

Gamified Teaching Strategies based on English Core Competencies

Lin Xiao

School of Foreign Languages and Literatures, Chongqing Normal University, Chongqing, China

Abstract: In the wake of technological advancements and the ongoing reforms in English curriculum of junior high schools, significant transformations have taken place in the teaching environment and content of junior high school English education. To align with the pedagogical principles of the new curriculum reform, several schools have introduced gamified approaches to English instruction, aiming to innovate the conventional teaching paradigms. However, in the practical application of this gamified English teaching method, the effective utilization of educational games as tools, alongside substantial improvement in teaching quality, while seamlessly nurturing students' core Competencies, remains a focal point that educators need to address. In order to facilitate educators' comprehensive comprehension of gamified teaching strategies and assist them in implementing the core language proficiency objectives within the junior high school English curriculum, this study elucidates how gamified teaching practices can effectively integrate and enhance essential language skills. Additionally, the paper proposes pragmatic strategies to address the array of challenges currently prevalent in gamified English instruction.

Keywords: Gamification; Gamified Teaching; English Core Competencies.

1. Introduction

The landscape of junior high school English education has been profoundly reshaped by the confluence of technological advancements and ongoing reforms in the foundational English curriculum. As the contours of pedagogy continue to evolve, educators and institutions have sought innovative approaches to meet the dynamic learning needs of students. In this context, the integration of gamified teaching strategies has emerged as a promising avenue to revolutionize conventional teaching paradigms.

Amid these transformative shifts, several forward-thinking schools have embarked on a journey to harness the potential of gamification in English instruction. By introducing elements of game design and mechanics into the learning process, these institutions aim not only to captivate and engage students but also to cultivate a deeper and more nuanced understanding of the English language. This transition from traditional methodologies to gamified approaches represents a conscientious effort to align with the tenets of the new curriculum reform and its emphasis on experiential and learner-centered education.

While the incorporation of gamified English teaching holds significant promise, the practical implementation of this pedagogical innovation requires careful consideration. In particular, the effective utilization of educational games as tools and the simultaneous enhancement of teaching quality demand focused attention. Additionally, the seamless integration of gamification into the curriculum while nurturing students' English core competencies poses challenges that educators must actively navigate.

To bridge the gap between the potential and the practice of gamification in junior high school English teaching, this study aims to provide educators with a comprehensive understanding of gamified teaching and the potential to enhance English core competencies of learners. Moreover, this paper proposes strategies that address the array of challenges currently prevalent in the domain of gamified English instruction. By delving into the nuances of

gamification in the context of English education, this study seeks to empower educators to leverage this transformative approach effectively and facilitate the holistic development of students' English core competencies.

2. Literature Review

Gamification, the integration of game elements and mechanics into non-game contexts, has gained significant attention in various fields, including education. As traditional teaching methods are being augmented by innovative approaches, gamification emerges as a promising strategy to enhance engagement, motivation, and learning outcomes among students.

The theoretical framework has been studied by many scholars. Gamification draws on the principles of behavioral psychology and game design to create engaging learning experiences. Gamification leverages intrinsic and extrinsic motivators such as rewards, challenges, and competition to drive user engagement (Deterding et al. 2011:9-15). Deci and Ryan's (1985) Self-Determination Theory further supports the idea that gamification can satisfy students' basic psychological needs for autonomy, competence, and relatedness, leading to increased intrinsic motivation.

There are many benefits to applying gamification to education. Numerous studies have highlighted the positive impact of gamification on educational outcomes. Anderson et al. (2010) found that gamified learning environments promote higher engagement and knowledge retention compared to traditional methods. Sailer et al. (2017) noted that gamification enhances learning efficiency and encourages active participation. Additionally, Hamari et al. (2016) emphasized the potential of gamification to foster social interaction, collaborative learning, and the development of problem-solving skills.

There are also challenges and considerations. While gamification offers promising advantages, it also presents challenges that educators must navigate. Deterding et al. (2011) cautioned against over-reliance on extrinsic rewards, as it may undermine intrinsic motivation in the long run.

