and orderly.

Subjects are the parts into which learning can be divided. Language, mathematics, foreign languages and other disciplines have their own characteristics and rules. Therefore, as a student, you can make different learning plans, according to the characteristics of different disciplines, such as teachers suggested. (XuDuoFen Jiaoyu Ketang, 2020)

• Language learning plan

Language learning is mainly reading and accumulation, so you need to read extra-curricular books for not less than 1 hour every day. The aim of reading is to understand the author's writing ideas, structure, mood, therefore doing reading notes is suggested.

• Mathematics learning plan

Many students have poor computing ability, resulting in frequent errors in the exam. You can improve your computing ability through certain training. For example, primary school students can do oral math problems every day, and calculate the time used each time.

• Foreign languages learning plan

Similar to language learning, foreign language learning requires the accumulation of vocabulary. It is recommended that you read articles to accumulate vocabulary, because it is easier to memorize words in the context of the text. Accumulating a large and precise vocabulary can be an adventure. If you're equipped with the right tools and a sense of curiosity, you'll have an exciting journey. And as on most adventures, you'll experience the joy of serendipitous discoveries. When you discover a word you like, you can enjoy the pleasure by learning its ancestry. The territory may seem strange at first, but in time you'll be living in a community of interrelated words where you'll always feel genuinely at home.

- Physical training plan

During school closures, you can do physical training at home. According to the situation and our own preferences, you could choose different exercises, such as skipping rope. For instance, middle and lower grade primary school children can jump 1000 a day (half an hour to complete), senior grade children can jump 1500 jumps per day (half an hour to complete), and secondary school students can raise requirements appropriately.

Story 6: A grade 1 student, from The Elementary School Affiliated to Renmin University China, Beijing, with their parents worked out a study plan together

During educational disruption, Yin Minghan, from the Elementary School affiliated to the Renmin University of China, made a set of special personal plans together with her parents, and they agreed: keep the promise and stick to it!

殷铭含假期作息时间表	
时间	活动
7:30	起床
7:30-8:00	洗漱、早餐
8:00-8:30	晨读
8:30-9:00	练字
9:00-9:30	室内操
10:00-11:30	线上课程学习（中间休息十分钟）
11:30-13:00	午餐、休息
13:00-13:30	阅读
13:30-14:00	口算练习（定量，做完、纠错完休息）
14:00-15:30	线上课程学习（中间休息十分钟）
15:30-16:00	室内操
16:00-17:00	兴趣练习
17:30-18:30	晚餐、休息
18:30-19:00	读诗、背诗
19:00-20:00	游戏、娱乐
20:00	洗漱休息

Yin's Schedule during educational disruption

Source: https://www.sohu.com/a/374475714_372473

Story tips:

For lower-grade students, parental supervision is a powerful guarantee for home study. You can invite your parents to participate in the monitoring of your own learning plan formulation and progress, and cultivate good learning habits from childhood.

Good planning can relieve stress for both children and parents. Check your plans and develop a written schedule not only for the day, but for the week as a whole. Prioritize and learn to create goals, tasks, and deadlines, just like adults do when they go to work. Tasks that may not have been difficult for you while attending school can become more challenging when learning from home, so it's important to reinforce boundaries and offer incentives for healthy behaviors.

For programming the self-learning plan, it is important to form the routine behaviors of sleeping, reading, exercise, using digital devices, leisure and entertainment, and therefore develop good

habits of learning and working. Remember the quote that "Sow a plan, you will reap the act; sow the act, you will reap a habit; sow a habit, you will reap a destiny".

2.3   Selecting learning resources on demand

Since students are surrounded by visual representations and audiovisual and auditory materials daily, owing in particular to media such as television and the Internet, it is difficult to imagine today's educational process without the use of various teaching and learning resources. The purpose and role of teaching and learning resources not only consist of making the educational process more attractive and interesting, but also of encouraging active learning, the development of different skills and the adoption of desirable values and attitudes of students.

When studying at home during school closures, students can find a variety of free educational resources on the Internet such as homework helpers, ideas for science projects and educational fairs, interesting information on subjects of their choices, and experts willing to interact with and educate kids about topics that intrigue them. When we study through the Internet, we can call it online learning.

Term 6. Online Learning

Online learning is defined as learning experiences in synchronous or asynchronous environments using different devices (e.g., mobile phones, laptops, etc.) with internet access. In these environments, students can be anywhere (independent) to learn and interact with instructors and other students (Singh and Thurman, 2019).

In most cases, teachers and students are separated from each other in time and space when learning online, and they interact with each other through distance learning. Distance learning doesn't depend on classroom space, school hours and fixed schedules, which gives educators and students more freedom to plan the process. Give easier access to learning Even if your school is closed and students can't attend classes in person, distance learning allows you to continue the process online and keep up with the curriculum (Distance-learning, 2020).

Since there are abundant learning resources on the Internet, effective students should know how to choose learning resources that suit their learning needs. Digital learning resources like Massive Open Online Courses (MOOCs), Small Private Online Courses (SPOCs), online video Micro-courses, e-books, simulations, models, graphics, animations, quizzes, games, and e-notes

are making learning more accessible, engaging, and contextualized. As a student, it is important to find, evaluate, and use the free online digital learning resources to solve your learning problems.

Large-scale courses known as MOOCs were invented to get free or low-cost education to people who could not afford or get access to traditional options. As an unprecedented shift to online teaching rise at colleges around the world during school closures, students and colleges are becoming more interested in the format.

Term 7. MOOC

MOOC, an acronym for Massive Open Online Course, is a new type of online training. It aims at large-scale interactive participation and open access via the web. In addition to traditional course materials such as videos, readings, and problem sets, MOOCs provide interactive user forums that help build a community for the students, professors, and teaching assistants (TAs) (Wikipedia). MOOCs build on the engagement of learners who self-organize their participation according to learning goals, prior knowledge and skills, and common interests.

With billions of websites online today, there is a lot of information on the Internet. When we studying at home during educational disruption, it's essential to search the Internet for information. There are many different search engines you can use, but some of the most popular include Google, Yahoo!, and Bing. To perform a search, you'll need to navigate to a search engine in your web browser, type one or more keywords—also known as search terms—then press Enter on your keyboard.

Tip 8：Helping you use search engines more efficiently（To students）

- Related Search

  If you want to find new websites with similar content to a website you already know of, use the *related: somesite.com* modifier.

  Example Search: *related: iasle.net*

- Word Definitions

  If you need quickly look up the definition of a word or phrase, simply use the *define: command*.

  Example Search: *define: educational technology*

- Specific Document Types

  If you're looking to find results that are of a specific type, you can use the modifier *filetype*.

  Example Search: *"active learning strategies " filetype: ppt*

  If you want to get more tips on searching, please search " related: https://blog.hubspot.com/marketing/google-advanced-search-tips"

Searching for information on a web page requires the use of Open Educational Resources (OER), which helps you discover and reconstruct knowledge. Wikipedia, itself an example of an OER, has an excellent explanation. OER can include syllabus, lecture notes, presentation slides, videos, podcasts, assigned readings, instructions for various kinds of assignments, and more. Attaching an open license to such resources allows them to be reused, revised, and redistributed.

