Job Satisfaction and Motivation of Teachers in Changing World

Kaan Bati

Abstract Global challenges and rapidly developing technology are creating a new (normal) life in the twenty-first century to which education systems will have to adapt. These rapid changes increase the need for qualified manpower in line with the requirements of the age, but education systems do not have the reflexes to respond to these needs. On the other hand, it is still unclear what kind of manpower will be needed in the coming years, what the new job descriptions will be and what skills will be required. In this chaotic environment, expectations from teachers, who are the locomotive of education systems, are increasing and this situation negatively affects their job satisfaction and motivation. In addition, the question "what do we expect from teachers in the digital world?" has yet to be answered. In this chapter, I have tried to examine teachers' motivation and job satisfaction in the light of societal changes and discussed what the future holds for the teaching profession and what education systems should do in this uncertain future.

Keywords Teachers · Job satisfaction · Motivation · Chaos

1 Teachers in Chaotic World

Changing job descriptions due to industrial and technological developments, which are the driving force of economic growth, define new skills and competencies for the manpower needed. The job descriptions and employee qualifications of the last century seem to be far from meeting our needs in today's world. Recognizing this gap, many researchers and theorists have proposed some skills that they define as twenty-first century skills (Saavedra & Opfer, 2012; Voogt & Roblin, 2012), twenty-first century skills are generally defined as higher order thinking skills, deeper learning outcomes, and complex thinking and communication skills (Saavedra & Opfer, 2012). The Partnership for 21st Century Skills (P21) grouped these skills under

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the sub-dimensions of (a) learning and innovation skills, (b) information, media and technology skills, and (c) life and career skills and emphasized that schools should support disciplinary and interdisciplinary teaching (Battelle for Kids 2019). However, these defined skills consist of skills such as creativity, problem solving and analytical thinking, which have been frequently discussed in the last century and are already included in education programs.

The rapid development of technology and the changes in job descriptions due to this development make it difficult for students to join the workforce quickly and be successful. The education provided in schools is far from providing students with these uncertain skills, so students are trying to increase their qualifications by participating in additional certificate programs. It is clear that there is an urgent need for students to develop twenty-first century skills. Many countries around the world have started to revise their education policies and curricula to include twenty-first century skills in their curricula (Charland 2014). However, despite all these initiatives and efforts, there is a clear problem: are we aware of the human qualities we will need in the coming years? I am not claiming that these so-called twenty-first century skills will not be useful in the current era, but I foresee that labeling them as twenty-first century skills may lead to a series of mistakes. We are about to complete the first quarter of the twenty-first century and let's look at the experiences of school-age children; pandemic, distance education, artificial intelligence applications (such as ChatGPT), global climate changes, etc. Even just these developments we have experienced in the last 5 years can give us clues about what kind of problems we may face in the rest of this century.

For example, we can foresee the possible consequences of global climate change, but we only have guesses about what kind of world awaits us afterwards. The IPCC (2018), in its Global Warming of 1.5 °C report, laid out many possible consequences such as health, energy, transportation, pollution, water and food shortages (https://www.ipcc.ch/sr15/). While all these changes are taking place, it is quite clear that employment and, in parallel, education systems will also be affected. Global climate change will soon demand manpower in many fields such as new agricultural practices, new energy production techniques, new transportation and communication solutions. Education systems and teachers will therefore be forced to adapt quickly to this transformation.

Unfortunately, transformations in education do not happen as fast as those in technology and industry, because it takes almost a generation to see the results of an approach or a paradigm introduced. Therefore, education systems may not be able to reflexively respond to rapid changes. When this happens, that is, when we need to find new solutions in areas such as food, energy, transportation and communication, will contemporary skills such as creative thinking, entrepreneurship and digital citizenship, which are currently included in curricula, be able to offer us solutions? On the other hand, the Sustainable Development Goals put forward by the United Nations are based on the vision of ending poverty, hunger and inequality worldwide by 2030 and ensuring the permanent protection of natural resources. One of these goals is Quality Education (SDG-4), which aims to provide inclusive and equitable lifelong quality education for all. This vision reveals that we have more pressing problems

than twenty-first century skills: the lack of equitable access to quality education for all.

