

Changes in Teacher Education and Teaching learning process: A critical study

Sapna Vijay

Asst. Prof, Christukula Mission College, Satna Madhya Pradesh

Abstract:

The growth and development of a nation depend on the activities of the teachers. Identically, they are working to grow the basement of the students. No matter it is school, college or university, a qualified teacher is the builder of a student. Even a teacher on the special skills or technical courses is keeping role responsibilities on the societies. For this reason, the leader of tomorrow is created by a teacher. At the same time, if a teacher fails to discover the eternal power of a student, the student fails in his whole life. That means a teacher is the best mentor for a life of the student.

The education system of the 21st century has changed radically with the integration of the technology in every sector. At the same time, the students are more matured than the previous time.

Now, in the twenty-first-century education depends on Thinking Skills, Interpersonal Skills, Information Media, Technological Skills as well as Life Skills. Especially, the education of the present time emphasis on life and career skills. Now there has no value for rote learning. In general, it needs to meet the industry need. To clarify, the teaching will be effective when a student can use the lesson outside of the classroom.

Keywords: Teacher Education, Classroom Management, Gen Z students, Teaching and Learning

Introduction:

In everchanging and globalizing world, the role of the teachers is essential to improve the sustainable education. At the same time, inspiring and guiding the students in increasing employability skills with the digital tools is the prerequisite for a teacher. Thus a teacher in the twenty-first century will be a digital teacher. Teachers are not the facilitator for learning of the students only, and now they are responsible for training the students for increasing employability skills, expanding the mind, growing digital citizenships, critical thinking, and creativity as well as sustainable learning. Thus, the winning of the students is the win of the teachers.

With the passes of time and integration of technology in every sector, the teacher's role has changed a lot. They need to enrich some skills to develop their students. Otherwise, the students will not get the lesson, and it will increase the of educated unemployed in the digital era. Let's see the changing role of a teacher in the 21st century.

Today's curriculums are nearing obsolesce. The future of education is going to be highly digital, personalized, merit centric and teachers will be utilized on an as-needed basis; therefore, despite having sound knowledge of a subject to be taught, a teacher must possess the following skills:

Being a good classroom organizer: – A classroom is where teachers help children grow in knowledge and personality. The classroom should be ordered to maintain a positive, productive learning environment and

keep children meaningfully engaged. Primary classroom management techniques involve practical seating, teacher-student relationships, rules and procedures, student independence.

Grabbing attention is essential to bring wow factor in classrooms to break the monotony and to make students alert and attentive for the learning process. Student independence- Students need to take responsibility for their behavior and learning. Teacher-student relationship is essential for learning. Teachers should strike a balanced relationship with students, a proper balance of dominance and cooperation with awareness of student's needs.

Teaching is a demanding profession-keeping positive outlook motivating, counseling, organizing, instructing, and leading takes a lot of skill. Teachers always struggle with designing instruction that caters the needs of all and can engage all learners, it should be innovative and, flexible and according to the needs of children.

If a teacher makes learning goal-oriented, instills a growth mindset, and harnesses the power of educational technology, it can create confident personalities. The role of a teacher changes with age; a good teacher can incorporate 21-century skills -critical thinking, collaboration, communication, and problem-solving to make children confident.

A teacher Sets high expectations and delivers actionable feedback. An effective teacher does not praise low quality work, checks for comprehension, reacts to performance changes, and gives actionable, frequent, detailed, and specific feedback. To exemplify, while providing feedback for any work, just deeming it good or bad is not enough. It is also essential to tell why and what better can be done further; effective teachers try to raise the bars of their children every time.

Effectiveness and coherence in communication with appropriate body language and dress code are quintessential Educators have always been the biggest influencers in a student's life. Like all other industries, the education sector is going through huge transformations, largely because digital technology has changed the way the world works- and is changing the way children study.

To understand the changing role of an educator, let's first comprehend the significant traits of the current generation of students. Generation Z has supersonic brains and cannot imagine a time before technology. In this age, information is readily available at our fingertips.

They process information faster than any other generation, thanks to apps like Snapchat. Thus, their attention spans might be significantly lower than Millennials and other generations. This means that they struggle to create and stick to future goals, as they are immersed in the present.

Gen Z is a force to be reckoned with and refuses to be passive learners. They aren't interested in simply showing up for class, sitting through a lecture, and taking notes that they'll memorize for an exam later. Instead, they expect to be fully engaged and to be a part of the learning process themselves. They tend to enjoy interactive classroom environments over the traditional dissemination teaching methods.

