The European Journal of Humanities and Social Sciences 2025, No 1
ISSN 2414-2344

PREMIER Publishing
ppublishing.org

Section 5. Pedagogy

DOI:10.29013/EJHSS-25-1-29-39

APPLYING THE THEORY OF MULTIPLE INTELLIGENCES TO DEVELOPING A SMART UNIVERSITY MODEL IN THE CONTEXT OF THE INDUSTRIAL REVOLUTION 4.0

Dinh Van De

[1] Ly Tu Trong College of Ho Chi Minh City, Viet Nam

Cite: *Dinh Van De. (2025). Applying the Theory of Multiple Intelligences to Developing A Smart University Model in the Context of the Industrial Revolution 4.0. European Journal of Humanities and Social Sciences 2025, No 1.* https://doi.org/10.29013/EJHSS-25-1-29-39

Abstract

In the past decades, our country's education has made remarkable achievements and development steps, which are essential to raising people's knowledge, training human resources, fostering talents, and achieving crucial results in the country's construction, protection, and development. Your work as educators, policymakers, and academic researchers has been integral to this progress. Not content with what has been, Vietnamese education continues on the path of development, linear and sustainable development in which selective research methods and advanced teaching theories are applied to teaching practice. Motivational teaching inspires a passion for exploring, learning, and researching to approach the modern scientific world. The theory of multiple intelligences is an optimal theory that creates a belief that helps to source the wealthiest talents hidden deep in each person, producing and directing the resources to help achieve desired goals. Success begins with belief. Belief comes from a statement or an idea we come up with ourselves. The theory of multiple intelligences is a proof.

Keywords: *Multiple intelligence theory, capacity, education, training, and responsiveness*

1. Introduction

In 1905, French psychologist Alfred Binet (1857–1911) first invented the test. The first practical IQ test, which provided a measure of intelligence, aimed to classify students of similar intelligence for ease of training.

In 1912, German philosopher and psychologist William Stern (1871–1938) coined the term IQ (intelligence quotient). He used the ratio of Mental Age (reflecting a person's level of intellectual development) to Biological Age (the person's actual age) to calculate an individual's intellectual development. He believed that individual differences, such as intelligence, were complex and that there was no easy way to compare individuals qualitatively. Concepts such as mental retardation could not be determined by a single intelligence test, as there were many factors that the test did

not measure, such as behavioral and emotional variables.

In 1916, Lewis M. Terman (1877–1956) was a psychologist at Stanford University. He was recognized as a pioneer in educational psychology in the early 20 th century and served as president of the American Psychological Association. He improved this calculation by multiplying the above quotient by 100 to remove the decimal points (Thomas Armstrong. 2011; http://bethongminh.vn/mida/howard-gardner-cha-de-cua-thuyet-tri-thong-minh-da-dang.html).

His formula for calculating intelligence quotient: IQ = x 100 has been widely recognized and used.

He also improved upon Binet's test to create the Stanford-Binet test, which is considered the original for many IQ tests today.

Howard Earl Gardner(born July 11, 1943) is a writer, developmental psychology American, and cognitive and educational research professor. He is the father of the theory of multiple intelligences. According to the Theory of multiple intelligences, Gardner's theory suggests that humans have different ways of processing information and that these ways are relatively independent. This theory is a critique of standard theories of intelligence, which emphasize correlations between abilities, as well as traditional measures such as IQ tests, which typically only take into account linguistic, logical, and spatial abilities (http://bethongminh.vn/mida/howard-gardner-cha-de-cua-thuyet-tri-thong-minh-da-dang.html).

Howard rejects the traditional concept of intelligence, often identified and assessed based on IQ tests. He argues that this concept does not fully reflect the diverse intellectual abilities of humans.

According to him, a student who easily solves a complex problem is not necessarily more intelligent than another student who struggles to complete the same problem in school. The second student will likely be better at other "forms" of intelligence.