It is obvious that digitalization and artificial intelligence, the second major change process ahead, will create new problems for the teaching profession. Bill Gates' predictions for the future of artificial intelligence show that "it is only a matter of time before artificial intelligence can teach children" (https://www.cnbc.com/2023/06/25/only-a-matter-of-time-before-ai-chatbots-are-teaching-kids-in-school.html), so shouldn't we re-evaluate the concept of teacher? I have stated above that the transformations in education systems are not as fast as technological developments, however, many studies examining the state of education systems during the pandemic process have revealed that education systems can also give some reflexes with the support of technology at some points.

UNICEF (2021) reported that 90% of countries closed their schools and switched to distance education during the pandemic. This is a great rate, but the fact that not every student can access distance education due to inequality of opportunity has made inequality in education and learning losses more visible all over the world during the pandemic. In addition, the decline in job satisfaction and motivation experienced by teachers during the pandemic raised questions about how executable the process was. All these developments are quite chaotic for teachers. To what extent do these chaotic situations affect teachers' motivation and job satisfaction? How does the potential decline in motivation and job satisfaction affect the quality of education? Does the resulting low quality of education put additional stress on teachers? As you can see, this is a vicious circle and I have tried to visualize it in Fig. 1.

Economic reasons and rising academic expectations are putting pressure on teachers' workloads. Particularly in countries with exam-based transition between education levels, students need to perform well in exams in order to achieve quality education, and this is a source of anxiety for parents as well as students. Teachers will bear the brunt of any possible failure. Many schools reflect such pressure from parents as an extra workload on teachers. This workload leads to low motivation, low motivation results in low quality of education, and low quality of education leads to low academic achievement. It is very difficult to get out of this vicious circle and it

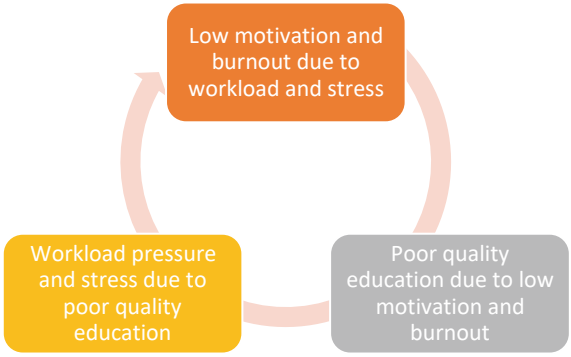

Fig. 1 Low motivation—poor quality education cycle

is not difficult to foresee that the expectations from teachers will increase, especially in the near future when they will have to keep up with the digital world. Before we tackle this vicious circle in the future, let's take a look at teachers' current job satisfaction and workload.

2 Workload and Burnout of Teachers

The school is a chaotic structure in itself, containing many parameters such as students, teachers, parents, programs, administrators, managers, administrators, skills, achievements and textbooks. In a system with so many variables, teachers are at the center of the showcase, and teachers are the ones who get the spotlight in the event of the slightest setback in education. A student's failure to perform as expected by the family in an exam often results in parents blaming teachers. Or a possible drop in school averages causes administrators to question teachers. Little thought is given to overcrowded schools, overworked teachers or insufficient materials for students. A review of studies on teachers' workload reveals that teachers think of workload as the time they spend on various daily tasks (Higton et al., 2017; Philipp & Kunter, 2013). In fact, although it is easy to calculate hours, it is possible that teachers with similar working hours do not complain about workload in the same way. This is because Kember and Leung (2006) found that workload is conceptualized by teachers as perceived workload rather than working hours.