With the passage of time and the integration of technology in every sector, the teacher's role has changed a lot. They need to enrich some skills to develop their students. Otherwise, the students will not get the lesson, and it will increase the number of educated unemployed in the digital era.

Teachers must be lifelong learners themselves. Teachers must understand that simply having a degree in teaching is not enough anymore. The 21st-century classroom has its own set of demands and to fulfil these the teacher needs to be aware of the ever-changing trends in the education industry, know the buzzwords, and address the different issues head-on. Expanding your professional network by connecting with eminent personalities from individual fields and having conversations with like-minded individuals is as essential as practicing teaching itself.

So, the educators of today need to be curious, flexible and forward-thinking to give students what they will need in the 21st century. The role of the teacher in the 21st century increasingly emphasizes mediated learning. By adopting this approach, teachers will be able to see the changes in their classrooms, schools and the community at large.

The objectives of this study to know the role of teacher before and after the modernization of teaching learning activities and to do comparative assessment of changes in role of teacher in modern and current environment of teaching and learning process.

Literature Review:

Review of related previous research work is a very important chapter in any research work. In other words, related former research work begins with the review of the research work. Review of related previous research work is helpful to the researcher in different ways. Many researchers have done research related to work towards changing role of teacher in modern world and current environment. According to Bruner (1957), “generic Coding systems that permit one to go beyond the data to new and possibly fruitful predictions”. The theory also proposed that when cognitive development is encouraged in the learner, it manifests in the form of his or her ability to think intellectually. Sharpley, Reynolds, Acosta, and Dua (1996) found that stress was a significant problem for 25% of staff with reports of increased anxiety, absence, injuries, illnesses, and poorer physical health; and Blix, Cruise, Mitchell, and Blix (1994) found that 48% of staff reported some health problems resulting from work stress. Fisher (1994) claimed that academic salaries are falling and workloads increasing

Abouserie (1996) states that academics have a large number of competing roles such as teaching, research, seeking funding, writing papers, and meeting seminar and tutorial commitments, and found that 74% of staff were moderately stressed and nearly 15% were seriously stressed with lecturers the most negatively affected followed by research assistants and professors. Linda Valli and Daria Buese (2007) did a study on “The Changing Roles of Teachers in an Era of High-Stakes Accountability” and found that teacher assume a number of roles in their work in classrooms is hardly in news.

Khalifah and Quthub, (2009). If the teacher has a good personality, has affection towards students, peace of mind, then becomes a teacher who is missed by his students. The beloved teacher is a person who accepts sincerely and happily - before all things - as a human being. This will make teachers more able to understand their students and interact well with students. Boddy et al. (2003); Moustafa et al. (2013) did research about student-centered, constructivist classrooms and documented that increases in students’ higher order thinking, learning, and motivation, particularly in STEM classes. Gunawan (2011) who argues that teachers through learning activities are expected to combine the overall potential of students’ brains to form meaningfulness (God Spot). All of these potentials are naturally given by God to humans in their position as human beings, human beings as a whole, with all their totality, mind and body. Education needs to be continually improved, optimized and still allows for improvement.

Safitri, (2014) did a study on Hoyles suggested a set of teacher roles which are simultaneously displayed in the classroom and found that in modern world and current environment the role of teacher in teaching learning process is changed. Singh, Malik, & Singh, 2016; Petty, (2009) found out that among the external factors that affect learning performance of the students are the mode and method of instruction given by the teacher, qualification of the teacher, peer influence on the students, and teacher-student ratio in a learning session. Leslie S Keiler (2018), did a study on Teachers’ roles and identities in student-centered classrooms and found that that radically changing the learning environment can affect teachers’ identities

and their approaches to teaching in predictable ways that can inform teacher education and professional development programs for STEM teachers, maximizing the success of teachers as they implement studentcentered pedagogy.