His theory of "multiple intelligences" suggests that each individual almost reaches a certain level in each "category" in the system of intelligence forms. Low or high level shows the individual's limitations or advantages in this field. In particular, this level is not a "constant" throughout life but can change (improve or decrease) depending on the cultivation conditions.

Howard Gardner's theory of multiple intelligences is based on the work of psychoanalyst Eric Erikson, sociologist David Riesman, and psychologist and cognitive scientist Jerome Bruner. He took courses on the study of human nature, especially how people think.

In his theory of multiple intelligences, Gardner established the specific requirements that each intelligence must meet in order to qualify as a functional intelligence.

2. Research Results

The theory of multiple intelligences, also known as the theory of multiple intelligences, was published by Dr. Howard Gardner of Harvard University in 1983. Howard Gardner proposed the theory of Multiple Intelligences, including seven intelligences. In 1996, he continued to add the 8 th intelligence, Naturalistic Intelligence, after a period of research and possible experimental planning (Thomas Armstrong. 2011; http://bethongminh.vn/mida/howard-gardner-cha-de-cua-thuyet-tri-thong-minh-da-dang.html; URL: http://genecodevietnam.com/ly-thuyet-thong-minh-da-tri-tue).

In 1999, he officially announced to the world that he would continue his research., supplementing and developing the theory of the existence of the 9 th type of intelligence, "existential intelligence". According to Professor Howard Gardner: "Existential intelligence is a special intelligence, a useful structure to assess one of the outstanding human abilities." After more than 20 years of research (July 8, 2020), Howard Gardner answered that existential intelligence is still in the research phase and proving its existence.

So existential intelligence has not officially become a type of intelligence in the theory of multiple intelligences; because there is still not enough basis related to brain parameters, biometric analysis shows that brain parameters are not enough basis to demonstrate the existence of this type of intelligence.

The human world possesses different types of intelligence, such as Naturalistic, linguistic, interpersonal, kinesthetic, logical-mathematical, visual, musical, and intrapersonal. The above types of intelligence are

collectively known as the theory of multiple intelligences.

Human intelligence is not only measured by IQ but also depends on 8 (eight) intelligence quotients in the theory of multiple intelligences.

According to Professor Gardner, intelligence is "the ability to solve problems or create products that have value in one or more cultural environments." Intelligence cannot be measured solely through mathematical logic or the ability to solve a problem quickly.

Multiple intelligence depends on the individual and is not a constant but a nonlinear mathematical function capable of infinite variation within a defined domain depending on each learner's knowledge acquisition conditions.

2.1 Multiple Intelligence Theory

Each person's ability to learn, express intelligence and skills can be expressed through 8 different types of intelligence:

1. Linguistic intelligence

Linguistic intelligence is the ability to use language effectively to express oneself and understand language, including its components: written, spoken, and body language.

People with linguistic intelligence are often good at reading, writing, speaking, listening to remember, discussing and debating, explaining, and giving persuasive speeches. People with this intelligence often use the power of language to provide speeches and eloquence. In particular, people with linguistic intelligence will learn foreign languages well thanks to their vocabulary memory.

2. Social communication intelligence

Interpersonal intelligence is the ability to interact socially, be outgoing, cooperate, influence and persuade others. It is also sensitive, empathetic, friendly, and approachable. It has leadership qualities and is psychological, responsible, charismatic, understanding, and compassionate.

It is the ability to understand and work with other people quickly and to sense and share their moods, personalities, emotions, temperaments, intentions, and desires.

People with social intelligence are extroverted, compassionate, and socially responsible. They can attract people to their organization or group, understand others, and see the world through their eyes.

In short, Interpersonal Intelligence represents the ability to interact socially, be outgoing and cooperative, and influence and persuade others. It includes sensitivity, empathy, friendliness, approachability, leadership qualities, psychological traits, responsibility, charisma, understanding, and compassion.

3. Musical intelligence

Is intelligence biased in the ability to perceive and compose tones, pitches, and rhythms, to perceive, appreciate, and perform music? This ability includes creating rhythms and beats and memorizing melodies and songs. This area of intelligence deals with melodies, music, and hearing. This intelligence is often very sensitive to sounds, rhythms, and pitches.

