



A Development of Online Learning Format in the Age of The New Normal Life

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Article History	Abstract
Received: 06 June 2023 Revised: 05 Sept 2023 Accepted: 11 Sept 2023	<p><i>The purposes of this research were: (1) to study the problems and obstacles of online learning in the age of the new normal life; (2) to study the ways to develop the model of online learning in the age of the new normal life; (3) to propose the appropriate model of online learning in the age of the new normal life. The samples used in this study were 183 personnel of Mahamakut Buddhist University and ten key informants. The instrument used to collect data was a research questionnaire. Statistics used in this research consisted of Percentage, Mean and Standard Deviation. The research results showed that: 1) The problems and obstacles of online learning in the age of the new normal life, in total, were at moderate level. In particular, problems about instruction media had the highest mean value, followed by problems about learners, problems about instructors, problems about learning evaluation, and problems about cooperation respectively. 2) The ways to develop online learning in the age of the new normal life, in total, were at high level. In particular, development of instruction media had the highest mean value, followed by learning evaluation, cooperation, development of learners, and development of instructors respectively. 3) The model of online learning in the age of the new normal life consisted of 1) Development of instructor which consisted of teaching preparation, punctuality, teaching technic, skills in using teaching instrument, and skills in persuasion and motivation; 2) Development of instrument media which consisted of arrangement of up-to-date teaching instruments, development of chatroom, arrangement of high speed internet, and development of communication channel; 3) Development of learners which consisted of cultivating intention and concentration in learning, skills in using learning instruments, interaction with classmates, and interaction with instructors; and 4) Development of learning evaluation which consisted of work assignment, following up assignment, building indicators for grading, and fairness an rightness in evaluations.</i></p>
CC License CC-BY-NC-SA 4.0	Keywords: <i>Online Learning, Cooperation, Learning Evaluation, Teaching Technic</i>

1. Introduction

Acute Online learning or E-Learning is an innovation that educational institutions, agencies and organizations at all levels can use to benefit teaching and knowledge transfer, development of learning resources for further education. The current online learning system is more modern than ever. It gives students the opportunity to learn through multimedia on the internet such as images, texts, audios, graphics, videos and animations. Students can access information anywhere and anytime. Therefore, students have their own freedom to study and are in control of their own learning which promotes student-centered learning, resulting in an efficient learning process (Salem, 2017).

Online education has become an important form of teaching and learning during COVID-19 epidemic to compensate for regular in-person study which pose a greater risk of spreading the disease.

Channuwong and Ruksat (2022), Channuwong et al. (2023) and Phrakhrusripariyativitan (2020) reported that the outbreak of COVID-19 pandemic has created anxiety, stress and panic for the world. The reason is that this virus is capable of destroying respiratory system and causing weak people to get a disease quickly. Prevention methods are also difficult as they can spread through sneezing, coughing and touching.

Online education has become more popular in foreign countries as it can suit the needs of students who are in working age. Students are able to work and continue to pursue knowledge and education certificate at the same time. This enables students to new opportunities for lifetime learning and self-development. In Thailand the Ministry of Education has certified online learning or distance learning via the Internet since 2006, making online education progressively growing twice as fast.

Online education also saves time, travel costs and expenses which benefit students. Moreover, educational institutes are able to manage and transfer knowledge to students without limits. According to the Office of the Educational Council (2017), learning, innovation, media and technology are key factors that drive and develop the learning society, increase learning accessibility to students, and allow them to learn continually throughout their lives.

Online media are able to publicize information via internet connection. These media play a vital role in every occupation and everyday lives. Most people use online media constantly, whether to gather information, interact socially, send messages, research and study. Therefore, online media are the most influential among modern people (Channuwong, 2018; Jamnien & Jamnien, 2018). Online education becomes increasingly essential in the current COVID-19 outbreak due to the fear of the disease transmission if classes are conducted normally. Therefore, educational institutions must adapt to the situation at hand to facilitate students. Students have to be responsible and instructors should motivate their students. Mesinsee (2013) reported that aligning teaching methods with students' behavior and application of modern technologies to incentivize students are greatly challenging to the instructors.

