

COMPUTER LITERACY IS A TOOL TO THE SYSTEM OF INNOVATIVE CLUSTER OF PEDAGOGICAL EDUCATION

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ABSTRACT

The article highlights the significance of digital (computer) literacy of teachers and proves it can help teacher education. When the period of quarantine started, it naturally showed many problems existed in teaching. Thus, not counting all of issues, in the paper we're going to discuss the vital role of computer literacy for teacher education or innovative cluster of pedagogical education that is widely being studied in Tashkent Region. Conditions, current problems and possible solutions will be stated.

Keywords: Digital literacy, teaching, pedagogy, computer skills, ICT, learners, school, competence.

INTRODUCTION

It seems the world has seen a new era of teaching practically. We have been using online teaching, distance learning, self-directed learning and so on, but Covid-19 has proved we aren't fully ready for real online teaching and learning. Some teachers weren't using ICT in the classroom or they didn't know how to use while they'd heard a lot about they must have done. When the period of quarantine started, it naturally showed many problems existed in teaching. Thus, not counting all of issues, in the paper we're going to discuss the vital role of computer literacy for teacher education or innovative cluster of pedagogical education that is widely being studied in Tashkent Region. Conditions, current problems and possible solutions will be stated.

No one can deny that the computer, specifically the microcomputer, is having a tremendous impact on the school of today. There has been an increased interest in using computers for instruction since microchip technology began to provide schools with small, inexpensive computers. [1] The microcomputer has arrived in education. Unfortunately, it has arrived so quickly that many classroom teachers have been caught in a technology gap. Teachers who have not grown up with computers are trying to teach youngsters who have. For the students, computers are fun; for the teachers, they are threatening, intimidating, and downright embarrassing - anything but fun. [5]

LITERATURE REVIEW

In fact, younger generation know to use modern technology more than teachers and they have ability to learn them quickly. However, one more disadvantage of it the youth haven't ability to use them for good or bad. Indeed, teachers should have computer using competence to teach and direct them. It's natural the one can't teach what he doesn't know well. In this way, cluster approach to improve digital literacy is appropriate way of improving the situation. Teachers can learn how to use computers from their students while directing them into their goals.

On the other hand, the issue of lacking computer literacy of teachers existed many years ago and it had been tried to solve in some Western countries. Manitoba's Universities and the Manitoba Department of Education have, over the past four years, engaged in a cooperative effort to raise the level of computer literacy of our teachers. While there has been no formal statement of objectives for this effort, objectives are implicit in the direction it has taken. These objectives are:

(1) To develop general computer literacy for all educators. If teachers are to serve children growing up in a culture in which computers and computer-related technology are pervasive, the teachers themselves must be computer literate. Although experts are not unanimous as to the specifics of the computer knowledge teachers should possess, there is a clear consensus that some level of computer literacy is an essential component of teacher competence and will become increasingly so in the future.

(2) To assist teachers, in learning how to use computers as tools in their subject matter areas. The list of subject matter areas in which computers are "tools of the trade" continues to grow. Most immediate and visible are business education, industrial education and mathematics. Not to be overlooked are problem-solving in the sciences and statistical treatments in the social sciences.

(3) To assist teachers in learning how to use computers to facilitate learning by students. Mathematics teachers may use computer languages such as Logo to assist in the development of mathematics concepts. Language arts teachers may use text editors or the string handling capabilities of Logo to develop compositional and verbal reasoning skills. Social studies, science, and mathematics teachers can use simulations to assist students in concept acquisition and to develop problem solving skills.

(4) To provide teachers with the knowledge and skills to teach about computers as a subject. Large numbers of teachers will require retraining to meet the demand for courses in computer literacy at the elementary and junior high school level. Initially, this group can "get by" with minimal background in computers. However, as the technology advances and becomes less expensive, and as more and more students gain access to increasingly sophisticated computers at younger and younger ages pressure will mount for these teachers to upgrade their subject matter knowledge and skills. [7]

DISCUSSION

In the 90s of the last century, the cluster model was observed even in the education system of some countries. Countries such as the United States, Germany, France, Finland, Russia and Belarus can be cited as leaders in this regard. [4] And now a 1980s effort in Canada has still not only been actual in some counties, but also reached the top to discuss and solve the problem. It makes sense to assume that the more digitally literate our teachers are, the more they'll employ these skills in the classroom, which will in turn foster a strong sense of digital citizenship in our students. However, the importance and scope of digital literacy extends beyond this simple theory. [3] Moreover, it's high time for teachers, who claim they don't have skills of computer, to feel responsibility in front of their learners. If they work on themselves, it may save knowledge of future. Organizing webinars, participating in online conferences, keeping in touch with other educational institutions via computers and internet can enhance them both professional development and partnership with other institutions which mean

clustering educational spheres. From this point, the lockdown is the best time to improve digital literacy for teachers.

On the other hand, computer literacy is a MUST doesn't mean all of subject teachers should be expert at computer using. They should have some competences to improve quality of their lessons, to teach their learners effectively. And these competences might be:

- a) the ability to read and write simple computer programs;
- b) the ability to use computer programs and documentation which is educational in nature;
- c) the ability to use computer terminology, particularly as it relates to hardware;
- d) the ability to recognize educational problems that can and cannot be solved using the computer;
- e) the ability to locate information on computing as it relates to education;
- f) the ability to discuss the moral and human-impact issues as they relate to the societal use of computers as well as the educational use of computers;

We would like state one more issue that knowledge might be out of date after some time if the one doesn't train regularly in the age of technology. In order to become a confident user of ICT in the classroom, teachers need to take part in ongoing training. Teachers should understand the benefits of digital literacy. Training in ICT needs to be recognised as essential for teaching such skills, and as an enabler of other teaching and learning practices. [2] The cluster of pedagogical education provides an opportunity to identify problems in the system, which in turn can identify its strengths and weaknesses. It is important that information about the state of affairs in the cluster is very objective. With the help of a cluster, the government and education authorities will be able to effectively apply the experience and research results of the development of education in the cluster region. The cluster approach to education enables governments to provide specific tools for effective interaction within the system, to better understand problems, and to plan the scientific basis for development in the region. [6] Teaching demands hard work, but the teacher who loves his job should continue learning daily. For the reason that teachers are teaching in age of technology while learners are living in the same period. Both of them see, practice and learn technological something. If a teacher is in one step forward, he can direct his students to the aim. However, a teacher cannot do these alone, so communication leads to gather other pedagogical directions in one virtual area that can be called innovative cluster of pedagogical cluster.

CONCLUSIONS

Students need a high level of computer literacy both to succeed at tomorrow's jobs as well as to create tomorrow's innovations. [2] If we want high results of our students as learning outcomes, we should start working on our computer literacy from now as teachers working co-operatively by clustering teaching and learning directions. When we think of it, we will feel empowered when we understand how technology will truly impact student learning in a positive way.

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