Musical intelligence is present in everyone's subconscious, people who have good listening skills, have time for music, know how to sing in tune and listen to various musical pieces with precision and clarity of senses.

Musical intelligence goes hand in hand with linguistic intelligence. From a musical perspective, a musically intelligent person will convey content using musical language.

4. Bodily intelligence

Bodily intelligence or bodily-kinesthetic intelligence is the ability to use the body or parts of the body to solve problems, signal, or express emotions, including the mind's ability to control those activities, move small muscles, and coordinate whole-body muscles.

People with kinesthetic intelligence are practical, sensitive, constantly want to move their bodies, and have "instinctive reactions" to situations and objects; they demonstrate the ability to control body movements skillfully.

5. Spatial intelligence

Spatial intelligence, or visual-spatial intelligence, is related to thinking in images and symbols and the ability to perceive, transform, and recreate different aspects of the vivid visual-spatial world.

People with visual-spatial intelligence can draw or sketch their ideas through images or graphics and easily orient themselves in 3D. This intelligence is expressed in the ability to perceive and visualize the visual-spatial world from many angles. In addition, this type of person also has the ability to remember images, videos, and pictures excellently.

6. Naturalistic intelligence

It is the ability to perceive and evaluate the relationship of humans with the natural world. Natural intelligence theory helps people perceive, classify, and derive characteristics of the environment. Naturalistic intelligence involves being keenly observant of the natural environment around them and able to classify different things well. It can be done by exploring nature, making collections for species, studying them, and grouping them.

7. Intrapersonal intelligence

People with intrapersonal intelligence can easily access and see their own emotions, distinguish many internal emotional states, and apply their understanding of themselves to enrich and outline the path for their lives; they often meditate to perceive and evaluate their strengths and weaknesses.

Being a person who is always thoughtful in a quiet state, is a person with solid independence, high straightforwardness, and extreme self-awareness, discipline; opinionated, strong-willed, highly self-reliant; prefers to work alone, independently rather than working with others, in groups; introverted with the ability to reflect internally, plan and manage arguments, understand inner language. They have a high self-awareness and can understand their emotions, goals, and motivations.

People with intrapersonal intelligence can easily access and see their emotions, distinguish their inner emotional states, and use their understanding of themselves to highlight the direction of their lives.

8. Logical-mathematical intelligence

Logical-mathematical intelligence: the ability to reason, analyze, synthesize and find the nature and rules of problems related to numbers, deduce sequences and think in the direction of cause and effect. The ability to reason, the ability to understand abstract problems, the ability to determine causes, chain events. The ability to detect, deduce sequences, reasons and think logically well.

This intelligence is closely related to scientific and mathematical ideas, the ability to create hypotheses, and the ability to find numerical patterns or rules based on rational concepts in life.

People with this intelligence often excel at abstract or numerical activities, where mathematical ability is less than reasoning ability. This area also includes abstract pattern recognition, scientific and investigative thinking, and the ability to perform complex calculations.

Sir Ken Robinson once said: "Human potential, like natural resources, is buried deep. You must work to find it; it is not just on the surface. You even have to create the circumstances for it to be revealed."

Each of us possesses all eight intelligences listed above but at different levels depending on each person's temperament. Some intelligences in the theory of multiple intelligences are more developed and may not be as strong. However, these strengths and weaknesses are not permanent and can change depending on the level of practice, promotion, and development.

2.2. Current status of education in our country

Traditional, modern, and contemporary schools often assess whether students are trained using conventional or competency-based approaches through memorization and reproduction of a specific learning unit. According to Gardner, teachers assess learners through one or two types of intelligence: linguistic intelligence and logical/mathematical intelligence; this assessment method does not guarantee accuracy and scientificity (Tran Khanh Duc. 2015).

Schools have neglected some of their students' optimal learning abilities because, in addition to linguistic and logical/mathematical intelligence, students also have learning abilities through music, movement, vision, communication, etc.