Online learning in educational institutions is the new form of education that has been recently utilized in every level from primary, secondary and tertiary education since the outbreak of COVID-19. Some institutions may be prepared, and some are not or have certain obstacles such as instructors, teaching media, learners, evaluation, cooperation relevant personnel. As a result, it is necessary to study the problems, obstacles and guidelines for developing an online education model in order to propose an education model that is suitable for learners in the age of the new normal life which significantly differ from life prior to the outbreak. Therefore, the researcher is interested in studying the development of online education formats in the new way of life.

Research Objectives

To study the problems and obstacles of online learning in the age of the new normal life. To study the ways to develop the model of online learning in the age of the new normal life. To propose the appropriate model of online learning in the age of the new normal life.

2. Literature Review

Online education (E-learning) means learning content or information for teaching or training which uses text and image presentation that are integrated with animation, video and audio; using technology to transfer content. E-learning is classified into 3 types: 1) Supplementary media which refers to media intended to learners' further enrichment of knowledge and experience such as supplementary sheets, videos, animations, images, etc. 2) Complementary media refers to the use of online media in addition to other teaching methods, such as designing or recommending learners to further study from E-learning. In general, teachers will set some objectives for students to study and research more from online media. 3) Comprehensive replacement refers to the use of online media that completely replaces classroom lectures on the basis that multimedia can help convey the content of academic subjects as effectively as in-person teachings (Laohajrasang, 2002). Online learning is self-study through internet or intranet system. Learners will be able to study according to their own capabilities and the media used are images, audios, videos and other multimedia. Instructors, classmates and students can interact, communicate, converse and exchange ideas with one another through email,

web-board, chat, LINE and social network. Everyone can study online at anywhere and anytime (Nopparat, 2005).

The current teaching and learning model use computers and internet networks to enhance the efficiency of teaching and learning. This process shifts the role of the teacher from instructor to educational designer. The use of technology to support teaching and learning can help foster social connection between students and enhance learning efficiency for students resulting in increased communication between instructors and learners. Moreover, students can express their own opinions freely and learn at any time and place (Barbour & Plough, 2009). This is different from normal learning in the classroom where classroom attendance at the specified time and place is required. The teacher will determine the teaching and learning process to help learners achieved the determined learning objectives by preparing contents and giving lectures so that a large number of learners can learn the content simultaneously in a limited amount of time (Khaemane, 2004). For online learning, students will be able to choose their own courses and many resources can be quickly and conveniently accessed via the internet whereas, for on-site learning, resources are limited to textbooks and documents from instructors and communication is limited only in the classroom. Overall, online learning frees students from time constraints, provides high privacy and access to vast information at a low cost (Tangphanthong, 2017).

Online teaching is considered a form of teaching that uses electronic devices to transfer knowledge. It is another type of highly effective teaching and learning arrangement which teachers should use and must learn how to use it properly. There are various formats which can be used as follows: (1) Online Learning Media are classified further into 2 types: 1) Stand alone, which is a closed-system online content that can be displayed on any person's computer without being linked to other users and is inaccessible by others. 2) Online learning media, an opened online teaching system that can be displayed by other computers with similar systems linked together as a network. This may be an internal network system (LAN) or an Internet system. (2) E-learning media can be classified according to two types of communication methods: 1) One-way Communication is when the sender does not give the receiver the opportunity to respond nor the interest towards the response of the other party. This type of media includes E-Books, still images, animations that focuses on providing information. Although it gives students the opportunity to interact with the media, it does so for learning and studying the content only. 2) Two-way Communication is a communication which both sender and receiver exchange information between one another. There is also an interactive flow of information. This type of media consists of an interactive type of CAI lesson or lesson management system (Thammatha, 2014).

3. Materials And Methods

Population and Sample

The population used in this study is 512 personnel in Mahamakut Buddhist University who are instructors, employees and students. The researcher used Taro Yamane's formula to determine the sample sized, and 225 samples were obtained. Questionnaires are distributed to all sample participants via convenience sampling and 10 key informants were interviewed.

Variables Used in the Study

The independent variables used in this study are sex, age, marital status, educational background, and occupation. The dependent variables are problems and obstacles in online education: (1) problems and obstacles of online learning, consisting of: 1) problems about instructors, 2) problems about instruction media, 3) problems about learners, 4) problems about learning evaluation, and 5) problems about cooperation. The second dependent variable is (2) The ways to develop online, consisting of: 1) development of instructors, 2) development of instruction media, 3) development of learners, 4) development of learning evaluation, and 5) cooperation.

