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SMART TECHNOLOGY AN EFFECTIVE TOOL IN TEACHING LANGUAGES

This paper contains information about smart technology in teaching languages: the usage in classrooms, the types, the benefits and the difference from traditional teaching. It has been emphasizing that due to Covid-19 it is imperative to develop the role of educational tools. Therefore, the smart technology for teaching languages has become more and more significant. It is admitted that the feature of smart technologies is their ability to perform the functions of teaching languages. Thus, there was examined the phases of the teaching method program on the use of digital technologies in the learning process and outlines investigational activity on the construction of tutors to work with innovative technologies. The study as well describes the need for the advancement of readiness among tutors to work with smart technologies and examine the formation of innovative potentials among educational staff, at the same time putting emphasis on the forming of innovative educational environment platforms with unified smart technologies, containing diversified forms of information technologies for education. It presented the basic principles of the organization of smart-learning, such as learning flexibility in an interactive educational environment, an integrated learning environment, content sharing by all universities, personalization and learning adaptation. This article deals with some types of smart technology and its usage in terms of teaching a language.

Key words: smart technology, information and communication technology, competency, e-learning, smart society, smart education.

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Смарт технологиясы – тілді оқытудың тиімді құралы

Мақалада смарт оқыту технологиясын оқытуда қолдану және оның түрлері, сыныпта қолданылуы, артықшылықтары және дәстүрлі оқытудан айырмашылықтары жайлы баяндалады. Covid-19 коронавирус жұқпасының тарауы – оқыту құралдарын дамытуда үлкен рөл алғаны рас. Сонымен қатар, смарт технологиясы тіл оқытуда үлкен басымдыққа ие болуда. Смарт технологияларының негізгі ерекшеліктерінің бірі – тіл оқыту қызметін белсенді түрде жүзеге асыра алуы. Осы орайда, аталған ғылыми жұмыста оқытуда жүргізілетін смарт технологиясын қолданудың, оқыту әдістемесі бағдарламасының кезеңдері зерттеліп, оқытушылардың жаңа технологиямен жұмысын құрайтын кезеңдер жайлы баяндалады. Оған қоса, берілген зерттеу жұмысы оқытушылар арасында смарт технологисымен жұмыс жасауға дайындықты арттыруға деген қажеттіліктерді сипаттайды. Білім беру процесі қызметкерлерінің инновациялық потенциалының қалыптасуын және жаңа білім технологияларының смарт технологияларымен бірлескен оқыту платформаларының құрылуын қарастырады. Оқыту процесіндегі әртүрлі ақпараттық технологияларды қосқандағы құрылымына назар аударады. Сонымен қатар, білім беру процесіндегі смарт ортаның қалыптасуы сапалы смарт-білім беру үшін қажет екендігі баяндалады. Смарт-оқытуды интербелсенді білім беру ортасында, біріктірілген оқыту ортасында, білім беруді дербестендіру мен бейімделу, контентті барлық оқу орындарымен бірге қолдануды ұйымдастырудағы икемділігі қарастырылады. Берілген мақала смарт технологиясының түрлері мен оның тіл оқытуда қаншалықты тиімді қолданылуына тоқталады.

Түйін сөздер: смарт технологиясы, ақпараттық және коммуникациялық технология, құзыреттілік, e-learning, смарт қоғам, смарт оқыту.

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Смарт-технология как эффективное средство в обучении языкам

В данной статье излагается информация о смарт технологиях в обучении языкам: их использовании в классах, типах, преимуществах и отличиях от традиционного обучения. В данной работе подчеркивается, что в связи с Covid-19 крайне важно повысить роль образовательных инструментов. Таким образом, интеллектуальные технологии для обучения языкам становятся все более и более значимыми. Признается, что особенностью интеллектуальных технологий является их способность выполнять функции обучения языкам. В том числе, в статье разбирается период программы проведения уроков для учителей по использованию новых технологий в учебных занятиях, определяется насущность прогресса готовности учителей в работе смарт технологиями обучения, отдается внимание формированию цифровых потенциалов действующих учителей, а также акцентируется на введение площадок новой обучающей среды с присутствием внедренных новых технологии, содержащих различные виды информационных технологий обучения. Показана актуальность данной темы исследования в современных реалиях становления нового типа образования, которое позволит улучшить качество профессиональной подготовки специалистов. Представлены основные принципы организации smart-обучения, такие как гибкость обучения в интерактивной образовательной среде, интегрированная среда обучения, совместное использование контента всеми вузами, персонализация и адаптация обучения. В этой статье рассматриваются некоторые виды интеллектуальных технологий и их использование с точки зрения обучения языку.