On the other hand, schools bring all learners together in a standard method and direction for assessment and judgment; meanwhile, learners can learn better if they can absorb knowledge using their strengths in diversity, temperament, passion, and interest.

Schools have not yet considered the intellectual diversity of each learner, because each type of intelligence is essential and each learner has many abilities in many different directions to develop their learning and research capacity successfully. Archimedes once said: "Give me a fulcrum, and I will move the earth." Schools should be a place to help, inspire passion and potential, and create learning condi-

tions in different directions for future owners of society. Be a lever to encourage learners to develop comprehensively.

The application of teaching methods applying the theory of multiple intelligences in Vietnamese education has not yet been widely developed; pedagogues and educational experts are looking for optimal solutions to this problem. Experiments show that the results of applying the theory of multiple intelligences in organizing teaching and learning by flexibly applying and synthesizing classical, modern, and contemporary teaching methods and techniques to engage active learners are acceptable. Still, some necessary and sufficient conditions are required for successful implementation.

The environment for implementing teaching and learning activities according to the theory of multiple intelligences has not met the requirements; there are no legal regulations; it only comes from the modern approach of some teachers, managers, and some schools with specific characteristics that are subject to innovation.

Teachers almost only use the scores of each subject to evaluate each person's intelligence when assessing students. This is why students are unintentionally labeled negatively by their relatives or teachers as weak because they have not achieved high academic scores (Dinh Van De. 2020).

Schools, families, and society have not focused on developing other types of intelligence besides language and logic/mathematics in the 08 theories of multiple intelligences, especially the currently unrecognized existential theory.

The theory of multiple intelligences has brought a humane and necessary perspective to call on schools and teachers to respect the diversity of intelligence in each learner. To solve the above situation, a solution must be found with the ultimate goal of learners' progress. Along with the teaching method, the theory of multiple intelligences must be combined to be implemented clearly in education and training.

2.3 Applying pluralism theory intelligence by Howard Gardner on innovative university model in the context of Industrial Revolution 4.0

Thomas Armstrong's message to parents and educators: "My work as an educator and psychologist in the field of multiple intelligences and natural talents of learners is guided by the belief that all people are born human beings. Every person born into this world has a unique potential that, if properly nurtured, can make the world a better place. The greatest challenge for parents and educators is to remove the obstacles that prevent these natural talents from being recognized, celebrated, and nurtured."

Education and training play a core role for each country, and educational development must be at the forefront of all fields. Teachers need to respect the diversity of intelligence in each learner; each type of intelligence is essential, and each learner has more or less ability in many different directions. Schools, teachers, and parents must be places to help, stimulate potential, and create learning conditions and passion in different directions for children who are the future owners of society (Thomas Armstrong. 2011; URL: http://www.google.com.vn).

The theory of multiple intelligences profoundly impacts teaching and learning methods. When affected by many areas of intelligence, learners can develop their strengths and weaknesses in a learning environment that meets the basic requirements of learning and research.

With educational philosophy's comprehensive development capacity for learners, the lecturer applies multiple intelligence theory, which is necessary for teaching. There, teachers inspire passion, ability, and aspiration in learners, which is a liberal approach to recognizing, honoring, and nurturing learners' talents.; learners have enough conditions, weaknesses, and strengths to equip themselves with modern knowledge, which is the primary motivation to comprehensively develop capacity based on optimal educational theory integrated into the theory of multiple intelligences (Nguyen Thanh Hai. 2020).

The theory of multiple intelligences can be applied successfully only when the teacher respects the diversity of intelligence in each learner. Each type of intelligence has its own characteristics and features, and each learner possesses more or less of the types of intelligence and has different tendencies. The family and the school are responsible for helping learners develop naturally according to their inclinations.

Multiple intelligence theory helps teachers put themselves in modern education's right frame of reference. Before teaching, teachers build a "mind map" and reflect on and choose a teaching method based on the "Brain Attack" method so that the lesson is the most suitable. Teachers clearly understand why that method is effective or only practical for one learner but not adequate for another. Therefore, in a lesson, teachers change teaching methods regularly to meet the student learner's interests, diversity, and temperament (Tran Khanh Duc. 2015).