Instruments Used Data Collection

The researcher used questionnaires to gather quantitative data by the following procedures. Study and research relevant ideas and theories regarding online learning from books, textbooks, research articles, and journals as a guideline to serve as guidelines for creating the questionnaire. Create a 3-part questionnaire for data collection: 1) 5 questions about personal information (sex, age, marital status,

educational background and occupation), 2) 20 questions regarding problems and obstacles of online learning in the age of the new normal life, 3) 20 questions regarding the ways to develop the model of online learning in the age of the new normal life Improve and adjust the questionnaire based on the feedback of the specialists and try out with 30 non-sample participants who are similar to the actual sample group. This is done so to determine Cronbach's Alpha Coefficient. Next, once the reliability coefficient of the questionnaire is obtained, the questionnaire is distributed to sample participants to conduct the research

Creation and Development of Instrument Used to Gather Information

The questionnaire has been verified through the following steps: The content of the questionnaire was verified by three research scholars in the related field. The congruence between the questions and research objectives are investigated using Item Objective Congruence Index (IOC). Cronbach's Alpha obtained is equal to 0.95. The reliability of the questionnaire was investigated by trying out with 30 non-sample participants. The reliability value of the whole questionnaire is 0.93

Data Collection

The researchers liaised with administrators and employees in the office to compile the questionnaires. The researchers also informed the employees and sample participants regarding the research prior to completing the questionnaire. The researchers distributed the questionnaire to 225 participants. 183 copies (81.33%) were returned. The completeness and validity of questionnaire were verified prior to data analysis. The researcher recruited 10 key informants who are specialized at development of online learning model to conduct an in-depth interview.

Data Analysis

In this study, the data are analyzed by the following means. The researcher statistically and quantitatively analyzed the data obtained from the Five Rating Likert Scale in the questionnaire with social science software. The score criteria consist of the following: 5 = strongly agree, 4 = agree, 3 = neutral, 2 = disagree, 1 = strongly disagree. The researcher determined the interpretation of the average value at 5 levels as follows: 4.21 - 5.00 = very high, 3.41 - 4.20 = high, 2.61 - 3.40 = moderate, 1.81 - 2.60 = low, and 1.00 - 1.80 = very low. Qualitative data analysis is conducted by an in-depth interview with key informants regarding problems and obstacles, and ways to develop online learning model in the age of the new normal life. Then, descriptive analysis is performed after data collection.

Statistics Used in the Study

The researcher used descriptive statistics to perform data analysis on the questionnaire to determine frequency and percentage. In addition, mean and standard deviation are used to analyze problems and obstacles, and ways to develop online learning model in the age of the new normal life.

3. Results and Discussion

Results Analysis of Personal Factors Among Participants

The researcher found that, out of 183 participants, the majority of them are male (67.75%) and the other 32.24% are female. Participants who are less than 25 years old have the largest number at 33.33%, followed by those between 26 to 35 years old (25.13%), and more than 56 years old (7.65%).

For marital status, 62.29 percent of participants are single, followed by married (33.33 %), and divorced/widowed (1.63%). The majority of participants graduated with a bachelor degree (57.37%). Subsequently, 18.03 percent participants graduate at lower level than bachelor's degree. Lastly, only 10.92 percent of participants earn a Ph.D. For occupation, the majority of participants are public servants or work for government agencies (36.06 %), followed by other occupations (27.86%0, and private business owners (17.48%).

Results Analysis of Problems and Obstacles of Online Learning in the Age of the New Normal Life.

Table 1: Problems and Obstacles of Online Learning in the Age of the New Normal Life.