Ключевые слова: смарт технологий, информационно-коммуникационные технологии, компетентность, e-learning, смарт общество, смарт обучение.

Introduction

The modern information society is gradually becoming a Smart Society. It is characterized by a very rapid development of computer capabilities and widespread use of information technologies in all areas. As a result, attitudes towards computer support issues are undergoing radical changes. These conditions also have effect on educational processes and create opportunities for qualitative changes in educational methods and methods of classical principles of education.

Smart technologies is a concept that various authors use today tend to designate the most modern technological developments that are used everywhere (economy, management, culture, society, education, science, etc.) and have certain qualities that can be called “smart” in Kazakhstan. This name suggests that these technologies, in addition to the actual technological (tautological truism) destinations have additional qualities that make higher level than conventional technology (Safullin E.N., Duskaliev N.K., Shagirov S.S., 2014: 4).

The rapid development of technology has introduced new concepts into our vocabulary. Among them are:

- Smartphone (Smart-Phone)
- Smart TV (Smart-TV)
- Smart boards

etc., which are often used by both adults and children. Smart means «intelligent» in English language. It is also used in the technological sense. That is, we call smart technology, smart equipment, convenient to use, preferably compact, multi-functional devices. And if we look at it from the point of view of the pedagogical process, this type of training is used in the sense of electronic training, mobile training, training anywhere, in any environment (Safullin E.N., Duskaliev N.K., Shagirov S.S., 2014: 5).

Smart teaching is a new type of teaching, a unique process that is rapidly developing. This includes the concepts of learning through social networks, sharing, personalized learning activities, student-centered, focused, centralized learning environments, and finally, learning using Smart devices. First, it was recognized and developed as a Smart technology. Therefore, let’s break down the gap between a mobile device and Smart technology (Safullin E.N., Duskaliev N.K., Shagirov S.S., 2014: 8).

Mobile is an English word, which means “computing” and “flexible”. (Kutepov M.M., Chelnokova E.A., Maksimova K.A., 2020: 18) This word is often found almost in all sphere, such as car, airmobile and mobile phone. Thus, mobile is a device that accelerates human activity and allows quick access to something. Now we can not imagine our life without these mobile devices. The development of information through mobile devices has led to the rapid de-

velopment of the information environment, thereby increasing the number of mobile device users several times. Due to this, the Internet has developed, wireless Internet has appeared, and therefore the world market has been formed, which is developing mobile device applications at a great pace (Baitileuova G., 2008: 21).

These days, the concept of a new teaching technology is widely used in methodological science. Teaching technology and methodological science are closely related to each other. The goal is to find effective ways of teaching. In order to reach an effective result in teaching language in an economic direction, teachers can use various Internet resources, distance learning, online conference, role-playing games, and technologies such as Skype, Zoom, Teams and etc. (Kulkaraev A., 2013:21).

Smart technology in education means to use special methods, pedagogical technologies, software and technical tools such as film, audio and video tools, computers, telecommunications networks. They are available for working with information in the classroom (Shcheglov S.G., 2005: 13).

The 21st century requires the development of the educational process based on the changes in the political, economic, social and other legal processes taking place in the country along with the use of Smart technology. In particular, access to the Internet, which is a virtual space, an authentic virtual interactive language environment, is considered as an effective means of developing the said competence (Mukhametzhanova S.T., Zhartynova Zh.A., 2008: 25). It is focused on the opportunities and services provided by the Internet for the formation of intercultural competence in foreign language teaching. For example: students can perform tasks and exercises in the documents provided in the Internet requirements, correspond by e-mail in the language they are learning, and participate in virtual communication clubs – conferences. At the same time, they have full opportunities to send and exchange text messages, listen to radio programs, watch videos according to their directions, that is, to use any type of information (Maksutkanova M., 2010: 7).

Literature review

In academic studies, problems of professionalism are often arisen as a question of specialist's preparedness, particularly as a realization of innovational activity. It should be clear that the preparedness of a specialist for the consumption of smart technologies has to contain "abilities to form, acquire, realize newness, as well as to get rid of out-

dated, impractical stuff in time (Топилина Н.В., 2006: 27).