Teachers put themselves in the position of learners to understand them clearly and let learners understand the learning content that the teacher teaches in their own way; learners will have confidence and interest in learning and remembering the lesson. Teachers should create regular, friendly, and sustainable relationships with learners so that personal interaction always appears to satisfy curiosity during teaching and learning hours.

Sometimes, the inner self is used to enlighten the learner by communicating exercises that challenge students to make connections between their own experiences and course content and to write reports or essays on related topics. This approach encourages students to think about their learning styles and processes.

Let the natural learner aim to engage these students to incorporate the outside world into the lesson; project-based learning is ideal. Giving students opportunities to interact with the outside world keeps them interested in the subject and stimulates creativity.

Create a different passion and interest in learning for each learner; stimulate learners to participate in the learning process with timely instructions and encouragement so that learners can overcome psychological inertia and participate in learning and research responsibly and sincerely.

Research and apply methods to integrate multiple intelligence theory with subjects. Initially, teachers apply intrapersonal, interpersonal, and natural intelligence as basic methods to start the lesson. At the same time, they thoroughly apply the four human temperaments to each member of the class. This is one of the easiest and most intuitive methods to open up the theory of multiple intelligences for learners.

There are many ways of learning and understanding when approaching a problem: We have different personalities, interests, tastes, and learning styles. Through practical observation, teachers need to understand and correctly assess these differences and know which type of learners excel according to the Theory of Multiple Intelligences. From there, they can develop appropriate teaching activities to develop learners' abilities. Each learner has unique skills that must be discovered, nurtured, and measured to satisfy their intellectual range.

Identifying learning styles and expecting explicit understanding of learning content from learners is the pedagogical task of the teacher. When approaching a research problem, learners must identify goals, criteria, or output standards that society accepts. In teaching, learning objectives and lesson objectives need to be clearly defined, measurable, and quantifiable to have confidence in empowering learners to take the initiative in learning. Therefore, lesson objectives need to return to their correct orbit: the learner. There, the learner is both the object and the subject of the teaching and learning process. To approach modern education, lesson and learning objectives must ensure the SMART principle of writing smart, new, and optimal learning objectives.

Writing lesson objectives according to the SMART principle has two essential tasks. One is to help teachers optimize teaching methods, teach effectively, and be compatible with the content of the training program. Two is to clearly inform learners about what knowledge, skills, and attitudes they will achieve after completing a learning unit. Learning outcomes must belong to learners and be transparent, with proficient learning and optimal learning methods.

S – Specific – When writing lesson objectives, precise language and clear and specific words are necessary. This helps facilitate pedagogical communication between teachers and learners; learners will understand the output results after completing the learning unit.

Teachers can use verbs that describe cognitive levels according to Bloom's taxonomy to write detailed and specific objectives.

M–Measurable – When writing learning objectives, they must be moderate. This means

that the defined domain must be built so that learners can satisfy the set objectives and have the full capacity to successfully achieve those objectives. Therefore, the objectives must be measurable and identifiable. Measurable criteria can be expressed through quantity, content, frequency, length, difficulty, etc.

A – Attainable – This is the relevance and differentiation when writing learning objectives. There are as many students in a class or lecture hall as there are students with the same capacity and cognitive level; therefore, instead of writing lesson objectives for all students, lecturers quantify from the learner's perspective and write appropriate learning objectives, ensuring that all students in the class achieve them.

R – Result The outputs in the lesson objectives should be expressed in the form of a specific product instead of general expressions such as "grasp," "understand," "have a positive attitude... The particular product form can be a presentation, a math problem, an experiment, a technological process design, mechanical processing, etc.

T – Time-bound – Lesson objectives must specify the time limit for students to complete tasks and requirements as expected. Setting a time limit in learning objectives helps students and lecturers clearly identify the tasks of teaching and learning within the prescribed time. In addition, time is also a tool to differentiate students' learning and research abilities.