Afzal Sayed Munna and Md Abul Kalam (2021), found from the personal reflection and class observation that for managing the behaviour of individuals or groups different strategies may have to be used such as questioning, role play, rewards, punishment, discussions, paired/group work, observations, switching activities, audio/visuals etc. The teachers' dynamics need to be understood by the teachers, and behaviours or teaching approaches need to be adjusted. Again, learning needs, methods or styles of the learners may be different; in this respect, teachers need to understand the need and preferences of the learners and prepare the lesson plan accordingly to meet the learning objective of all learners rather than certain individuals. In a 2013 study conducted by Cook, Kennedy, and McGuire, it was considered whether General Chemistry students would improve their performance after being taught metacognitive learning skills. This study was conducted due to the increasing rate of attrition exhibited in LSU undergraduate chemistry classes. In their study, 700 Louisiana State University science majors enrolled in General Chemistry participated. After the first exam, students who attended class were lectured for 50 minutes on metacognitive strategies. This lecture discussed topics such as paraphrasing and rewriting notes, working homework problems through without using an example, previewing materials, studying productively in groups, pretending to teach information, and integrating new material into past knowledge. This lecture also discussed the Study Cycle or the plan-attend-learn-review-study (PALRS) model. Cook et al. found when considering the final grades of all the students enrolled in that particular General Chemistry course, those who attended the metacognition lecture averaged a full letter grade higher than those who were absent. This study shows that teaching chemistry students how to better learn, retain, and apply knowledge improves their performance.

Data analysis and interpretation

The teaching-learning process is a combined process where an educator analyses and gauges learning needs, outlines and establishes learning objectives, and employs new teaching-learning strategies to impart knowledge. The teaching and learning process is a relationship that exists between a teacher and a student, where one party (usually the teacher) imparts knowledge to the receiving party (usually the student). This process is a two-way 'circular' communication model, which means that this process will only flourish with a two-way equal communication and discussion stream. The overall development of students is dependent on the various aspects of the teaching-learning process, which will be systematically discussed below.

Elements of the Teaching Learning Process

There are several key elements of the teaching-learning process. These are intrinsic parts that may seem small on their own, but together, they form a well-oiled machine that is an effective teaching and learning process. Each of these components can work as insightful suggestions to improve your teaching-learning process. Missing out on even a couple of elements may hinder the overall effectiveness of a holistic teaching-learning plan.

Listed below are 13 essential elements necessary for an ideal educational plan.

Teachers: Educators who design, deliver, and facilitate the learning process.

Learners: Students actively engaged in acquiring knowledge and skills.

Curriculum: A structured plan outlining educational content, objectives, and outcomes of that particular subject or year. A curriculum lays out the pace and the structure of the information being taught.

Instructional Methods: Various strategies are used to convey information and facilitate learning. They can be auditory and visual aids like videos and movies, research opportunities like essays and projects, application-based stimulatory activities, physical excursions like field trips and educational outings, interactive sessions with experts, etc.

Assessment and Evaluation: Methods to measure and evaluate student understanding and progress through application-based questions, recall-based questions, inference-based questions, etc. Assessment can take many forms, such as group projects, tests, theoretical and practical examinations, etc.

Learning Resources: Materials and tools that support the learning objectives. Learning resources include textbooks, online reference materials, documentaries, interactive smart classroom aids, journals, and research papers.

Classroom Environment: The physical and emotional atmosphere in which learning takes place. A good, positive learning environment is conducive to growth, development of a healthy curiosity, and a healthy attitude towards learning and absorbing knowledge.

Technology: Integration of tools and devices helps to enhance the learning experience. Smart classroom aids like Extramarks are online tools that you can use to elevate learning processes with the power of EdTech.

Feedback and Reflection: The role of feedback in the teaching-learning process is crucial for continuous improvement. When you keep getting appropriate feedback, you engage in continuous assessment and reflection and keep improving as you go.

Communication: There should always be a clear and effective exchange of information between teachers and students. All ideas should be communicated, along with feedback and weak areas, so that the student can absorb and improve accordingly.

Motivation: Motivation counts for the intrinsic and extrinsic factors influencing student engagement and enthusiasm. When students are motivated, they are more likely to be involved and excited to learn, and hence, increase the scope of the teaching-learning process.

Adaptability: A teaching-learning process should have flexibility in its approach to meet the diverse needs of learners. Their different abilities, learning capacities, intellectual capabilities, areas of strength, and weaknesses should be identified, and the curriculum and instructional methods should be adapted for the same to ensure a smooth learning process.

Assessment of Learning Styles: There should be proper recognition and accommodation of different learning preferences and styles of students. Assessing and improving the teaching plan based on the needs of visual, auditory, and kinaesthetic learners, etc., is how one comes up with a truly inclusive learning environment. Each difference should be acknowledged and appreciated, and adjustments should be made to the teaching-learning process to incorporate them.