Problems and Obstacles	\bar{x}	S.D.	Interpretation	Rank
1. Instructor	2.82	1.20	Moderate	3

2. Instruction Media	2.88	1.13	Moderate	1
3. Learners	2.87	1.17	Moderate	2
4. Learning Evaluation	2.72	1.19	Moderate	4
5. Cooperation	2.67	1.24	Moderate	5
Overall	2.79	1.18	Moderate	

According to Table 1, participants reported that the overall problems and obstacles of online learning in the age of the new normal life is at a moderate level ($\bar{x} = 2.79$, S.D. = 1.18). In particular, the problem of instruction media has the highest mean value ($\bar{x} = 2.88$, S.D. = 1.13), followed by, learners ($\bar{x} = 2.87$, S.D. = 1.17), instructors ($\bar{x} = 2.82$, S.D. = 1.20), learning evaluation ($\bar{x} = 2.72$, S.D. = 1.19), and cooperation ($\bar{x} = 2.67$, S.D. = 1.24) respectively.

Results Analysis of Ways to Develop Online Learning Model in the Age of the New Normal Life.
Table 2: Ways to Develop Online Learning Model in the Age of the New Normal Life.

Ways to Develop Online Learning Model in the Age of the New Normal Life.	\bar{x}	S.D.	Interpretation	Rank
1. Instructor Development	3.60	1.05	High	5
2. Instruction Media Development	3.65	1.06	High	1
3. Learner Development	3.61	1.08	High	4
4. Learning Evaluation Development	3.64	1.12	High	2
5. Cooperation	3.63	1.12	High	3
Overall	3.62	1.08	High	

According to Table 2, the opinion of participants on the overall ways to develop learning model in the age of the new normal life is at a high level ($\bar{x} = 3.60$, S.D. = 1.05). In particular, the development of instruction media has the highest mean value ($\bar{x} = 3.65$, S.D. = 1.06), followed by, learning evaluation ($\bar{x} = 3.64$, S.D. = 1.12), cooperation ($\bar{x} = 3.63$, S.D. = 1.12), learners ($\bar{x} = 3.61$, S.D. = 1.08), and instructors ($\bar{x} = 3.60$, S.D. = 1.05) respectively.

In-depth Key Informants Interview Results on Problems and Obstacles, and Ways to Develop Online Learning Model

The results of interviewing 10 key informants in-depth regarding problems and obstacles, and ways to develop online learning model can be summarized as follows.

Instructors Problems and Solutions. Some instructors lack preparation and skills required for online teaching. Some lack teaching equipment. The teachings are not interesting because some instructors still use the traditional way of lecturing with little interaction and technique to get the students' attention. In addition, some instructors lack skills in using programs to access various websites, including skills in displaying various media. They lack essential tools to design their lessons to support the online learning such as computers used in teaching and limitations of personnel who specializes in information technology systems. The solution is to increase the preparedness for instructors such as studying the content in advance and preparing slides and lessons beforehand. There should be training in online teaching skills and equipment usage skills. In addition, teachers should employ teaching techniques that can get a hold of student attention and increase classroom interaction in online learning. Furthermore, instructors should be trained in using media that can be linked to various websites such as YouTube.

Instruction Media Problems and Solutions. The problems are that the internet system is unstable. The signal is sometimes poor, intermittent. Some students do not have little to no knowledge about using communication devices and have problems submitting their assignments. In addition, online learning materials (i.e., online textbooks) are scarce and the lack of diverse teaching media that are interesting and modern is also the problem. The solution is the internet system should be modernized to be fast, operational, and efficient. Students should increase their proficiency to use online devices.

Lastly, teachers should prepare online teaching materials such as videos or slides for teaching, etc. beforehand.

Learners Problems and Solutions. The problem is that the quality of learning has decreased due to some learners do not show interest towards the lesson. Teachers cannot control students' behavior. Some of them left the camera on but do not pay any attention. Some learners may have communication problems and did not inquire about the content of the lessons taught by the teacher. Learners lack interaction with instructors and classmates. Some lack skills in online learning making them unable to attend the classroom or join the class chatroom. Some students also do not attend class or submit assignments on time. The solution is that learners must pay attention to their studies, be disciplined and have self-control, and do not engage in other activities during class time. In addition, students are encouraged to ask instructors questions to get clear answer and increase interaction with instructors and classmates. Furthermore, students need to develop their online learning skills and modern equipment for online classes should be provided. Instructors should also strictly moderate their students in classes.