Term 8. Open Educational Resources (OER)

Open Educational Resources (OER) are teaching, learning and research materials in any

medium – digital or otherwise-that reside in the public domain or have been released under an open license that permits no-cost access, use, adaptation, and redistribution by others with no or limited restrictions. (UNESCO, 2019)

Openly licensed educational resources are teaching, learning, and research resources that reside in the public domain or have been released under a license that permits their use, modification, and sharing with others. Open resources may be fully online courses or digital textbooks or more granular resources such as images, videos, and assessment items. (U.S. DEPARTMENT OF EDUCATION, 2017)

OER, a part of the global open content movement, are shared teaching, learning, and research resources available under legally-recognized open licenses. High-quality OER can save teachers significant time and effort on resource development and advance student learning inside and outside the classroom. Further, open sharing of resources has the potential to fuel collaboration, encourage the improvement of available materials, and aid in the dissemination of best practices. Below we will offer a selection of these resources that may prove useful in your efforts to support learning.

Table 2 shows examples of popular OER repositories along with some important features that could help you select a particular repository.

Table 2. Digital resources for students at different levels

OER Repositories	Subject Domain	Educational Level	QR CODE
National Public Service Platform for Educational Resources (Chinese)	Cross-disciplinary	K12 Education	
Curriki	Cross-disciplinary	Cross-stage K12	
JunyiAcademy	Cross-disciplinary	Elementary to high school K12 Education	
Cicle time fun	Cross-disciplinary	0-6 year old kids	
Fluenc Matters	Reading	K12 Education	
Storyline Online	English learning	K12 Education	
National Geographic kids	Geographic	K12 education	

OER Repositories	Subject Domain	Educational Level	QR CODE
ScienceBOB	Science	K12 educaiton	
Scratch	Technology	Primary school students	
Cool math games	Math	Primary school students	
If you want more, scan the QR code	Every subject	All level	

2.4 Cooperative learning - Studying and playing in group

Homeschooled kids might feel cut off from other students their age-especially during the teen years when friendships are so important. The good news is that, with homeschooling a growing trend, there are plenty of other homeschooled kids out there to connect with either in person or virtually. They can put them in touch with one another.

When studying at home during school closures, you can use communication tools or software to build a learning group or community for cooperative learning. When you act as a part of a group, you can gain experience during collaboration and develop the important skills of critical thinking, self-reflection, and co-construction of knowledge (Brindley, Walti, & Blaschke, 2009).

Social software like Dingtalk (https://www.dingtalk.com), WeChat (https://weixin.qq.com), Twitter, etc. could help you communicate with peers, and build learning groups if necessary.

Term 9. Cooperative learning

Cooperative learning is the instructional use of small groups so that students work together to maximize their own and each other's learning. In cooperative learning situations, there is a positive interdependence among students' goal attainments; students perceive that they can reach their learning goals if and only if the other students in the learning group also reach their goals. Cooperative efforts result in participants striving for mutual benefit so that all group members benefit from each other's efforts, recognizing that all group members share a common fate, realizing that one's performance is mutually caused by oneself and one's colleagues, and feeling proud and jointly celebrating when a group member is recognized for achievement. (Johnson, & Johnson, 2011)

There are five essential elements to mediate the effectiveness of cooperative learning, and they are known as PIGS Face.
- Positive interdependence

Cooperative learning encompasses a wide range of strategies for promoting academic learning through peer cooperation and communication. As the term "cooperative learning" implies, students help each other learn, share ideas and resources, and plan cooperatively what and how to study. The teacher does not dictate specific instructions but rather allows students varying degrees of choice as to the substance and goals of their learning activities, thus making students active participants in the process of acquiring knowledge (Davidson, & Major, 2014).

Like Cooperative learning, project-based learning is also a form of group learning. With project-based learning, the content is baked inside of a long-term project, real-world problem students need to solve in a creative and authentic way. In the process of solving the problem, it requires critical thinking, problem solving, collaboration, and various forms of communication. To answer the driving question and create high-quality work, students need to do much more than remember information. They need to use higher-order thinking skills and learn to work as a team.

Term 10: Project-based learning

Project-based learning takes place in the context of authentic problems, continues over time, and brings in knowledge from many subjects. Project-based learning, if properly implemented and supported, helps students develop 21st century skills including creativity, collaboration, and leadership and engages them in complex, real-world challenges that help them meet expectations for critical thinking. (U.S. DEPARTMENT OF EDUCATION, 2017)

While students are doing group work, projects must be divisible into multiple tasks of the same complexity, and each student is responsible for one task. Online discussions are essential. There are several techniques for doing effective meetings, as follows:

- **Planning and running a meeting:** Plan the meeting carefully: who, what, when, where, why, and how many; Prepare and send out an agenda, identifying issues to be discussed.

- **Steps that should be taken during a meeting:** start on time; clearly define roles; review, revise, and order the agenda; set clear time limits; review action items from the previous meeting; focus on one issue at a time.

- **Steps that should be taken after a meeting:** record final decisions or actions to be taken; assign tasks to group members; set deadlines for the tasks; set the date and place of the next meeting and develop a preliminary agenda; evaluate the meeting, get feedback from members; end the meeting positively; prepare the group memo, distribute to members and others who need to know.

Story 7：Ningbo Xiangshan Experimental Primary School, Ningbo, Zhejiang Province, uses WeChat to promote Chinese learning

A class at grade 6 of Ningbo Xiangshan Experimental Primary School, Ningbo,

Zhejiang Province, uses WeChat to establish a learning group to carry out learning practice. According to the problems of parents' limited time during educational disruption, this class tried to explore new learning strategies and effectively improve the students' Chinese literacy. Learning in WeChat group in this class mainly starts from three aspects: team members punched in spontaneously and play a role model to lead; team leaders randomly select and mobilize all members to participate; friends timely 'like' to achieve resource sharing.

Story tips:

WeChat is a simple and easy-to-use learning tool for all-ages students in China. Group collaborative learning through WeChat can help you supervise each other and establish a good social relationship through group collaboration.

Tools like google doc (docs.google.com), Shimo Doc (https://shimo.im/), Tencent Doc (https://docs.qq.com/desktop) could help you collaborate with peers to produce Word, PPT, and Excel work.

For example, use Google Docs to work collaboratively on a project.

First to plan the task collaboratively, and determine each one's responsibility for the collaborative work. Then open google doc, (as shown in Figure 8 and Figure 9) and select the docs, sheets, slides or forms you want to use.
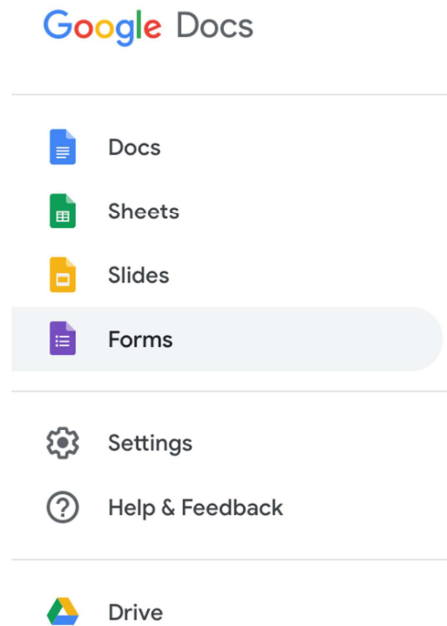
Figure 11 Share the doc

Second, click the share button, and share with peers choosing "can edit".
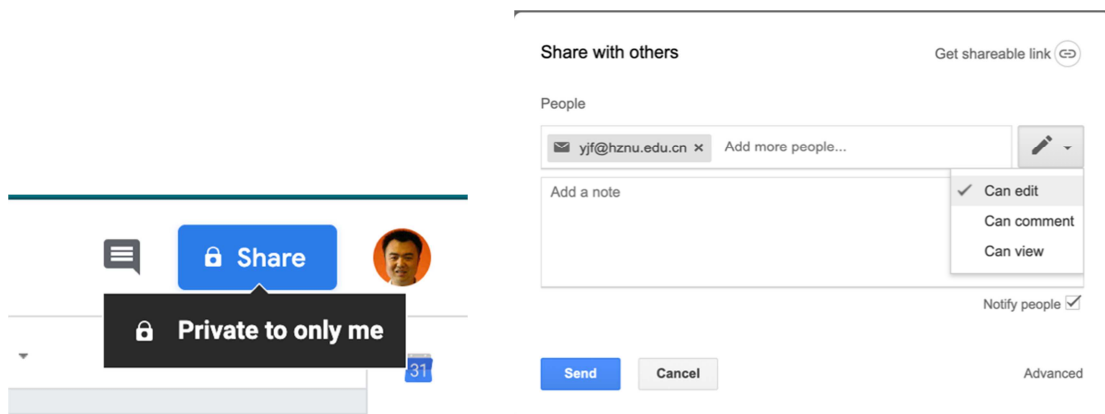
Figure 12 Work together on the collaborative task

Then team members could open the link in the mailbox and work together on the collaborative task.