Professionalism has a wide range of display beginning from a slight knowledge of a professional activity of a teacher and ending up with the formation of the readiness to the realization of innovational activity: scientific search of achievements high results of pedagogical work. Studying and examining scientific-pedagogical literature (S.G.Grigoryeva, S.I.Zymin, A.V.Koptelov, A.K.Markova, V.N.Panova and others) enabled to identify the content and levels of forming professional positions of a teacher (Ильина Н.Ф., 2014: 42).

- the level of primary pedagogical advancement acquisition: being familiar and understanding pedagogical process features, being able to create and get methods, tools, various pedagogical technologies into the process and presence of professionally significant personality qualities;

- informational and productive level, teacher can produce others' work, to use it on a good methodological level;

- the rational level – teacher shows individual creative potential, rational capabilities in solving not-standard pedagogic objectives;

- the scientific level – teacher can reproduce an individual style of activity in an educational process organization;

- the level of being open to acquire newness in an education and being aware of necessity of realization of an innovation in an educational process.

The examining scholars' scientific publications such as A.V.Lapshova, O, N. Kalachnikova, E.M. Krizhova, S.B.Kulikova and so on (Калачикова О.Н., 2008: 174). As well as observing pedagogical practice show that for an effective providing process of teachers' constant professional development – as a teacher-specialist in his or her subject-field, as a teacher-educator, as a teacher-scientist, finally as a teacher-innovator – it is necessary the presence of preparedness to an innovational activity.

Being ready for an innovational activity depicts teacher's maturity tuse new ways of solving educational programmes, as well as O. Demyanova, I.V.Osipenkova, N.A.Razina, V.N.Panova, T.I. Sergeeva and others pay attention to a serious stereotype break. Preparedness for the realization of innovational activity is considered as an important phenomenon in a professional advancement of a teacher. The necessity of teacher's innovational professional activity in a modern condition of developing society, culture, education is identified as following:

- the ongoing socio-economic transformations that have necessitated the improvement of the exist-

ing educational system in order to eliminate contradictions between the real and desired characteristics of the content of the educational services provided and the needs of students;

- strengthening the humanitarization of the content of education, increasing the educational component of education, requiring a constant search of modern states and as a result, the search for innovative forms of interaction between the state, education and science in order to solve common educational tasks.

Based on the above, it can be assumed that there is a building of a new logic professional information of a teacher largely depends on his understanding of the importance of innovation in the educational process, readiness for innovation in the educational process, readiness for innovation, and the manifestation of innovative activity.

Materials and methods

Immense smart-technologies such as Smart-economics, Smart education, Smart-society have replaced informational technologies which are the core of modern century.

Thus, what are Smart, Smart education?

Smart – is the acronym of words like Self-directed, Motivated, Adaptive, Resource free, Technology embedded, it signifies in directing education to a person and to motivate him or her, applying electronic

resources by using new technologies.

The conception of Smart education – conveying different immense educational resources to listener in convenient and instant way. Therefore, Smart education has to be upgraded with various educational resources. Smart education is giving education in an interactive community by worldwide available content in convenient way. The basis of Smart education concept is wide range and available education resources. Smart education implements renewing all methods and technologies and enables to appear new technologies such as smart board, smart screen and allows to join the Internet anywhere. These modern technologies form the content, systematize them and deliver to a user. Thanks to it, implementing education may exist everywhere: at home, museum or café. That is to say, every participant of educational process can utilize common content by Internet.

There has been appeared a concept of Smart technology in recent years and we often hear phrases like Smart city, Smart phone, Smart equipment, Smart community. Thus, Smart learning replaced E-learning and instead of informational society there has appeared smart-society.

Smart education is available type of education based on concept Life Long Learning that suggested UNESCO which means learning anywhere, anytime.

The main innovative smart technologies in the educational process are different.