Evaluation Problems and Solutions. The problem is that evaluation may not reached the set standards or students may achieve less scores compared to on-site classes. Some students do not attend classes consistently and do not submit their assignments on time, causing increased difficulty in learning evaluation. The solution is to find additional evaluation means such as class attendance, asking questions and classroom interactions. Instructors may give assignments to students at the end of the lesson for further student research. Assignments should be focused on worksheets, activities or reports since students' attendance may not match the actual attendance.

Cooperation Problems and Solutions. The problem is that most students and some parents do not cooperate, and students' room do not suit online learning. This causes students to lack focus during online classes. The solution is that parents should arrange students' rooms to suit online classes so that students would feel like they are in classroom. Instructors should check attendance before and after classes to make sure that students actually participate in lectures and activities.

Questionnaire participants provided feedback that the overall problems and obstacles of online learning in the age of the new normal life is at moderate level. When each aspect is considered individually, the problem of instruction media has the highest mean value, followed by, learners, instructors, learning evaluation, and cooperation respectively. Salem (2017) reported that the problem of teaching media is the main problem for online education. The reason is that some students used devices that are not efficient enough. Their internet connection is unstable causing discontinuity in learning or receiving information from the teacher. In addition, some students can concentrate and study very well. but some lack discipline, lack self-control and do not pay attention which may cause learning to be ineffective.

The opinions of respondents on the overall ways to develop learning model in the age of the new normal life is at a high level. When each aspect is considered individually, the development of instruction media has the highest mean value followed by, learning evaluation, cooperation, learners, and instructors respectively. These results suggest that instruction media is highly important for online learning. The Office of the Education Council (2005:5) stated that instruction media, innovation and technology are important factors in developing a learning society. Promoting and creating mechanisms to provide every learner with opportunities and choices to enter continuous lifelong learning through a variety of formats and methods will lead to the development of quality, efficiency, and capacity of learners. In addition, Maesincee (2013) explained that online learning media are an adjustment of the teaching and learning processes to be in line with the behavior of the learners and the changing situation. The use of modern technology in teaching and learning will be a tool to stimulate learners' interest. This is a great challenge for teachers. Therefore, teaching materials need to be developed appropriately and effectively used in teaching and learning processes. Bangbon et al. (2023) and Sukbanjong (2011) found that online learning allows students to learn continuously, have the freedom to study anytime and anywhere without limits. Thammatha (2014) stated that instruction media must be properly designed for effective teaching and learning. The idea must be translated into a work that others can see, perceive, or feel. Therefore, designing teaching media is a systematic

planning process by analyzing learning elements, activities and learning assessments so that teachers can effectively transfer knowledge to students. Experienced instructors will be able to use their experience knowledge, and their ability to select teaching methods, teaching materials, and activities for effective classes and achieving the set objectives. In addition, the Ministry of Education (2017) has set the 12th Education Plan of the Ministry of Education (2017-2021). In the 2nd mission: enhancing access to educational services in the country equally and Strategy 5: Promote and Develop Digital Technology Network System for Education, there are 4 policies. 1) Develop digital technology network system for modern education and non-redundant management to ensure that service recipients can access them thoroughly and efficiently. 2) Develop a national central educational database system. Database reporting system is created to link educational information at all levels/types of education into an updated, standardized and unified system. 3) Produce and develop applications or electronic learning media for learners, educational institutions, and educational agencies at all levels/types of education to systematically increase the quality of learning. 4) Provide basic information technology equipment/resources to students adequately, thoroughly, and suitable for further pursuit of knowledge on their own.

4. Conclusion

Development of Online Learning Model in the Age of the New Normal Life

From the research results and in-depth interviews, the researchers propose an online learning model as follows:

- (1) Teacher development includes preparation for teaching, punctuality, teaching techniques, skills in using teaching equipment, persuasion and motivation skills
- (2) Development of teaching media includes providing up-to-date tools/equipment, developing chat rooms, improving the internet system to be fast, and developing communication channels
- (3) Student development consists of developing attention and concentration in class, improving skills in using educational equipment/tools, improving interacting classmates and teachers. Lastly,
- (4) Developing evaluation system includes giving assignments, sending work or submitting reports, and development of indicators for fair scoring and accurate assessments as shown in Figure 1.