Story 8: A student at Washington state's Northshore school district wrote his assignments in Google Docs in educational disruption

> Teachers at Washington state's Northshore school district spent the past week figuring out how to teach students to do science experiments at their kitchen tables, or jumping jacks in their home basements instead of gym class. Takumi Ohno, 45, whose 9-year-old son is a third grader in the district. Her son's teacher decided not to livestream her classes but rather to post 15-minute videos that showed her, for example, teaching a math lesson. Her son wrote his assignments in Google Docs that his teacher reviewed.
>
> "It's fun," said Ohno's son, "I get to see my mom the whole day."

Ohno said her son doesn't need much direction. "But sometimes I have to remind him that his break time is up," she said.

Takumi Ohno's third-grade son practices his typing skills

Source：

https://www.nbcnews.com/news/education/coronavirus-closes-schools-teachers-families-brace-massive-experiment-online-education-n1160966

Story tips:
Active Learning at home during educational disruption can make full use of online resources, such as abundant online videos and convenient online learning tools, which will make learning safer, but also need parents to help supervise.

Tip 9: Helping you manage multi-dimensional learning resources (To students)

- Learning Environment Management: Learning environments will be adjusted from the three aspects. Firstly, developing a routine by choosing a quiet and fixed location, like a study; Secondly, avoiding distractions, which contains distractors (such as cellphones, favorite pictures, music, etc.) and people (partners, families, teachers, etc.); Thirdly, clearing up the environment. Maintaining the learning environment clean and tidying up books, stationery, materials, etc.

- Social Support Management: Consulting others for help. Learning is such a complex and difficult process that it is normal to consult others.

2.5   Engaged learning - Making learning process effective

Children's learning efficiency at home would be affected during school closures. Most children may generate a little chaos and disorganization, and are easily distracted, off-task. In order for children to excel, children and their parents need to work together to ensure learning effective and be self-discipline. When students are in charge of their own learning, they feel a sense of belonging—learning becomes an activity defined by them.

In this phase, you can get experience while implementing the strategies you chose and making real-time adjustments to your plans as needed. You might start with a checklist of the tasks required to achieve a certain goal. As you are working, you could make progress with the goal using the task list. You can compare your behavior or skills to a determined set of tasks or behaviors that are listed as necessary to reach a goal and determine whether you are on the target. It is different from self-evaluation, as shown in Table 3.

Table 3. The differences between self-monitoring and self-evaluation

	Self-monitoring	In common	Self-evaluation
What	Checking and adjusting one's ongoing performance Metacognitive strategy	Performance Metacognitive strategy	Judging how well one has learned and performed so far Metacognitive strategy
Why	To measure their effectiveness during a task To change, adjust, improve learning practices in order to succeed.	To improve	Identify strengths and weaknesses To improve next time
When	Ongoing during a learning sequence		At the end of a learning sequence

There are some monitoring techniques that will deepen your learning. (Moore, 2017)
- Writing a learning contract. As you begin to learn, do not be interrupted by other things until you finished your task or achieve your goal.
- Talk about what you learn: Communicate what you learn with your teachers, family, and peers.
- Summarizing: Another good way to help you grasp your learning targets is to summarize what you've learned.

There are questions for monitoring your learning process as follows:
- What aspect of your learning do you think was most effective? Why? How so?
- What aspect of your learning do you think was least effective? Why? How so?
- What specific action(s) would improve your performance based on the feedback you received?
- What advice would you offer to others to help their performance on this task?

2.5.1 How to manage the learning process

For the lower grade primary school students, the academic task is relatively easy, the amount and difficulty of homework is not very big. At the same time, these students are relatively unfamiliar to use learning tools. Therefore, you can ask parents and teachers for help to use strategies to motivate you on reading, writing, and homework. For students who will attend the college entrance examination or high school entrance examination this year, your academic tasks are very heavy, so you can communicate on your burdens with your parents when you feel uncomfortable. For other students with certain self-management abilities, you are always struggling between independence and dependence, initiative and passive. As a result, team collaboration would be a good way to manage your learning process.

To better manage the learning process independently or with your parents, there are some things you can do.

• Gather all the supplies where you learn, and self-assess your readiness to learn.

• Stay focused on one thing. Stick with one task and learn to say "No" to distractions.

• Use a list to check off what you have done and get ready for what's next.

• Re-evaluate and alter goals as required during your unit of study.

There are some things your parents can do to support you.

• Setting up an environment conducive to parents working and children learning.

• If there is no separate room in the home, create separation with headphones and/or visual cues like room dividers, plants, furniture, etc.

• Help your child think of the supplies needed.

• Communicate with children's teachers, and getting familiarized with a school's learning plan

Tip 10: Helping you promote your self-monitoring and properly respond to misbehaviors in learning (To students)

• **Making a daily schedule.** Junior students can ask your parents to monitor you and them with some self-management ability can supervise each other with your classmates. If you will graduate from junior and senior middle schools mainly conduct self-monitoring, you could strictly follow the schedule.

• **Task classification.** According to the degree of urgency and importance of the order, your long-term and short-term goals and tasks will be prioritized by the following principles: a) Important and urgent tasks will be immediately dealt with; b）Important but not urgent tasks, which need detailed planning, will be divided and set aside an amount of time to do every day. c) Urgent but not important tasks, if you do not have time, can be arranged for others to help finish. d) If the tasks are not urgent and important, try not to do them.

• **Dealing with "Interruptions".** Setting up an unexpected event area at the bottom of the daily schedule table, recording the event in this area, and then immediately returning to learning, so as to prevent the real interruption, and then arranging a time for the event after the current learning content is completed.

• **Task division.** For some difficult learning tasks, they can be divided into some easy to complete small tasks, which will be tackled one by one and step by step, so as to effectively avoid slackness caused by difficulties.

• **Keeping a learning journal.** Recording your daily, weekly and monthly learning time, learning content and learning comes by learning journals, so as to keep track of your knowledge mastery and learning progress at any time, and making necessary adjustments in time.