Objectives of the Teaching-Learning Process

The objectives of the teaching-learning process encompass a broad range of holistic goals and outcomes aimed at fostering an effective education. These objectives are designed to promote the intellectual, cognitive, analytical, logical, ethical, social, and emotional development of the students. The full scope of the teaching-learning process can only be observed if all these objectives are achieved, as they form the

bedrock on which a strong foundation for intellectual development is built. The various objectives and their basic tenets are listed below.

Knowledge Acquisition and Understanding:

The first goal in an educational process is to develop cognitive and intellectual reasoning, along with absorbing pre-existing, factual information. The teacher isn't just imparting knowledge, but the student is also understanding and applying it. These are the basic principles for learning new concepts. Knowledge acquisition entails 4 processes:

Gaining Factual Knowledge: Students acquire basic facts, concepts, and principles about a specific subject area.

Conceptual Understanding: Through collaboration and discussions, the students' grasp of key ideas, their relationships, and how they apply them in different contexts is enhanced.

Developing Critical Thinking Abilities: Based on their understanding, students develop the ability to analyse information, evaluate arguments, and form independent judgments.

Problem-Solving: These learners are now equipped with the skills to approach challenges strategically and arrive at effective solutions, and can be tested for the same by solving related application-based stimulatory problems and doing collaborative activities.

Skill Development

While students need to develop their cognitive and intellectual abilities, they also need to develop holistically. This is one of the most important aspects of the teaching-learning process. Overall development of additional skills will help the students grow into well-adjusted adults who are ready to take on the world, all thanks to their insightful educators. A few necessary skills to develop in students are:

Communication Skills: Learning to master effective written and oral communication, including listening, speaking, reading, and writing.

Collaboration Skills: Learning to work effectively with others in teams, respecting diverse perspectives, and achieving shared goals.

Technology Skills: learning to be competent in using digital tools and technology for learning, research, and communication.

Life Skills: Learning to cultivate self-management abilities, critical thinking skills, adaptability, and problem-solving skills relevant to daily life.

Attitude and Values

Last but not least, intellectual and holistic development is only effective for fostering learning well into adulthood with the right attitude. If the student isn't curious, isn't able to differentiate between right and wrong, and understands their responsibilities as a citizen, then there is no meaning in the teaching-learning process. All the learning imparted, no matter how effective, will fall on deaf ears. Some essential attitudes and values that should be inculcated in students are:

Curiosity and a Love of Learning: Fostering students' natural desire to explore, investigate, and continually expand knowledge is important to ensure that they can unlock their full potential.

Open-mindedness and Respect: Students should be encouraged to be empathetic, understanding, and appreciative of diverse perspectives and cultures. ‘Unity in Diversity’ shouldn’t just be moral in a book but a well-received life lesson.

Facilitator of Learning

Teachers guide students through the learning process by providing relevant information, resources, and activities. They create an environment that encourages curiosity, critical thinking, and active participation. They impart information and ensure that the students absorb that information.

Knowledge Source

Teachers are a primary source of information and expertise in their subject areas. They should present content clearly and organize it, ensuring that students have a solid foundation of knowledge. A teacher is a personification of an encyclopedia to a young student and should be ready to answer all kinds of questions about the subject matter and a lot more unrelated question as well!

Mentor and Role Model

Teachers also serve as mentors, offering guidance and support to students in both academic and personal matters. They should exemplify positive values, righteous conduct, and behaviour, serving as role models for students to emulate in the present and the future. Students are as impressionable as clay, and the behaviors of a teacher towards a student shape not only their opinions about the educator but also their self-image and outlook.

Curriculum Developer

Teachers are also in charge of designing and organising the curriculum to meet educational objectives and standards. They should be able to adapt instructional materials to suit the needs and interests of their students, as mentioned earlier in the article.

Classroom Manager

Teachers have to establish a positive and well-managed classroom environment conducive to learning. They are responsible for handling classroom dynamics, ensuring discipline, and fostering a sense of community within students. Not only are they the de-facto leader, but they also have to nurture the children to be more independent, just like any good manager would.

Assessor and Evaluator

Teachers are also in charge of the evaluation of the teaching-learning process. Educators should design specific assessments to gauge students’ understanding and progress. They also have to provide feedback to help students improve and tailor their teaching methods according to student needs. They have to use their judgment and chart an academic path for their students that would be the most beneficial for them. Essentially, the role of a teacher in the teaching-learning process is dynamic and extends beyond imparting information. Effective teachers contribute significantly to the holistic development of their students, nurturing not only their academic growth but also their social, emotional, and ethical well-being. As we all have learned, there are no bad students. And we can be better teachers by donning all these caps and personifying these roles as an educator.