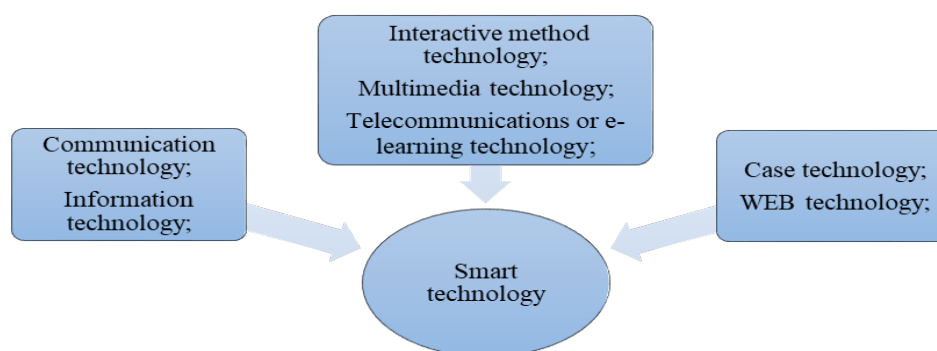


Figure 1 – the main innovative smart technologies.

Digital interactive didactic complex is presented by the group of teachers on an interactive board, called SMART board, listeners present the steps of project work step-by-step: types of tasks for learners, logically formed in a unique line. Listeners have to identify an approximate result of accomplished tasks.

Smart technology covers various types of technology, such as: communication technology, information technology, interactive method technology, multimedia technology, case technology, telecommunications or e-learning technology and WEB technology. They are all technologies, but they vary according to their functions.

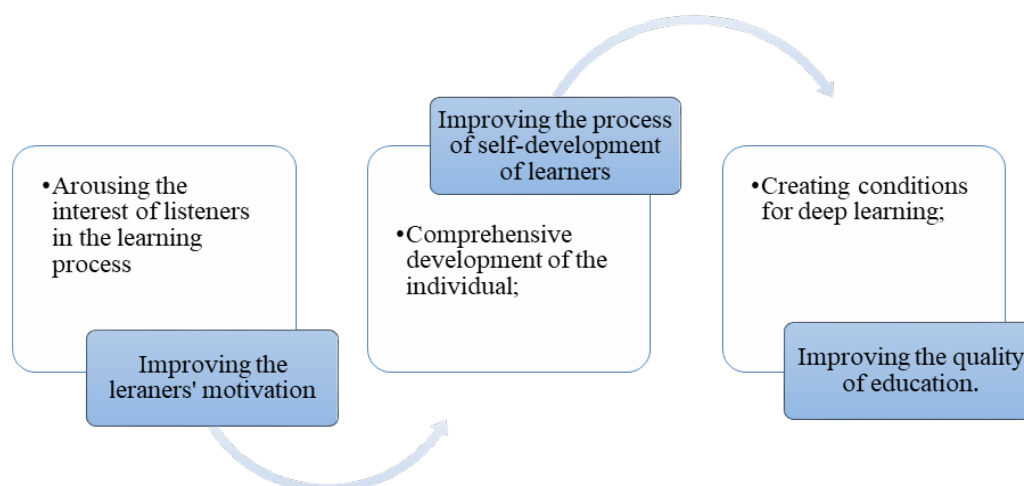


Figure 2 – some aspects of smart technologies can be individually demonstrated in the teaching process.

Hence, smart education makes new demands on teachers. At the same time, it opens up new opportunities for teachers, including exchange of experience, attention to science, and time saving opportunities. According to the concept of Smart-technology, it has a great influence on the quality of education and the motivation of the learner. The degree of self-directed learning is a predictor of the incorporation of technology, claims Gokcearslan (2017). Teachers must employ a variety of supports to encourage students to use technology for learning on their own, including behavior support (improving learners' confidence in their abilities to participate in extracurricular activities), capacity support (assisting learners in developing the capacity to use the resources effectively), and pedagogical or metacognitive guidance. According to Lai (2015), who summarized the findings of a study involving 160 university students, "capacity support and behavior support predicted self-directed technology use through enhanced perceptions of facilitating conditions and self-efficacy in using technological resources for language learning, whereas affection support predicted self-directed technology use through strengthened perceptions of the usefulness of technological resources for language learning (Bondarenko O.R., 1991: 11).

Smart technologies in education stabilize the costs of educational institutions, and on the other hand, raise the educational activity and product to a new level. In the implementation of educational programs, technology differs from the basic point of view of the educational process, as well as the introduction of innovative curricula and subjects.