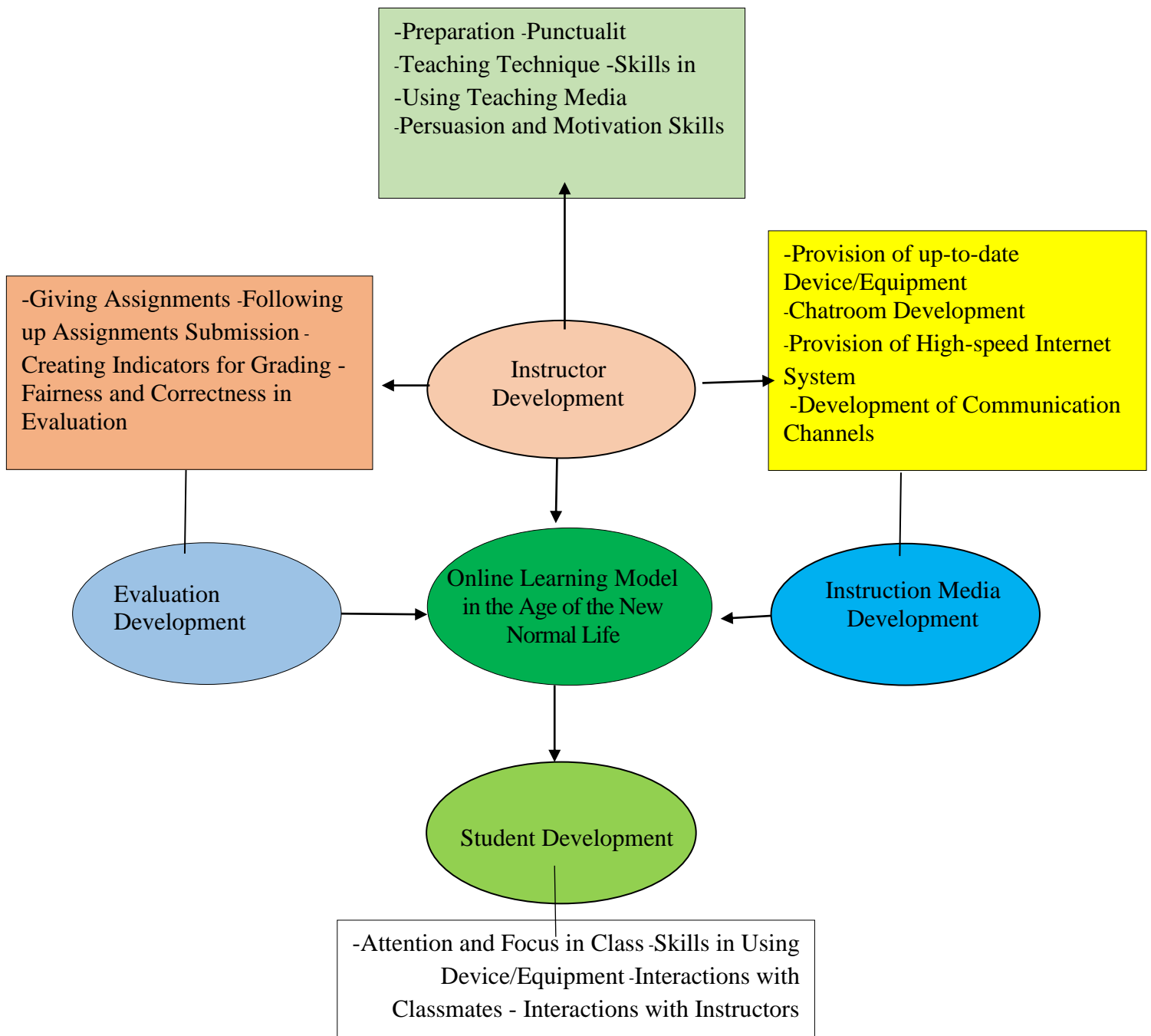


Figure 1 Online Learning Model in the Age of the New Normal Life

Recommendations

Teaching materials should be developed to be up-to-date, able to convey and exchange information efficiently to make online teaching more effective. Internet system, researching and conveying information system should be developed to be effective which will make teaching less boring and students can study continuously. There should be training to improve the skills of using online media in learning so that students are able to use teaching media effectively. The online learning evaluation system should be improved to be able to reflect students' academic performance realistically, correctly and appropriately.

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