Engagement: Engagement is about participating, sharing, and acting together, a state in which the community's knowledge, skills, and resources are mobilized and applied to their fullest extent.

R – Relevance: Relevance is the quality that determines one's sense of unity with the social environment (family, class, group, acquaintances, colleagues, nation, etc.). The orientation of the environment determines the beliefs, ideas, values, and norms of the participants in a particular social circle. Tradition is also a manifestation of conformity since each subsequent generation repeats certain actions that previous generations have done.

Conformity is synonymous with conformity. Conformity is an exclusive psychological quality of personality; conformity defines a particular behavior. Conformity exists alongside other social manifestations of uniformity in opinions and judgments and post-facto change of opinion. This pattern can powerfully impact the educational process in optimal directions.

Nowadays, people often use Bloom's taxonomy of educational (teaching) goals to write general and specific goals, in which the knowledge domain (Cognitive Domain) has six levels from low to high.: Know, Understand, Apply, Analyze/Synthesize, Evaluate (analyze, synthesize in-depth, independently) and Create; Harrow's classification of educational objectives for the skill area, including 05 levels from low to high: Imitate, Do (basic initial skills), Do accurately (independent performance skills), Do differently (combined skills), Do fluently, automate (advanced skills).

Determining attitude goals is also researched and implemented based on Bloom, with five levels in a positive direction. Writing attitude goals is the most complex and complicated. There are even many inconsistent attitude expressions in the same learner. Quantifying attitude education goals and determining evidence to evaluate attitudes is complex and relative. That requires attitude goals through communication, observation, assignment, regular supervision, and at many different times: Receiving, Responding, Evaluating, Organizational awareness, and Personality characteristics/expressions.

The teacher wrote content on multiple intelligence theory in a concise, essential form. All the knowledge the learner learns is converged to a minimalist common denominator.

The test evaluates learning outcomes based on the learner's ability without being limited or bound by the regulations and psychology of the test maker and satisfying the expectations of the theory of multiple intelligences. There are no rigid, dogmatic regulations to decide whether the learner is intelligent or not through memorization and reproduction of the examiner's score.

Learning style: To meet learners' learning styles, educators and educational administrators invest in equipment, facilities, and teaching staff and constantly improve training programs (CTDT) to meet learners' capacity in the most effective way. Knowing that learners always possess all types of intelligence, according to Howard Gardner, finding and proposing a learning style that can help learners

develop all kinds of intelligence while emphasizing the method of promoting intellectual potential according to learners' capacity helps them succeed in life (Nguyen Xuan Lac. 2017; URL: http://www.google.com.vn).

Career orientation and development for learners according to the theory of multiple intelligences: In education, career orientation is one of the essential elements. The theory of multiple intelligences is a system of standards based on each learner's ability to determine criteria according to each standard as a guide for learners to build goals for their future careers. The teacher's orientation is critical; learners determine the possible domain for themselves and will put all their abilities, intelligence, time, and effort into studying and researching to achieve success.

Applying multiple intelligence theory in teaching theory: This method typically involves applying the theory of multiple intelligences to teach concepts, the structure of a technical device, engineering principles, engineering materials, etc.

Applying the theory of multiple intelligences in integrated teaching: We must go through the job analysis activity to identify integrated lessons. The program designers build the job analysis activity; here, the lecturer only chooses from the job analysis diagram corresponding to each job identified in the profession as the name of an integrated lesson.

Integrated lessons focus on forming competencies, and the theoretical part of the lesson is new theoretical knowledge that serves the practice of skills.

Applying the theory of multiple intelligences in practical teaching: to apply the theory of multiple intelligences to teach design/manufacturing lessons, teach inspection and appraisal of machinery and equipment, teach installation/assembly and operation of machinery and equipment, teach repair and maintenance of machinery and equipment, etc.

2.4 Digital transformation is the driving force for developing the intelligent applied university model

Minister of Education and Training Nguyen Kim Son said that it is necessary to see all the benefits and advantages of digital transformation to have an orientation for the benefits and advantages to be demonstrated. For education, it means better management, more convenient teaching, and better quality learning. "If done well, this will be a push to change educational thinking, educational management, the profession of teachers, and learners' activities. Towards solving sustainable and long-term problems in the education sector," the Minister emphasized.