Additionally, Caponetto et al. (2014) pointed out that poorly designed gamified systems may result in superficial engagement without meaningful learning. Balancing fun with educational value and aligning game mechanics with learning objectives remain essential considerations.

Therefore, thoughtful design and integration are highly required for effective implementation of gamification in education. Garriss et al. (2002) emphasized the importance of aligning game elements with curriculum content and learning goals. This requires careful consideration of students' cognitive and developmental levels (Hanus & Fox, 2015) to ensure that the gamified experience enhances rather than distracts from learning. Moreover, embedding formative assessment within gamified activities can provide real-time feedback, promoting self-regulation and continuous improvement (Hamari et al., 2016).

As gamification continues to evolve in education, there are several avenues for further research and exploration. Investigating the long-term effects of gamified learning on student motivation and achievement remains a vital area of inquiry. Additionally, exploring the impact of cultural and contextual factors on the effectiveness of gamification strategies can provide insights for designing culturally sensitive educational interventions.

In conclusion, studies on gamification in education underscores its potential to transform traditional teaching approaches by fostering engagement, motivation, and active learning. Drawing from psychological theories and game design principles, gamification offers educators innovative ways to create meaningful learning experiences. While challenges such as maintaining intrinsic motivation and aligning game mechanics with educational goals exist, careful design and implementation can lead to enhanced learning outcomes. As the field of gamification in education continues to evolve, ongoing research and thoughtful application will contribute to its continued success in facilitating effective and engaging learning environments.

3. Theoretical Foundation

3.1. Constructivist Learning Theory

3.1.1. Constructivist View of Knowledge

Constructivist theory posits that knowledge is not an absolute representation of reality. Rather, it serves as a relatively reliable interpretation or hypothesis concerning various phenomena. Furthermore, knowledge cannot precisely encapsulate the world's laws; it necessitates contextual re-creation when addressing specific issues. Moreover, learners hold varying understandings of propositions, which arise from individuals constructing their interpretations based on their experiential backgrounds. This process is contingent upon the specific learning journey within particular contexts. Therefore, leveraging gamified learning software not only offers learners increased opportunities to acquire knowledge but also permits personalized knowledge construction based on their existing experiences.

3.1.2. Constructivist View of Learners

Constructivists emphasize that learners do not enter the classroom with blank minds. In the process of constructing their own knowledge, pre-existing knowledge experiences and beliefs play a significant role. Consequently, teaching should not disregard learners' experiences and start anew. Instead, it should treat

existing knowledge experiences as germination points for new knowledge, guiding learners to "cultivate" new knowledge experiences from their existing ones. The application of educational game software can generate personalized learning tasks based on learners' English learning foundation and diverse learning needs. This student-centered approach emphasizes connecting new and old knowledge, facilitating the construction of individualized knowledge systems.

3.1.3. Constructivist View of Learning

Constructivism presents a sharp critique of traditional teaching views, offering novel interpretations of learning that emphasize its active, constructive, social, and contextual dimensions. Learning, in the constructivist perspective, emerges as a process where individual learners construct knowledge based on their experiential backgrounds, rather than knowledge being transmitted from teachers to learners. Consequently, learners engaged in learning must synthesize, reorganize, transform, and modify their pre-existing knowledge experiences to comprehend new information, phenomena, and problem-solving. To cultivate learners' practical and innovative abilities, traditional passive learning methodologies require substantial refinement.

Constructivism underscores that learning occurs through the internalization of relevant knowledge and skills within a social and cultural context, often achieved through cooperative interactions within a learning community. A classroom can be seen as a learning community, and within gamified educational software, a small group can similarly function as a learning community. Constructivists propose the contextual cognition perspective, highlighting the contextual nature of learning, knowledge, and wisdom. Knowledge is viewed as inextricably tied to active contexts and cannot exist abstractly. Therefore, individual learning should align with contextualized social practices. However, due to geographical and urban-rural disparities, substantial differences exist in English social practice activities. Therefore, combining gamified software with VR technology may bridge these gaps.