Results and discussion

Integration of smart technology by itself, though, is insufficient Yilmaz (2018) claims that this method of language learning has both technical and pedagogical ramifications. In the former, students' abilities in their self-directed use of technology, their initiative, and their tools are considered, whereas in the later, instructional design is (Bondarenko O.R., 1991: 42). To put it another way, there is a need for instructors who can plan and keep up this kind of lesson flow in addition to having the "pedagogical knowledge" that must be incorporated into such training.

The integration of smart technologies into education system will be one of the most effective way to improve the quality of teaching and learning process. The research found the main differences between traditional and non-traditional classes in which smart technology is used.

Smart technologies in the system of education change the content of the studied disciplines, as well as the presentation of information, it is not only presentations or video, these are already direct connections to information networks, databases and forums. Most of the research devoted to the issue of smart technologies do not allow highlight all their possibilities. In this article, the information and most fully disclose the possibilities of these technologies in the professional training of students are systematized. Consistent terminology is characteristic of many disciplines, but variations is found in almost every discipline. It is useful to use these definitions or extensions, variations, or deviations documented in future articles to grow and prosper the body of knowledge for intelligent

learning and teaching technologies (Kiseleva N.E., 2009: 157).

As it is mentioned above, smart technology services vary according to their functions. For instance, Youtube serves as free platform of getting different educational and entertaining videos for the lesson. As well as there is an innovative board on

the Internet – “Miro”, it is nowadays widespread and available for every teacher who is willing to integrate to his or her classes instructional and explanation form of the new topic.

Google Docs is the most beneficial platform where a teacher can upload necessary materials and can exchange it with learners.

Table 1 – benefits of smart technology

| Benefits for teachers | Benefits for learners |
|-----------------------------------------------------------|---------------------------------------------------------|
| improving the quality of education | an individual form of studying educational material |
| delegation of a number of functions from computer teacher | providing instant feedback; – variety of work |
| variety of activities | individualization of the process learning |
| application of innovative pedagogical technologies. | formation and development creative abilities |
| facilitating the management of the educational process; | flexibility in learning |
| simplified knowledge control mechanism | unlimited access to all necessary educational resources |

Table 2 – smart technology services and their functions

| Smart technology services | Their functions |
|---------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Youtube | a world-renowned video server with billions of videos, including many video lessons. |
| Miro | a digital whiteboard that supports collaboration, mind mapping, and more |
| Google classroom | a free tool that allows teachers to effectively manage and evaluate student progress from anywhere. |
| Handouts | a service for free video meeting of up to 10 users at the same time. There is also a service that allows anyone to share their screen by sending a message to the chat. |
| Google Docs | a service for working with documents of different versions. For example, text typing, spreadsheet, presentation work, etc. |
| Smart Notebook | The content of lectures and practical lessons in a SMART Notebook file cabinet is useful for students to prepare for monitoring modules and exams, as well as for those who are absent for some reason. |

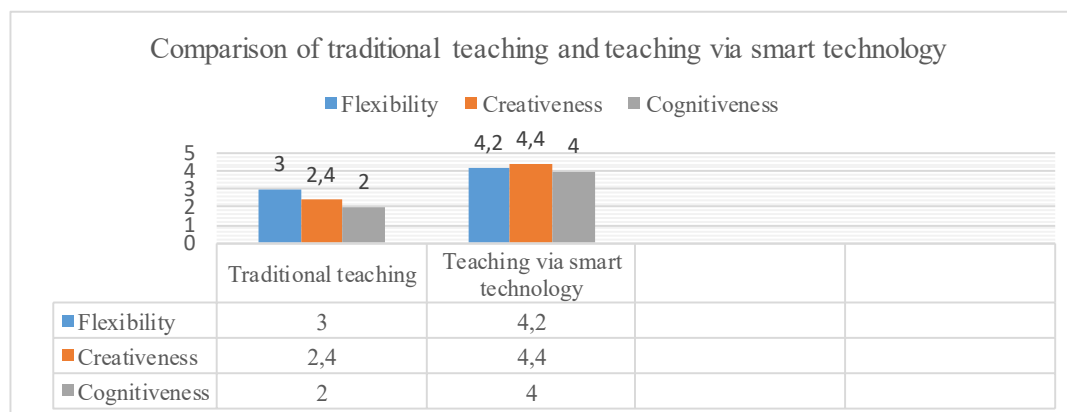


Figure 3 – comparison of traditional teaching and teaching via smart technology.