Improving the quality of education: Nowadays, technological achievements such as the Internet of Things (IoT) help to enhance management and monitoring in educational institutions and monitor and observe learners' behavior. Big data technology helps to analyze learners' learning behavior to provide appropriate support and advice, or Blockchain helps to build and develop a system to manage information and academic records of learners, allowing the consolidation, management, and sharing of data from many educational institutions, recording learners' learning history and personal transcripts to ensure trust and consistent and transparent data information.

Building and developing flexible learning space and time, promoting open-equal, – personalized education: Currently, open mass online courses appear with big names in the world, such as Udacity, Coursera, edX, Udemy, FutureLearn, creating the most favorable conditions for learners to quickly absorb and master knowledge flexibly, effectively and conveniently anytime, anywhere. This foundation has opened up a new education – open education, helping people access multi-dimensional information, narrowing all spaces, and saving time optimally, thereby rapidly developing knowledge, awareness, and thinking on a multimedia platform (Tran Khanh Duc, 2020).

Increase interactivity, practicality – application: Apply virtual reality augmented reality in education to build virtual laboratories, virtual reality models with user interaction, or AR books, Blippar software for space science research, etc., to help learners have engaging, open, multi-sensory experiences in a virtual environment, easy to understand, easy to remember and explore, attractive for learners, while promoting interaction, practice, and application of knowledge right in the classroom.

Reduced training costs: With the development of the Internet, online teaching models (e-learning) help reduce training costs. Accordingly, course costs will be re-

duced significantly. Training facilities save on equipping facilities and paying lecturers and experts; learners save on tuition, living expenses, learning materials, and other fees.

Accompanying open education are open learning resources, which help learners and teachers connect with knowledge effectively wherever they are and at any time. They also help managers be transparent about the teaching and learning activities of the educational institution they lead. Open learning resources are an inevitable development trend in modern education.

Optimally operated training facilities: Applying technology to operations helps manage teachers and students more thoroughly, reduces workload, eliminates waste, and improves the efficiency and quality of work of departments, offices, and training.

Assessing learners' learning outcomes is assessing learners' knowledge, skills, and attitudes through instructional materials and measuring progress. Using learners' assessments combined with data analysis, lecturers exercise their rights and obligations as teachers and classroom managers to adjust teaching plans to be convenient and suitable for learners. Lecturers build appropriate question banks for each subject; students answer lecturers' questions through assessment testing software, from which lecturers can accurately assess each student's knowledge, skills, and attitudes (Tran Khanh Duc, 2020).

During the implementation process, flexibly apply solutions for the best results, such as:

– Deploying e-government, aiming at the ultimate goal of digital government in the entire education sector. Which focuses on connecting, sharing data, and communicating from the Central to lecturers, managers, schools, and each locality in sync with the national database, contributing to the formation of a national open database. From here, in the cyberspace environment, the education sector must thoroughly digitize. Directing activities, operations, training, transactions, meetings, books, student records, and electronic grade books are done by electronic documents, replacing paper documents and papers.

Digital transformation in the entire education sector must be propagated, disseminated, and mobilized to raise awareness and responsibility. Be clear about ideology, with determination and a high will to build a digital culture in the education sector from lecturers, managers, schools, and each locality.

– Specialized digital databases must be combined with technologies such as Big data, AI, Blockchain, etc., to build information collection systems that make accurate predictions and forecasts and create various applications suitable for each learner.

– To serve the teaching and learning, testing, assessment, and scientific research in the digital transformation of the entire education sector, it is necessary to promote the development of digital learning materials, build a digital learning material repository, and open learning materials for the whole of the industry, interconnect and link with international learning material repositories to meet the expectations of learning, self-study and lifelong learning needs; continue to approach innovation in teaching and learning methods with the direction of applying digital technology, encourage and develop new, smart education and training models based on digital platforms, gradually narrowing the gap between learning subjects.