3.1.4. Constructivist View of Teaching

Constructivism offers pointed criticism of traditional teaching perspectives and provides new explanations, introducing a series of educational reforms. A fundamental and core concept is to enable learners to learn through problem-solving. Constructivism critiques the decontextualization of learning in traditional approaches and advocates for context-based learning. Social interactions among teachers and learners, as well as between learners, are emphasized, with cooperative and interactive teaching methods widely adopted within the constructivist paradigm.

In conclusion, Constructivism underscores the cognitive agency of learners while acknowledging the instructional guidance of teachers. Teachers act as facilitators and catalysts of meaning construction, rather than mere knowledge disseminators or imposers. The learning behaviors described by Constructivism closely align with learners' behaviors in educational games. The emphasized learning context, collaboration, and dialogue align with the crucial foundations of applying educational games in classrooms. Both the contextual game scenarios and interactions between learners and teachers contribute to learners' knowledge construction.

Simultaneously, teachers naturally integrate subject matter into games, creating a gamified learning environment that allows learners to "learn while playing" in a relaxed setting. In this environment, teachers truly become guides and collaborators in learners' learning activities.

3.2. Theory of Multiple Intelligences

The theory of multiple intelligences, introduced by psychologist Howard Gardner in 1983 at Harvard University's Graduate School of Education, posits that the human brain consists of eight distinct areas, each associated with a specific form of thinking or intelligence. Gardner proposed eight types of intelligence: linguistic, logical-mathematical, musical, bodily-kinesthetic, spatial, interpersonal, intrapersonal, and naturalistic. Each individual possesses varying degrees of these intelligences, with their unique combinations and levels of expression. Effective education and training can elevate each intelligence to higher levels.

Gardner views intelligence as inherent biological potential, present to varying degrees in every individual. The environment and education play significant roles in cultivating and nurturing this potential. Each intelligence can be developed through appropriate education and training. Differences in intelligence among individuals stem from the diverse combinations of intelligences and their utilization in addressing various problems across different domains.

According to Gardner's theory, education should create an environment accommodating the cognitive diversity of all learners, allowing each individual to maximize their intelligence potential. This approach refrains from presuming uniform intelligences among learners and instead embraces these differences. Just as learners demonstrate distinct learning disparities in English language acquisition, some excel in memorization while others excel in creative application. Educational games, through stimuli like sound, color, and narrative, cater to various senses, enabling learners to find entry points tailored to their learning preferences and maximize their learning abilities.

The theory of multiple intelligences advocates for student-driven engagement and exploration, fostering skills in independent information gathering, problem analysis and resolution, as well as collaboration and communication. English teachers should meticulously analyze curricula, utilizing educational game design to develop targeted and timely teaching activities. Through games, learners can develop their multiple intelligences by engaging in role-playing activities and effectively accomplishing learning objectives.

3.3. Gamification of Learning Theory

According to Advanced Chinese Dictionary, Gamification refers to amusement and play. Dutch scholar Huizinga defines games as voluntary activities or diversions bound within specific time and space, with rules accepted freely by players yet exerting absolute constraints. Games are pursued for their intrinsic value, accompanied by a sense of tension, enjoyment, and an awareness of being distinct from everyday life.

The concept of gamified learning has been proposed and energetically advocated by Professor Sang Xinmin, a distinguished domestic expert in information technology education and the director of the Future Education Research Center at South China Normal University. Also known as "learning gamification," this notion primarily

refers to a novel generation of learning methods guided by the perspective of gamified learning. Under the purview of this perspective, in the process of instructional design, the cultivation of objectives and development, along with means of evaluation, are coupled with considerations of learners' age-related psychological traits and pedagogical strategies. Drawing insights from gaming, this approach involves the design and selection of suitable developmental tools, evaluation methods, and instructional strategies. It's important to note that gamified learning extends beyond the mere utilization of digitally gamified learning tools during the learning process. Consequently, the application of gaming software to enhance learning or engaging in learning activities based on the attributes and spirit of games all fall within the realm of gamified learning. The gamified learning approach serves as an educational philosophy where games are strategically transformed into means of learning within practical contexts. The theoretical construct of gamified learning primarily encompasses elements such as the creation of gaming scenarios that prompt inquiry-based learning, the infusion of enjoyment and competitiveness within games to stimulate learners' motivation for learning, and the facilitation of deep learning among learners.