• **Highlighter markers.** Items that are visually isolated from a list are more likely to be remembered, will promote more focus on the task at hand and avoid distraction from other tasks on the list. (Source in Table 4)

Table 4 . Strategies and methods for students at different levels

Level	Psychological Characteristics	Characteristics of Learning Activities	Learning Process	Strategies	Tools
Primary school students	Poor self-control and immature mind	Students in the lower grades have fewer and easier assignments Generally, teachers and parents will give high praises for encouragement.		Encouragements and monitoring of teachers and parents are recommended, which will also help students improve self-monitoring habits.	
			Preview	Students set their daily learning schedules. (Preview with the help of parents)	Paper and pen for handwriting (Primary students write the words down and paste them on their desks as they do not have their own mobile phones)
		Students in higher grades have more types of harder assignments. Teachers and parents will also put forward higher requirements for students.	Online courses in Math	Students should take online courses accompanied by parents with a camera turned on.	
			Accomplish assignments	Teachers post assignments on schedule (and set the durations and rankings for the assignments) to motivate students to accomplish them.	Various learning platforms
		The fourth grade of primary school may be an important turning point in the development of self-monitoring ability from passive control to self-control, from passive self-monitoring to active self-monitoring, and from behavioral monitoring to cognitive monitoring. There is a significant	Review	Mistake recording	Communication platforms
			Self-improvement; extended reading	Using reading punch cards on mobile phones; Writing book reviews on blogs	

		gender difference in self-monitoring capabilities, with girls significantly higher than boys.			
Middle school students	Middle school students are in adolescence with heavy rebellion. Compared with primary school students, they have stronger self-control. They may conduct learning activities self-consciously and actively while dependent on passive monitoring.	Students in middle schools have arduous tasks that are relatively harder. Students' self-control ability plays an increasingly important role in learning.	Teachers give instructions Students conduct learning activities Students accomplish assignments autonomously	Improve students' willpower and self-control. Create a positive classroom atmosphere	Mainly willpower and peer effects

Story 9: Grade 10 students' home study, from Tsinghua University High School, Beijing

> During COVID-19 outbreak, grade 10 students from Tsinghua University High School have adopted online learning. Based on the recommendation of their headteacher, students use the Forest APP for time management and strictly regulate the time spent on mobile phones per day. Based on the abundant learning materials prepared by teachers of all subjects, students can participate in the live streaming at home conducted by teachers or autonomous learning according to the schedule. Under the guidance of teachers, students worked in groups to monitor, learned from each other and made reports regularly.

Story tips:

Students at higher grades already have a good ability of self-monitoring. As a result, you can monitor and urge each other to accomplish learning plans and make mutual improvement.

2.5.2 Tools for managing the learning process

During studying at home, it is not easy to manage the time. The Apps of time management will help us, as shown in Table 5.

Table 5．Tools for self-monitoring on learning process

	Name	Form	Introduction
Learning Time Monitoring	Notebooks / Post-it notes	Paper tools	To-do list
	Tomato TODO	APP	Pomodoro timer + to-do list + data statistics
	Do not be phone freak.	APP	Monitoring the entertainment apps on the mobile phone so as to promote self-control
	Timer on Fire	APP	Countdown tool
	Tomato Clock	APP	Pomodoro timer
	aTimeLogger http://www.atimelogger.com/	APP	Time tracking tool
	ihour	APP	Recording the duration for each task
	FocusNow	APP	The free version of Forest which improves concentration
	Life Cycle	APP	Time recording tool
	Year in progress（Android）	APP	Show the schedule, not by day, hour or minute, but by month, quarter, week,

			year and day
	Habit Streaks（iPhone）	APP	Cultivate habits and clock in daily
	Pendo	APP	Schedule tool
Content and process monitoring	Mnote https://mnote.caiyun.feixin.1008 6.cn/	APP	Stickler tool
	Evernote Chinese website: https://www.yinxiang.com/ English website: https://evernote.com/	APP/PC	Recording and synchronizing daily experience, thoughts and inspirations in a prompt way
	OneNote	APP/PC app	Note tool
	TickTick https://www.dida365.com/	APP	The to-do list recording work and life
	VoodooPad	APP/PC app (paid)	Organizing and managing information via wiki-link.
	Youdao Cloud Note http://note.youdao.com/	APP/ PC app	Editing and sharing online data. Also allowing multiuser collaborative work
	Notebooks for mistakes	Paper tool	Recording mistakes
	Shimo.im https://shimo.im/welcome	Website	A cloud platform for real-time multiuser collaborative editing of documents and sheets.

Motto 7: It's fine to celebrate success but it is more important to heed the lessons of failure. ——Bill Gates, Co-founder of the Microsoft Corporation

2.6   Checking the quality of learning by yourself

Effective self-regulated learning requires that you engage yourself in self-evaluation periodically. Self-evaluation is a process comprising self-judgments of present performance and self-reactions to these judgments (Schunk, 1994).

The methods of self-evaluation are mainly divided into self-evaluation based on learning objectives (teachers' requirements), internal evaluation based on students' past, and relative evaluation based on peers' learning status. It pays attention to students' self-analysis of their homework, self-evaluation of various learning works, self-examination of their daily behavior,

and timely recording and reflecting on their progress and changes. Teachers or parents further guide students to set new goals and formulate realistic action plans to maximize the motivational function of self-evaluation.

Through self-evaluation, you can:

- identify your own skill gaps, where your knowledge is poor
- see where to focus your attention in learning
- set realistic goals
- revise your work
- track your own progress
- if online, decide when to move to the next level of the course

2.6.1 How to assess learning outcome by yourself

After each period of learning or exercise, as a student, you could stop and evaluate your own work. In this phase, you could evaluate your efforts and reward your own performance daily, since it has contributed to the growth of your long-term habits. Different types of methods could be used for conducting self-evaluation, as shown in Table 6.

Table 6 Typical types of self-evaluation

	Rubrics	Test	Concept map
Descriptions	Rubrics are a valuable tool for self-assessment. Because rubrics not only list the success criteria but also provide descriptions of levels of performance, students can use them to monitor and evaluate their progress during an assessment task or activity.	A test will help students to conduct self-evaluation. For students in lower grades, the recommended types of questions include multiple options and fill-in-the-blank quizzes, and free-response questions should be designed to allow students to upload photos of their answers.	A concept map organises facts, concepts, ideas or terms in a visual or diagrammatic way so that the relationship between the individual items is made clearer.
Target user	Middle school and senior grade primary school students	All	Middle school and senior grade primary school students
Learning scenario	Multi-situations; Parents could work with kids to create the rubric, or provided by the teacher	Knowledge mastering assessment	Sum up the learning in a period, organize knowledge

Tip 11: Helping you make effective learning evaluation (To students)

- Making learning evaluation forms and practical evaluation standards to maintain the evaluation clearer.

- The evaluation should be practical and realistic, to avoid high or low evaluation of your own, resulting in inaccurate evaluation outcomes.

- Evaluation objectives should be diversified, including the evaluation of learning process, the evaluation of learning outcomes and the evaluation of learning attitude.

Story 10: Linyi No.1 Experimental Primary School, Shandong Province, called on students to evaluate by themselves

On the road of students' growth, teachers are facilitators, and students are performers. They should practice step by step and find ways to walk more steadily and faster in practice. Based on this understanding, Linyi No.1 Experimental Primary School, Shandong Province has changed that evaluation form formulated by teachers and parents, encouraged students to use their brains to make self-evaluation form, gave the right of evaluation to students, and promoted students to think and summarize themselves.

Source:http://www.jyb.cn/rmtzcg/xwy/wzxw/202002/t20200219_297294.html

Story tips:

Society is a kind of 'large classroom', and life is a kind of 'large textbook'. Only by getting you in this 'large classroom', and letting you understand this 'large textbook', can your growth be all-round and healthy.

2.6.2 Tools for assessing your learning outcome

As shown in Table 7, lots of tools could be used for self-evaluation on learning outcomes. Tools for testing could provide tests and assess automatically, for example, Yingyuliulishuo could provide feedback on your English pronunciation; concept map tools allow you to organize your knowledge or ideas in the concept map personally or collaboratively, Processon could allow you work with your group members on your maps.