Conclusion:

The role played by teachers becomes a very important component and in fact it can be said that they are in way our nation builders. For any student, education and character are the basic foundations and it is laid by teachers as well as parents.

They tend to instill values, attitudes and behavior in children right from childhood. Today with challenging environment, in any school or college, everything primarily depends on the teacher. The role of teachers has become very challenging. It is quite essential for teachers to be social, understanding and friendly nature so that students feel comfortable to seek any help without hesitation.

The basic role for any teacher is to create a very interesting classroom for students. Students must feel comfortable with the teacher and at the same time, teacher must encourage students. Students should be taught the right path and knowledge or matter should be conveyed in such a manner that students would find it very easy to understand.

The system approach (Rassekh and Vaideanu, 1989) to education, which relates organization, operation and evaluation of the teaching learning process, also highlights the importance of teachers and learners who are the important component for efficiency and quality of educational process of what actually happens in the classroom. It attaches particular importance to the interaction between the components of this process: objectives, contents, learning methods, teaching resources, organization of instruction, the process of learning and evaluation.

Recommendation and Educational Implications of the Results:

Improving the teaching-learning process is a multifaceted challenge that involves both teachers and learners. Teachers, being the facilitators in this scenario, shoulder a larger part of this responsibility. There are countless suggestions to improve the teaching-learning process. Here are a few of the strategies to do so:

Create a Positive Learning Environment:

As an educator, try to foster a supportive and inclusive classroom atmosphere where students feel comfortable expressing their thoughts and ideas. You need to establish clear expectations and rules right from the beginning to promote a respectful and collaborative learning environment. When students feel comfortable and at home in the classroom, is when they will truly blossom into strong-minded individuals, unafraid to speak their minds and express who they are.

Use Varied Teaching Methods:

Try to employ a mix of instructional methods like the ones mentioned earlier in the article, such as lectures, group discussions, hands-on activities, multimedia presentations, etc., to cater to diverse learning styles. Incorporate technology and interactive tools to make lessons more engaging and relevant to the current intellectual landscape.

Set Clear Learning Objectives

Always clearly define the goals of each lesson or unit to provide students with a roadmap for their learning journey. Ensure that objectives are measurable and achievable with genuine effort, allowing for assessment of student progress. When such objectives are set, students feel a sense of achievement when they have

completed a particular lesson. This will encourage them to participate more and take avid interest in class activities.

Provide Timely and Constructive Feedback

Regularly keep assessing student performance and provide feedback that is specific, timely, and, most of all, actionable. Encourage self-assessment and reflection to empower students to take ownership of their learning. When the feedback is given in a timely and non-derogatory manner, the student will grow to appreciate constructive criticism rather than fear it and will thrive on peer reviews and strive to improve.

Encourage Active Participation

Encourage and increase student engagement through discussions, debates, group activities, and hands-on projects. Encourage and entertain questions and critical thinking to stimulate intellectual curiosity. Q&A slots, doubt-clearing sessions, trivia, factoid, and research-related activities, etc., all contribute to the development of intellectual curiosity, promptness in clearing queries, and a thirst for knowledge that propels the students for their future academic pursuits.

Differentiate Instruction

One should learn to recognise and accommodate diverse learning abilities by tailoring instructional modules to individual needs. As an educator, you should offer opportunities for advanced learners to delve deeper into the subject matter while simultaneously providing additional support for those students who may be lagging or facing difficulties.

Promote Collaborative Learning

Consistently encourage teamwork and collaboration among students to enhance their social and communication skills. Group projects and peer-review activities can promote peer learning and a sense of community in the classroom. Rather than making learning a two-way exchange between student and teacher, let it transform into an interconnected network where information is not just disseminated from the educator to the learner but from one learner to another.

Stay Updated on Educational Trends

Continuously seek professional development opportunities to stay informed about new and innovative teaching methods, technology, and educational research. Keep yourself and your curriculum fluid and adaptable, and be open to incorporating new, effective strategies into your teaching. Keep upskilling yourself and your fellow educators by attending specialised seminars, educational retreats, research conventions, and expert sessions to better yourselves as mentors and teachers.