The intense pace of work in schools over a long period of time causes teachers to suffer from health problems such as chronic stress and emotional fatigue, which can be associated with burnout (Sonnentag & Fritz, 2015). Because studies in this field reveal that teachers' job burnout is mostly caused by workload (Avanzi et al., 2018; Timms et al., 2012). There are many studies examining the relationship between teachers' burnout and job stress (Ho, 2017; Skaalvik & Skaalvik, 2016), and findings show that teachers who have to deal with larger classes often have to shoulder a greater burden (Yong & Yue, 2007). This situation causes teachers to experience high levels of job stress and consequently lower job performance (Ho, 2017). This leads us to the vicious circle I have tried to explain in Fig. 1.

The OECD Teaching and Learning International Survey (TALIS) is an international, large-scale survey of teachers, school leaders and the learning environment in schools. In the 2018 TALIS report, the distribution of the time teachers spend in the classroom is reported, with data dating back to 2008. TALIS 2018 reported that the amount of time teachers spend on active teaching and learning during a standardized lesson decreased from 2008 to 2018 in 12 out of 20 countries and economies with comparable data, with the largest decreases observed in Bulgaria, the Flemish Community of Belgium, Hungary and Turkey (OECD, 2019). It is not difficult to see that the result of this reduction in the time allocated for teaching in the classroom is lower quality of education.

3 Job Satisfaction of Teachers

Teacher job satisfaction is an important variable with far-reaching consequences for the school, students, the teaching profession and society. Research shows that teachers' job satisfaction increases with school quality (high standards), more effective school management and school adaptation (Ronfeldt et al., 2013). Teachers who are satisfied with their jobs are less likely to suffer from burnout syndrome (Anastasiou & Belios, 2020), have lower absenteeism rates (Ingersoll, 2017), and have higher job performance (Baroudi et al., 2022). Moreover, according to Hardy (2018), students of teachers with high job satisfaction also show better academic performance. However, it is difficult to conduct empirical studies to increase teachers' job satisfaction, as the factors on which teachers' job satisfaction depends, such as quality school environment, good standard of living, small class size, and social respect, are issues related to countries' economies and policies (Sims, 2020). For example, during the Covid-19 pandemic, studies providing evidence of teachers' job satisfaction and burnout were presented (Say et al., 2022), but experimental studies to address these shortcomings were not conducted. However, the literature suggests that improving self-efficacy, increasing participation in decision-making, providing job autonomy, and improving working conditions will increase teachers' job satisfaction (Sun & Xia, 2018).

As I have mentioned before, such variables are political and economic, so teachers' job satisfaction and motivation vary across countries, regions and even districts. Our social perception and some of our feelings from childhood tend to associate the teaching profession with sacrifice, and in some geographies even attribute sacredness to the teaching profession. However, poor working environments, low salaries and social status are unfortunately the realities of the teaching profession today. The social status of teachers is one of the variables of the professional teaching profession. The TALIS 2018 data also provides findings on the prestige of teachers or the perception of teaching in society. The results show that the extent to which teachers feel valued in the society they live in varies greatly from country to country, and this perception is highly subject to change (Mezza, 2022). This leads teachers to invest time and money in continuous professional development, otherwise their social acceptance is likely to suffer.

4 Inequality of Opportunity to Learn

Is the digitalization of education a threat? This is an issue that needs to be evaluated from many different perspectives. First of all, due to our positive view of technology, we have a belief that the technological is better. This also affects our view

of education. You can claim that your children will learn better with technology-supported teaching practices. However, the rising dominance of technology in education systems also brings some threats. The PISA 2018 Results Report (Effective Policies, Successful Schools, Vol. V) reported large disparities among OECD countries in students' access to educational technology. According to this report, in OECD countries, educational technology is more available in private schools than in public schools, in socio-economically advantaged schools than in disadvantaged schools, and this inequality has been increasing over the years. Between 2015 and 2018, the number of educational technologies increased in schools with students from higher socio-economic backgrounds, but not in schools with students from lower socio-economic backgrounds. This problem is of course not limited to educational technology, the same report mentions the emergence of a new type of social division: advantaged students versus disadvantaged students.