Figure 4 presents smart technologies for learning and instruction. As it can be seen, the opportunities for teachers and learners that smart technology

provides are relevant and bright. Whereas students can monitor their progress by themselves, teachers have time to make creative lessons.

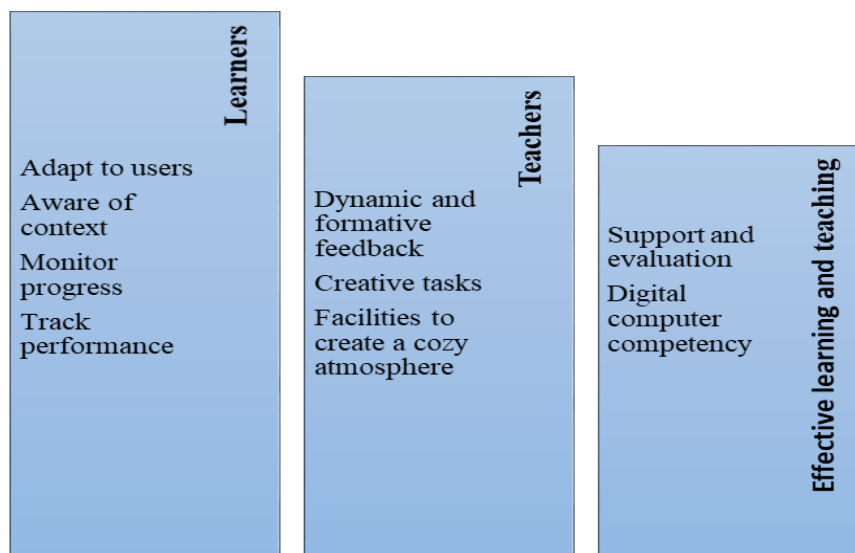


Figure 4 – Smart technologies for learning and instruction.

One type of Smart technology is ICT and Smart TV, which are used in working with presentations. That is, the presentation is material presented in the form of slides: tables, drawings, video materials. The following aspects are provided when using computer, multimedia, Smart TV and electronic textbooks as an interactive board in the English language lesson:

- teaches the topic;
- to speak correctly;
- explains the rules through drawings and helps students to remember them.

The use of the Smart technologies in language lessons increases the effectiveness of the lesson: memory dictation, content, creating a plan of creative work, as well as sentence analysis.

The importance of digital technology in simplifying the education and acceleration issues and adaptation of a person to it is increasing significantly. Internet, mobile phone and computer have become the main element for XXI century's people. Influence of human capital has not been sufficient to develop modern education, therefore, it has become actual to review its quality of concept, methods, tools and techniques.

Conclusion

Conclusions of the study and prospects for further research in this area. In conclusion, it is impossible to introduce Smart education without assimilating e-learning. The main objective of Smart education is to assist student and educator to form effective educational condition. This will be useful either to a student or a teacher, even to the creator of this program to the university. Utilizing Smart education requires complex methods and approaches. Students' results cover combined professional community, innovation project service competences, competences based on practice. The conception of Smart education is appropriate to development of modern technology paradigms. A lot of countries approved it as a new opportunity in education system. Currently, Smart education technologies in progress of developing and we hope a lot of problems of Smart technologies will be solved in the future. The goal of the study is achieved: to reveal the possibilities of smart technologies in the system of teaching languages and the differences of teaching a language process with smart technology and traditional teaching.

Implementation of smart technologies in the system of education provides an opportunity to choose various modern methods, forms, means of organizing the educational process.

Modern smart technologies in the education system contribute to the development of creative abilities students and the formation of their professional competencies. Hence, the role of the teacher is not an observer, not an evaluator, but the initiator of creative activities who organizes cognitive activities. Only such training broadens the horizons of the student's intellect, develops creativity and cognition.

The 21st century is the century of technologies. Mobile devices, Internet networks have become a simple daily habit of life, and information technology

has become an important part of human life. Digital society, digital environment has been formed. Developed countries are increasing the possibilities of using technologies for human benefit. Internet networks provide a lot of opportunities for human development in different directions. A person can engage in entrepreneurship, scientific research, and creativity while sitting at home. Social networks have opened the way for a person to realize all his possibilities.

In short, smart technology in teaching aspect helps the student to learn new information, to search for it independently, to increase his or her interest in the subject, and to use the knowledge acquired at school or at the university without fear in everyday life.

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