Promote Critical Thinking

Design activities and assignments that require students to analyse, evaluate, and apply knowledge rather than simply memorise information. Encourage questioning and exploration of multiple perspectives. Application-based tests and stimulatory problems not only sharpen critical thinking skills, but problem-solving abilities as well.

Establish Real-World Connections

Education and learning cannot just be contained to the four walls of a classroom, completely disconnected from the world outside. Try to relate lessons to real-world applications to help students see the practical relevance of their learning. Guest speakers, field trips, and real-life case studies can enhance the connection between theoretical knowledge and its practical applications.

Cultivate a Growth Mindset

Foster a growth mindset within students by praising efforts, perseverance, and resilience rather than focusing solely on grades. When students feel seen for their hard work, they are more responsive to learning. You should help students understand that intelligence, inborn talent, and abilities can be developed and honed through dedication and hard work. Encourage students to find their niche and cultivate it to become a strength for their future endeavours. Also, try to teach them not to get disheartened by their weaknesses and, rather, try to overcome or circumvent them to achieve success.

Incorporate Technology

Instead of running away from technology, embrace it. Gone are the days of a traditional chalk-and-blackboard classroom. There are several EdTech tools available that can be used to make the classroom experience more interactive and smoother and increase the scope of the teaching and learning process. Technologies like interactive whiteboards and displays, collaborative learning platforms for a peer-based learning environment, online assessments and analysis tools for easier testing, augmented and virtual reality tools for a more interactive classroom, etc., are ways you can bring your classroom to life in the 21st century.

With platforms like Extra marks smart school solutions such as Smart Class Plus, you can transform traditional classrooms into engaging, learner-centric environments by seamlessly integrating state-of-the-art digital infrastructure like smart whiteboards with professionally-developed multimedia learning content and robust practice & test-related academic tools.

Suggestions for future research

Design a portfolio of coherent learning experiences for science teachers that attend to teachers' The field also needs research on the development of teacher educators, professional development leaders, and teacher leaders more generally. Learning to teach teachers is related to but distinct from learning to teach. Research documenting and explaining how skilled teacher developers acquire relevant knowledge and practice would help improve the quality of professional learning across the myriad settings in which it takes place.

References:

1. Adair, J. (2009). Leadership and motivation: the fifty rule and the eight key principles of motivating others, London: Kogan Page.
2. Alfayad, Z., Arif, L. S. (2017). Employee Voice and Job Satisfaction: An Application of Herzberg Two-factor Theory. International Review of Management and Marketing 7, 150–156.
3. Alfieri, L., Brooks, P. J., Aldrich, J., Tenenbaum, H. (2011). Does discovery-based instruction enhance learning? Journal of Educational Psychology 103.

4. Arthurs (2007). A juggling act in the classroom: Managing different learning styles. Teaching and learning in nursing.
5. Becker, A., Davis, S., McGregor, L., Grover, C. (1990). Student Expectations of Course and Instructor. Teaching Psychology 17, 59–162.
6. Bruner, J. S. (1957). Going beyond the information given. New York: Norton.
7. Ellis, S. and Tod, J. (2015). Promoting behaviour for the learning in the classroom: Effective strategies, personal style, and Professionalism. Routledge: London.
8. Gray, C., and MacBlain S. (2012). Learning theories in childhood. Sage Publications Ltd: London.
9. Garver, R., Noguera, P. (2012). For Safety's Sake: A Case Study of School Security Efforts and Their Impact on Education Reform, Journal of Applied Research on Children: Informing Policy for Children at Risk 3.
10. Gilakjani, A. (2012). Visual, auditory, kinaesthetic learning styles and their impacts on English language teaching. Journal of studies In education 2, 104–113.
11. Hackman, J.R. Oldham, G.R., (1976). Motivation Through the Design of Work: Test of a Theory. Organizational behaviour and human Performance 16, 250–276.
12. Johnston, H. (2012). The Spiral Curriculum. Education Partnership Inc., Florida.
13. Kiel, J., (1999). Reshaping Maslow's hierarchy of needs to reflect today's educational and managerial philosophies. Journal of Instructional Psychology 26, 167.
14. Hepsiba, N., Subhashini, A., Raju, M., & Rao, Y. P. (2018). Changing role of teachers in the present society. International Journal of Health & Medical Sciences, 1(1), 35-38. <https://doi.org/10.31295/ijhms.v1n1.37>