– Create equal learning opportunities among regions with different socio-economic conditions when and only when the network infrastructure is synchronously completed, serving teaching and learning activities as possible; quickly propagate and mobilize social resources to participate in implementing the network infrastructure.

– Training and fostering knowledge and information technology skills for management staff and teachers. In particular, information security, safety, and protection from cyber-attacks are essential for educational operations in the digital environment, meeting the requirements of digital transformation in education.

– To build a digital environment of connection and sharing between lecturers, administrators, schools, and each student, the educational social network must have unified control and direction with legality to systematically deploy open online courses and train and support teachers and learners in a synchronous manner.

With the issues analyzed above, we can see that digital transformation in education is very important. Based on the proven con-

tent, it will be a feasible direction in the education sector. With the advancement of science and technology, digital transformation will help the Vietnamese education sector develop more and more and approach world education.

3. Conclusion

To develop and optimally apply the multiple intelligence theory in our country's current education system, teachers must utilize and help learners according to each individual's strengths and clearly explain teaching methods so that learners can learn and research best.

From the experimental planning in education, we have the necessary and sufficient conditions to apply the theory of multiple intelligences to schooling in a feasible way as follows: Building a diverse and practical learning environment, creating comfortable psychology for learners to experience, Standing from the perspective of the learner to apply the learner's criteria to the standard system of the theory of multiple intelligences in an optimal way with the belief that the theory of multiple intelligences has liberated all learners; Accepting all characteristics of the learner's temperament, respecting and listening to all feedback, even if it is unusual, of the learner; Developing communication skills and creative thinking, encouraging teamwork but supporting independent work (URL: http://en.wikipedia.org/wiki/Thuy%E1%BA%BFt_%C4%91a_tr%C3%AD_tu%E1%BB%87).

The article presents content related to the theory of multiple intelligences and the current state of education in Vietnam. It has proposed some general solutions to promote innovation in education and training and for each teacher in particular. Each proposed solution needs to be further studied, specifically a detailed roadmap plan developed, a reasonable organization assigned for implementation, and a pilot evaluation to ensure effectiveness when implemented in the diverse realities of each place and each different time and circumstance.

References

Tran Khanh Duc. (2015). Capacity and creative thinking in higher education, Hanoi National University Publishing House.

Dinh Van De. (2020). Evaluation of students' learning outcomes according to competency-based approach in teaching mechanical engineering technology at colleges, PhD thesis in Technical Education, Hanoi University of Science and Technology.

Tran Khanh Duc and authors. (2022). Scientific thinking and development of scientific thinking in education & training, Hanoi National University Publishing House.

Tank Yoshitaka. (2020). Vietnam's educational reform – Will it become a reality? Vietnam Women's Publishing House – Translated by Nguyen Quoc Vuong.

Tran Khanh Duc. (2020). Theory and Teaching Methods to Develop Capacity and Creative Thinking. Hanoi National University Publishing House.

Nguyen Thanh Hai. (2020). Stem/Steam Education – From practical experience to creative thinking. Tre Publishing House.

Thomas Armstrong. (2011). Multiple Intelligences in the Classroom, translated by Le Quang Long, Education Publishing House, Ho Chi Minh City.

Nguyen Xuan Lac. (2017). Introduction to modern teaching theory and technology, Vietnam Education Publishing House.

Information on the Internet:

www.google.com.vn
www.unesco.org.vn
Wikipedia website

Reference websites:

URL: http://bethongminh.vn/mida/howard-gardner-cha-de-cua-thuyet-tri-thong-minh-da-dang.html
URL:http://en.wikipedia.org/wiki/Thuy%E1%BA%BFt_%C4%91a_tr%C3%AD_tu%E1%BB%87
URL: http://genecodevietnam.com/ly-thuyet-thong-minh-da-tri-tue/

submitted 09.01.2025;
accepted for publication 23.01.2025;
published 18.02.2025

Contact: dinhvande@lttc.edu.vn