Table 7.   Tools for self-evaluation on learning outcome

Tools for self-evaluation			
category	name	Form	introduction
Test	Yuantiku http://www.yuantiku.com/	APP	Yuantiku provides the examinations over the years of nationwide junior and senior middle schools
	Uda https://cn.udacity.com/	APP	A question-centered, personalized English learning application
	Xueba100 http://www.xueba100.com/	APP	A question bank with search engine
	17zuoye https://ucenter.17zuoye.com	APP	17zuoye provides online assignments and thematic exercises.
	Liulishuo https://www.liulishuo.com/	APP	An English learning application combined advanced auto-scoring engine of spoken English
	The exercises/papers purchased by students themselves	Paper products	The exercises/papers provide thematic training
	ALEKS https://www.aleks.com/	Website	An evaluation system for learning process, covering various subjects.
Rubrics	Learning Contract	Document	A plan of learning activities

			negotiated/designed jointly by learners and instructors
	CSI Graphic	Graphic	C represents Colour (Students may choose a color representing the essence of his/her idea); S represents Symbol (Students may choose a symbol representing the essence of his/her idea); I represent Image (Student may choose an image representing the essence of his/her idea)
	KWL	Form	K-W-L—or what I already know, what I want to know, and what I learned
Concept map	Xmind https://www.xmind.cn/	PC App	A mind mapping tool
	MindManager https://www.mindmanager.cn/	PC App	A mind mapping tool
	Inspiration	PC App	A mind mapping tool suitable for brainstorming
	Mubu https://mubu.com/	Website	A tool to organize thoughts by outlines and mind maps
	Coggle https://coggle.it/	Website	: An online collaborative mind mapping tool
	Processon https://www.processon.com/	Website	An online collaborative drawing platform

For example, K-W-L—or what you already know, what you want to know, and what you learned—is an active learning strategy that helps to improve retention and comprehension (as shown in Table 8).

When you are assessing your learning outcome, you could list in the first column the information you already know about the topic you are going to learn. In the second column, you could list questions you would like to answer or information you would like to know about the new topic. Finally, after completing the lesson, in the third column, you could list the information you have learned.

Table 8. KWL method

K What I already know	W What I want to know	L What I learned

2.7   Reviewing what you have learnt

As one teacher said, "Learning doesn't just happen because we get an A or don't make the final cut for the track team. We learn when we reflect on why we were or weren't successful, and how we can make changes going forward to reach a different outcome." Self-reflection can serve as a powerful assessment tool. Students can use it to make changes to improve their learning. We recommend you to make self-reflection regularly. Daily, or weekly? It's up to you.According to your different learning situations at home, you can reflect on different contents, such as how about your self-study, how did you get along with your parents at home, how about your cooperative learning with your classmates, your brothers or sisters, and how did you communicate with teachers.

In the reflection phase, you can synthesize everything you learned and reflect on your experience, learning what works for you and what should be altered or replaced with a new strategy (Ackerman, 2019), then improve your personalized learning. Reflection will help you improve responsibility for your own learning. To support your self-evaluation process, you could regularly consult with the advising instructor, and seek feedback, and then engage in reflection of your achievements. Reviewing and sharing with your family or friends will also help you develop some skills in critical thinking, logical thinking, and comprehensive thinking, which can be applied in other problem-solving situations and learning by yourself.

Term 11. Personalized learning

Personalized learning refers to instruction in which the pace of learning and the instructional approach are optimized for the needs of each learner. Learning objectives, instructional approaches, and instructional content (and its sequencing) may all vary based on learner needs. In addition, learning activities are meaningful and relevant to learners, driven by their interests, and often self-initiated. (U.S. Department of Education, & Office of Educational Technology, 2017)

Personalized learning offers a path to effectively support your learning by reviewing how you learn best and actively engage, motivate, and inspire yourself with the right resources at the right time, in the right medium, and at the right pace. In personalized learning, you can tap into your own strengths, needs, and interests to customize learning and choose what, how, when, and where you learn to ensure to achieve at your greatest potential.

Opportunities for reflection were provided through the completion of a complex and real-world task. Armed with a real-world challenge to address, a task to be handled, or content to explore, students can develop academic and problem-solving skills in a context that is relevant to the learner. This kind of learning style connecting what students have learnt to real world issues, problems, and applications can be called Authentic learning.

Term 12. Authentic learning

Authentic learning experiences are those that place learners in the context of real-world experiences and challenges (U.S. DEPARTMENT OF EDUCATION, 2017). Authentic learning pedagogy not only allows students to engage in realistic tasks using real-world resources and tools, but it also provides opportunities for students to learn with intention by thinking and acting like professionals as they address real problems. (U.S. Department of Education, & Office of Educational Technology, 2017)

Tip 12: Using concept map to review what you learn

Concept maps are a graphic representation of students' knowledge. Creating concept maps can provide you with insights into what you have learnt.

To structure a concept map exercise, follow these three steps:

• Create a focus question that clearly specifies the issue that the concept map should address

• Begin by generating a list of relevant concepts and organizing them before constructing a preliminary map.

• Revise your concept map. Concept maps evolve as they become more detailed and may require rethinking and reconfiguring.

The following practices are encouraged:

• Employ a hierarchical structure that distinguishes concepts and facts at different levels of specificity

• Draw multiple connections, or cross-links, that illustrate how ideas in different domains are related

• Include specific examples of events and objects that clarify the meaning of a given concept

Source: https://www.cmu.edu/teaching/assessment/assesslearning/conceptmaps.html

When students become reflective about their learning process in real-world experiences and challenges, they are strengthening their own capacity to learn. Central to this is the principal of reflection as metacognition, where students are aware of and can describe their thinking in a way that allows them to "close the gap" between what they know and what they need to learn.

According to Johns (2000)' model for structured reflection, self-reflection includes the loop of the following 5 steps(as cited in Wain, 2017), as shown in Figure 10.
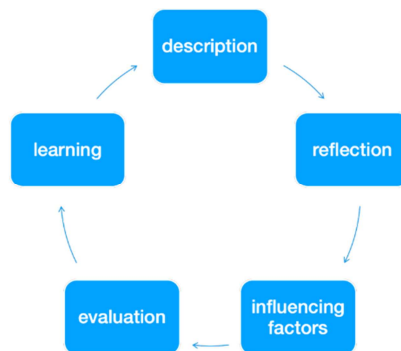
Figure 13．Johns' model for structured reflection (2000)

Self-reflection will help you recall, consider, and evaluate your learning experiences. Johns' model will help you provoke two related processes of looking inwards upon yourself and recalling the experience, and then looking outwards asking the key questions on the matters. This approach can enable you to access the breadth and depth of reflection.

According to Johns' model, you need to answer some questions.
- Description: Describe the event and significant factors
- Reflection: What are you trying to achieve and what are the consequences?
- Influencing factors: What factors affected decision making (internal, external, existing knowledge)?
- Evaluation: Could you deal with it better? What choices did you have, and what were the consequences?
- Learning: What will change because of the experience and how you felt about it? Will it change your way of knowing?

Extensive and relevant modeling in the following 7 questions below can help you conduct self-reflection:(Assessment as Learning, 2020)
- What is the purpose of learning these concepts and skills?
- What do I know about this topic?
- What strategies do I know that will help me learn this?
- Am I understanding these concepts?
- What are the criteria for improving my work?
- Have I accomplished the goals I set for myself?
- Could I teach this problem-solving process to someone else easily? Why or why not?

When you studying at home, you can carry out a self-reflection process by yourself, share with your family or critical friends online for positive advice for improvement. With the increase of your self-reflection skills, so will your self-esteem, and you will feel better.