It is clear that advantaged students have higher opportunities to learn (OTL) than disadvantaged students, and that this translates into unequal job opportunities later in life. PISA investigates students' academic performance as well as the sources of that performance. Opportunity to Learn (OTL) is one of the sources of academic performance. The concept of Opportunity to Learn argues that differences in academic achievement are due to unequal learning conditions rather than students' abilities and includes conditions or opportunities that promote learning in schools and classrooms, such as curriculum, learning materials, physical conditions, teachers and their teaching experiences (Wijaya, 2017). Education systems are failing to provide children with equal opportunities to learn, and in this case, the teacher factor comes into play once again. How fair is it to expect teachers to pull rabbits out of hats when there are so many sources of students' low academic achievement?

5 Artificial Intelligence and the Future of Teaching

Before entering this discussion, I think it would be appropriate to define artificial intelligence; Luckin et al. (2016) define AI as […] "computer systems that have been designed to interact with the world through capabilities (for example, visual perception and speech recognition) and intelligent behaviors (for example, assessing the available information and then taking the most sensible action to achieve a stated goal) that we would think of as essentially human" (p. 14). As the definition suggests, AI is fundamentally capable of imitating humans. Therefore, given the state of today's digital technologies, it is not difficult to predict that artificial intelligence will be active in all areas of our lives, including education, in the near future. As I mentioned above, industry pioneers such as Bill Gates believe that the role of AI as a teacher is not far away. In addition, many "romantics" point to the social and emotional aspects of the teaching profession, saying that either AI cannot be a teacher because it lacks emotion, or that students will not accept AI teachers. Felix (2020) discussed many aspects of the use of AI in education and argued that AI in its current form is not capable of taking on the role of a teacher. According to Felix, AI is a machine that

has no will of its own, cannot think consciously, has no sense of self. Moreover, because it is programmed, it is incapable of flexible thinking and learning, so it lacks creativity and is not capable of the creative solutions and approaches that teachers demonstrate every day in the classroom.

On the other hand, there is also the possibility that our understanding of learning and schooling may change into something else in the future, and given the pace of development of AI, there is the potential for the use of AI in education in the future, but only as a secondary construct. This is where I differ from Felix and think that the AI-teacher concept will become widespread faster than expected due to the low-cost labor and long working hours it will offer. There are two main points in this debate, firstly, can the human—computer interaction between the AI-teacher and the student become as effective as the human—human interaction between the teacher and the student? So can AI mimic human communication? The work on this topic continues at a rapid pace and according to Edwards et al. (2018), it won't be long before AI mimics the components of human communication: credibility, attraction, immediacy and humor. Another point is the acceptance of the AI-teacher by humans, and more specifically by students, i.e. would they be willing to interact with the AI-teacher? Kim et al. (2020), in their research, found that students are predisposed to accept AI teaching assistants and are willing to communicate with them. Studies in the literature seem to vindicate Bill Gates.

We have been living with computers and algorithms for a long time, and we are quite happy with the convenience and speed they bring to our lives. Without realizing it, AI has already taken the lead in many sectors and others are likely to be next. While teachers may believe that AI can't teach because their profession is too human-centered, this change is closer than they think. In the near future, education, learning methods, thinking skills and teaching methods and approaches will need to be redefined. As individualized teaching assistants replace teachers, school will become more controversial and the teaching profession will need to be redefined. The advancement of AI is based on machine learning, and so AI algorithms may need to learn from teachers in order to take over teaching. In this case, competent teachers could review the learning and decisions made by personal AI assistants—perhaps for a while.

6 Conclusion

The world is changing very fast and education systems have to keep up with this change. We are discussing how our children can learn better with new approaches, methods, materials and we are making efforts to ensure that they will be able to have a job in the future. Teachers, who are the locomotive of education systems, are always in the spotlight and have to take criticism for the failures in education systems. In addition, the increasing labor force and low public image have a negative impact on teachers' job satisfaction and motivation. They are deprived of many supports due to inequality of opportunity. On top of all this, it seems quite possible that they face the

risk of losing their profession in the face of developing technologies. An education system in which personalized artificial intelligence applications start as support for teachers, and then the roles will change and teachers will support personal assistants may not be too far-fetched. The scary thing is that teachers will no longer be needed.

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