Tip 13: Helping you improve a comprehensive and effective self-reflection (To students)

- The greatest enemy of reflection is overconfidence. Avoiding falling into the trap of overconfidence.

- After a task is completed, do not hurry to do homework or start the next task. It is necessary to make up for the deficiency and make connections between prior knowledge and new knowledge, so as to build your own knowledge system.

- Consulting your partners, parents, and teachers to evaluate you and share your learning experiences and achievements with them.

- Implementing the follow-up mechanism. Ask yourself moderately such as "why is this column made like this?" "What are my reasons for thinking?" "What do I learn from these analyses?", etc.

- The short-term periodic reflection will be combined with long-term process reflection. For instance, reflective learning can be made on a piece of knowledge, on a course, on a day's learning, or even on a semester's learning.

- Learning tools can be applied to visualize the thinking, which will make the reflection results more intuitive, so as to provide a reference for the subsequent learning process.

Story 11: Students, from Greentown Yuhua Qinqin School, Hangzhou, Zhejiang Province, conducted self-reflection by writing learning dairy

During the educational disruption, students, from Greentown Yuhua Qinqin School, Hangzhou, Zhejiang Province, shared their learning dairies during the home study for joy and improvement. The grade 1 to grade 3 students shared their dairies in which they had got a lot of learning tips by multiple inquiry-based activities. For example, in a Chinese study, when meeting troubles in learning new words and reading texts, students can learn from pictures and puzzles, and look up words from dictionaries. In terms of mathematics learning, students have become young "financial experts" and "explorers" and realized interesting mathematic phenomena while learning RMB of various face values and currencies of different countries, making currency flashcards, managing their lucky money, as well as seeking the symmetrical beauty in life.
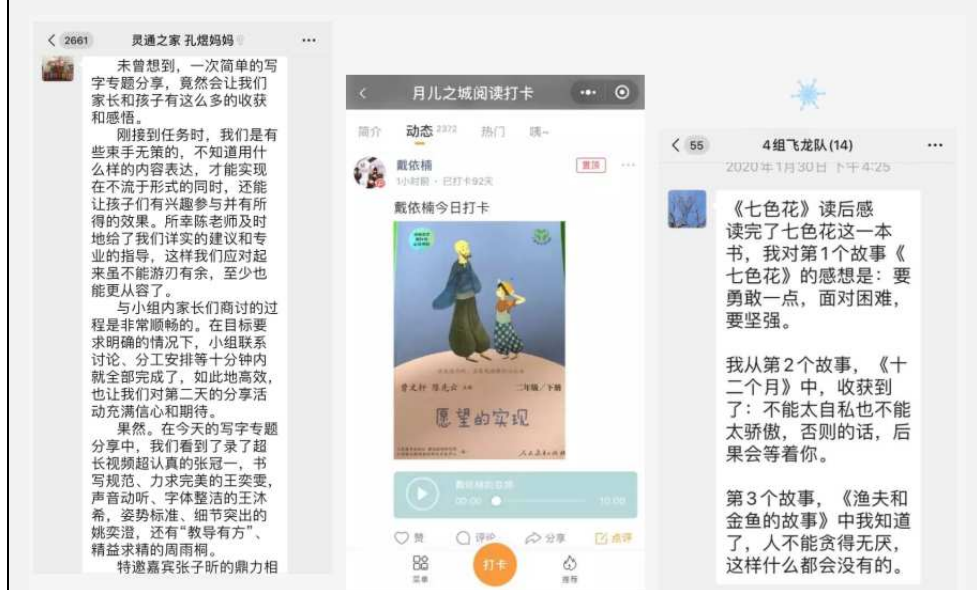
Students, who will graduate from junior middle schools soon, have built their own knowledge system. They can think deeply and continue to study purposefully, so as to analyze and solve problems more comprehensively and quickly, and acquire skills to learn the latest knowledge. Based on mind maps and goal-orientation, students will review the knowledge nodes independently from their own understanding. By connecting different chapters vertically and expanding knowledge application horizontally, the new network of knowledge structure can be formed, which will deepen their own self-reflection.

Source：https://mp.weixin.qq.com/s/j-628gvfD9HsYxJ5wJqKNg
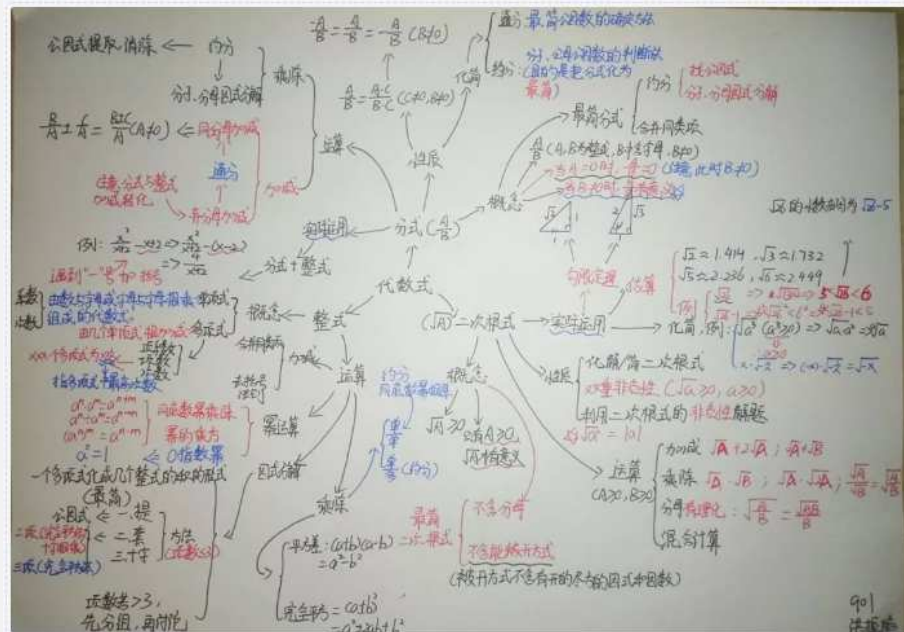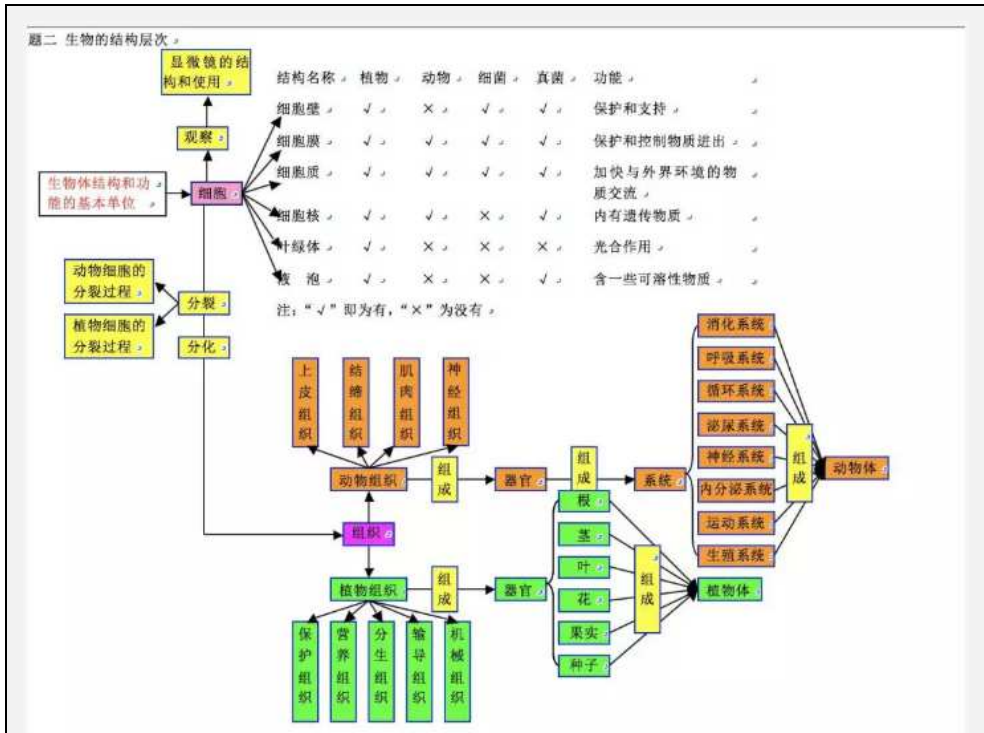
Story tips:

Based on the fact that the knowledge points in different subjects have distinct cognitive goals, students at different levels should adopt different ways of learning and thinking. For students below grade 4, the learning task is relatively easy, so you can ask your parents and teachers to take some forms of activities to help you conduct self-reflection, which can not only enhance your interest in learning, but also develop good study habits. For students who already have kind of self-monitoring, you have enough time to conduct self-reflection by writing diaries, drawing a mind map, etc. However, for students who will graduate from junior and senior middle schools soon, the learning task is heavy, so that your self-reflection could mainly about the content of subject knowledge. You can deepen your understanding by sorting outlines of knowledge so as to better make up for the deficiency.

3   Keeping healthy while studying at home

Staying at home and learning online, with no face-to-face interactions with teachers and peers, may raise more stress and anxiety for students. Therefore, besides protecting you from COVID-19, mental health should come before academics.

3.1   Doing moderate exercise: Helping you stay active

The key to slowing the spread of COVID-19 is to limit contact as much as possible. While school is out, children should not have playdates with children from other households. If children are playing outside their own homes, they must remain 6 feet from anyone who is not in their own household.

While school closures, keeping your child healthy and helping them stay active：

- Encourage your child to play outdoors—it's great for physical and mental health. Take a walk with your child or go on a bike ride.

- Use indoor activity breaks (stretch breaks, dance breaks) throughout the day to help your child stay healthy and focused. (U.S. Department of Health & Human Services, 2020)

Tips 14: Developing good habits

- Using apps for health and fitness to help you stay on track. If possible, you can have access to personal trainers, classes and quick workouts at the click of a button.

- Don't oversleep, but try to sleep at least seven hours a day.

- Cook for yourself and others in need. Add more fruits, vegetables, vitamins, and proteins to your diet. Eat two or three meals a day.

3.2   Keeping a positive mindset

The growing number of adolescents receiving care for internalizing mental health problems and the increasing share receiving care in specialty outpatient settings has put new demands on specialty adolescent mental health treatment centers, according to results of a survey study published in JAMA Psychiatry.

"Providers working with adolescents in various settings are increasingly dealing with patients who are presenting with internalizing problems such as depression, anxiety, and suicidal ideations." Ramin Mojtabai, the department of mental health at Johns Hopkins Bloomberg School of Public Health.

With more and more students studying at home, this lifestyle change can also bring about discomfort. Therefore, mental health and psychosocial considerations for adolescents and children are extremely necessary during the COVID-19 outbreak. (Mojtaba, & Olfson, 2020).

3.2.1 Staying informed on COVID-19

Stay informed on the latest developments about COVID-19, get up-to-date information about local COVID-19 activity from public health officials, and follow the advice given by your healthcare provider, your national and local public health authority or your schools on how to protect yourself and others from COVID-19. We recommend tailoring social media usage to avoid the swirling vortex of social media.

Tips 15: Talking about COVID-19 (To Parents)
- Allow your children to talk freely
- Always answer your children's questions truthfully.
- Talk to your children in a way they can understand.
- Give your children space to share how they are feeling and let them know you are there for them.

3.2.2 Keep calm and positive

When you are studying at home during educational disruption, you may feel stressed and respond in different ways, such as being more clingy, anxious, withdrawing, angry or agitated, bed wetting, etc. Take it easy, you can take the following treasures to relax.

Tips 16: Keep calm and manage stress (To Children)
- Avoid social media that makes you feel panicked. We all need a break sometimes.
- Find someone who you can talk to about how you are feeling.
- Taking time to focus on your health, training, diet, physical activity levels, and health habits, as well as reassessing your work.
- Go for a walk or exercise at home.

Tips 17: Keep calm and manage stress (To Parents)
- Set aside time to spend with each child: It can be for just 20 minutes, or longer – it's up to you.
- Try praising your children or teenagers for something they have done well. They may not show it, but you'll see them doing that good thing again.
- Speak in a calm voice. Shouting at your child will just make you and them more stressed and angrier. Get your children's attention by using their name.
- Teens especially need to be able to communicate with their friends. Help your teens connect through social media and other safe distancing ways.
- Be open and listen to your children. Your children will look to you for support and reassurance. Listen to your children when they share how they are feeling.
- Accept how your children feel and give them comfort.

3.2.3 Making new routines

As much as possible, staying at home should not disrupt your sleep-wake cycle, working hours and daily activities. Making new routines, and create a flexible but consistent daily routine: (a) Make a schedule for you and your children that has time for structured activities as well as free time. This can help children feel more secure and better behaved. (b) Children or teenagers can help plan the routine for the day – like making a school timetable. Children will follow this better if they help to make it. (c) Include exercise in each day- this helps with stress and kids with lots of energy at home.

Tips 18: Keep to a regular schedule

- Take regular breaks.
- Make time to exercise.
- Keep to a regular sleep schedule.
- Limit distractions when possible (turn off social media notifications, for example).
- Set daily and weekly goals.
- Make time to socialize, even if it's virtual.

Tips 19: Stay away from bad behaviors (To parents)

- Stop it before it starts! When your children start to get restless, you can distract with something interesting or fun: "Come, let's go outside for a walk!"
- Feel like screaming? Give yourself or your children a 10-second pause. Breathe in and out slowly five times. Then try to respond in a calmer way.

If you want to get more parenting tips, please click:
- *Coronavirus disease (COVID-19) advice for the public: Healthy Parenting: https://www.who.int/emergencies/diseases/novel-coronavirus-2019/advice-for-public/healthy-parenting*
- *Mental Health and Psychosocial Considerations During COVID-19 Outbreak: https://www.who.int/docs/default-source/coronaviruse/mental-health-considerations.pdf?sfvrsn=6d3578af_8*
- *Helping children cope with stress during the 2019-nCoV outbreak: https://www.who.int/docs/default-source/coronaviruse/helping-children-cope-with-stress-print.pdf?sfvrsn=f3 a063ff_2*
- 《 家 安 心 安 ： 新 冠 肺 炎 疫 情 下 的 家 庭 心 理 自 助 手 册 》 https://jsek.bnuic.com/BitsPressV2/reader/ddvakj/index (Chinese Version)

Story 12: Yanji Jinxue Primary School, Jilin Province carried out a series of activities on thanksgiving and filial piety

> Yanji Jinxue Primary School, Jilin Province, carried out a series of activities to encourage students to "be grateful, be polite and filial", to pay tribute to the anti-epidemic heroes in a special way, and to express their love to teachers, mothers, grandmothers, etc. Children get close to their families by doing housework, helping family massage, punch backs, wash feet, and hugging, etc. Versatile children tried to express their blessings to their teachers and mothers in a variety of forms like a dance, a song, a piece of performance, a handcraft, etc.

Source：http://www.jinxue1953.com/Huaihi_ReadNews.asp?NewsID=420

Story tips:

Parent-child interaction is helpful to relieve the anxiety brought by long-term staying at home, such as handcrafting, drawing, parent-child games, indoor sports, making food, taking care of plants and other activities, which can not only cultivate children's labor consciousness and hands-on ability but also conduce to the physical and mental health of children's home study.

Conclusion

UNESCO stated that, as of 25 March, school closures in many countries worldwide during the spread of COVID-19 made 1,524,648,768 learners being excluded from the normal learning process. Alternative approaches, such as online learning at home, were used to maintain undisrupted learning. However, when students at different grades studying at home, parents and kids are facing some challenges. For example, (a) children's capacity of self-control is poor; their works delay; they are not willing to go to bed on time; (b) children have learning anxiety, especially for the students who are going to graduate from junior and senior high schools; (c) children are not interested in studying; (d) children are addicted to electronic devices (mobile phones, tablets, etc.); (e) children are rebellious and always act contrary to the parents.

To live well in the uncertainty and complex world, students should be prepared to master the 21st century skills to solve problems actively. Self-regulation skill is the one that plays a key role in students' success. During educational disruption, it is a good opportunity to promote students' active learning at home to train self-regulation skills. To promote active learning at home, the following experiences are identified to facilitate your self-regulated learning when you are studying at home.

(1) ***Scheduling learning and playing in balance.*** Striking a balance between learning and playing is the first step for a student's effective self-regulated active learning, and a balanced schedule should be made by yourself. You should first select a calendar or something like a notepad that can be scheduled. Either way, you should be able to easily view, modify, and label, and have enough space to schedule short- or medium-term daily learning. Sticking to a learning plan is as important as creating a learning plan. After completing a day of study as planned, you should give yourself a small reward to motivate yourself to continue.

(2) ***Choosing learning resources on demand.*** Selecting learning contents and resources on your demand could give you more options for learning, and good family-school cooperation should give you more advice. You need to find, evaluate, and use free digital learning resources and other resources to solve your learning problems, mastering the basic skills of using search engines could be helpful.

(3) ***Inspiring the study from playing.*** Studying and playing in a team are the guarantee for effective active learning. When studying at home, you may feel lonely as no peers are around. To learn actively at home, communication tools or software could be used to build the learning community for promoting online communication and team cooperation.

(4) ***Engaged in learning by self-monitoring.*** Making the learning process effective is the key to implementing active learning at home, and different forms of family accompany will bring more support to children of different ages. In the self-monitoring process, you could get experience implementing the strategies you chose and making real-time adjustments to your plans as needed. Tools, such as checklists, could be used to determine whether you are on the target, and then to change, adjust, and improve learning practices to succeed.

(5) ***Nourishing learning ability with e-assessment.*** Checking the quality of learning could promote you to identify your strengths and weaknesses so that you can improve next time.

Rubric, tests, concept maps are the typical methods students could utilize for self-evaluation. Tools could be used for conducting self-evaluation, for example, test tools could provide tests and assessment automatically, concept-map tools allow you to organize your knowledge or ideas in the concept map personally or collaboratively.

(6) ***Carrying out reflection on learning methods.*** Reviewing and sharing what you have learnt is a driver for you to become reflective practitioners and ultimately increase self-awareness, self-identity and personal growth. In this phase, you could synthesize everything you learned and reflect on your experience, learning what works for you and what should be altered or replaced with a new strategy. A structured model of self-reflection is helpful to develop your ability to reflect on your experiences during learning at home.

(7) ***Exercising daily and moderately.*** During COVID-19, moderate exercise is necessary for you to keep physical and mental health. Using apps for health and fitness to help you stay on track. Most importantly, keep calm and positive, get up-to-date information about local COVID-19 from public health officials, and tailoring social media usage to avoid the swirling vortex of social media. It will be better to create a flexible but consistent daily routine, and make new routines with your family.

These seven elements can be named as a SCIENCE model for children learning actively at home during school closures.

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UNESCO International Research and Training Centre for Rural Education (UNESCO INRULED) was jointly founded by the Chinese government and UNESCO and located at BNU in 2008. The vision of UNESCO INRULED is to promote social-economic development in rural areas by bringing about positive changes in the thinking and behavior and rural people, who make the majority of the population in developing countries and to achieve the goals of Education for All. UNESCO INRULED has published over 40 publications, including research projects, training modules, magazines as well as newsletters. UNESCO INRULED also has established a wide network of cooperation with UN agencies, development agencies, non-governmental organizations, foundations and closed links with UNESCO institutions and centers.

UNESCO Institute for Information Technologies in Education (UNESCO IITE)

UNESCO Institute for Information Technologies in Education (UNESCO IITE) was established as an integral part of UNESCO by the General Conference of UNESCO at its 29th session (November 1997) and is located in Moscow, Russian Federation. IITE is the only UNESCO category 1 Institute that holds a global mandate for ICT in education. In line with the new Education 2030 Agenda, IITE has developed its strategic priority areas to meet new demands and tasks ahead. The mission of IITE in the new era is promoting the innovative use of ICT and serving as facilitator and enabler for achieving Sustainable Development Goal 4 (SDG 4) through ICT-enabled solutions and best practices.

Smart Learning Institute of Beijing Normal University (SLIBNU)

Beijing Normal University (BNU) grew out of the Education Department of Imperial University of Peking established in 1902, which initiated teacher training in China's higher education. After the development for over a century, BNU has become a comprehensive and research-intensive university with its main characteristics of basic disciplines in sciences and humanities, teacher education and educational science. Smart Learning Institute (SLI) is jointly established by Beijing Normal University and a global educational technology company NetDragon Websoft. SLI is a comprehensive experimental platform involving scientific research, technology development, and innovative instruction. SLI focuses on detecting learning patterns powered by ICT, creating smart learning environments and platforms for life-long and life-wide learning, as well as supporting diversified, personalized and differential learning needs for digital learners.

International association of smart learning environment (IASLE)

The International association of smart learning environments (IASLE) is a cutting-edge professional forum for researchers, academics, practitioners, and industry professionals interested and/or engaged in the reform of the ways of teaching and learning through advancing current learning environments towards smart learning environments. It provides opportunities for discussions and constructive dialogue among various stakeholders on the limitations of existing learning environments, need for reform, innovative uses of emerging pedagogical approaches and technologies, and sharing and promotion of best practices, leading to the evolution, design and implementation of smart learning environments.

Arab League's Educational, Cultural and Scientific Organization (ALECSO)

The Arab League Educational, Cultural and Scientific Organization (ALECSO) is a Tunis-based specialized institution working under the umbrella of the League of Arab States. It is essentially concerned with the development and coordination of the activities related to education, culture and sciences in the Arab World. It was established by virtue of Article 3 of the Arab Cultural Unity Charter, and was officially announced in Cairo on July 25, 1970.

As stated in Article One of its Constitution, ALECSO was established with the aim of promoting Arab intellectual unity through education, culture and sciences, and enhancing the educational, cultural and scientific level in the Arab World so that it can positively contribute to universal civilization.

Edmodo

Edmodo is an educational technology company offering a communication, collaboration, and coaching platform to K-12 schools and teachers. The Edmodo network enables teachers to share content, distribute quizzes, assignments, and manage communication with students, colleagues, and parents. Edmodo is very teacher-centric in their design and philosophy: students and parents can only join Edmodo if invited to do so by a teacher. Teachers and students spend large amounts of time on the platform, both in and out of the classroom. Edmodo is free to use, but it also offers premium services.