The theory of gamified learning stands as a foundational pillar for educational games. Educational games are a fusion of education and gaming, aimed at enhancing students' learning efficacy. From a broader perspective, educational games are deemed as competitive exercises designed to attain victory, whereby participants must apply subject-specific or other relevant knowledge to drive practice and achieve success. In a more focused sense, educational games refer to games of educational significance that leverage computer and network support, constituting "computer game software capable of nurturing users' knowledge, skills, intellect, emotions, attitudes, values, while holding certain educational value." (Market Research Office of China Distance Education, 2004:44-47.) This category encompasses two types: one is composed of computer games with intrinsic educational implications, where the primary objective of the game isn't pedagogical, yet its motivational mechanisms, game processes, environments, rules, motivational components, and other factors can be harnessed for educational purposes, aligning with instructional guidance to achieve teaching objectives. The second type pertains to subject-specific educational games intentionally designed for teaching objectives, emphasizing their educational nature, and featuring well-defined teaching objectives, specific content, and thoughtfully considered instructional strategies.(Xiao, 2007:5) In this paper, the term "gamified" refers to the narrow definition of educational games.

4. Gamified Teaching Under English Core Competencies

4.1. Language Ability

Gamified teaching has emerged as a dynamic and innovative pedagogical approach to enhance learners' language ability. Rooted in the principles of engagement, motivation, and interactive learning, gamification leverages

game mechanics and design elements within an educational context. This methodology synergistically cultivates language proficiency across listening, speaking, reading, viewing, and writing domains while fostering language awareness and a nuanced grasp of linguistic intricacies.

Through gamified teaching, learners are immersed in captivating narratives and scenarios, effectively simulating real-life language usage. This immersive experience nurtures contextual comprehension and encourages active participation, thus refining both receptive and productive language skills. Gamification's inherent interactivity promotes dynamic engagement, heightening learners' motivation to tackle linguistic challenges and persistently refine their language competence.

Furthermore, gamified teaching nurtures cultural awareness by embedding cultural nuances within the virtual game world, prompting learners to navigate diverse sociocultural contexts. This cultural infusion not only bolsters cross-cultural communication skills but also widens international horizons. The analytical thinking demanded in game-based problem-solving enhances cognitive capacity, which seamlessly translates to advanced language processing skills, critical for nuanced communication.

In conclusion, gamified teaching substantiates a multifaceted framework for fostering learners' language ability. By amalgamating immersive language experiences, cultural awareness, and cognitive development, gamification underscores a transformative educational approach that empowers learners to proficiently engage in cross-cultural discourse, amplifying their language competencies and international communicative aptitude.

4.2. Cultural Awareness

Through immersive and interactive gamified experiences, students are afforded a dynamic platform to engage with diverse cultural narratives, thereby engendering cross-cultural cognition, attitudes, and behaviors.

Gamification effectively embeds cultural nuances within virtual environments, affording learners opportunities to traverse multifaceted cultural landscapes. By embodying characters and scenarios emblematic of distinct cultures, learners are prompted to decipher cultural contexts, fostering a deeper comprehension of cultural norms, values, and societal intricacies. This immersive cultural engagement synergistically augments learners' cultural confidence and nurtures a sense of global interconnectedness.

Moreover, gamified teaching propels cultural awareness by promoting experiential learning. Learners actively navigate cultural challenges, make informed decisions, and witness the consequences of their choices within the game framework. This experiential paradigm facilitates empathetic understanding of cultural perspectives, bolstering cultural sensitivity and refining intercultural communication skills.

The gamified approach also cultivates a spirit of open-minded inquiry, encouraging learners to critically examine cultural contrasts and commonalities. Such analytical thinking facilitates the recognition of shared human experiences, fostering a sense of unity amidst cultural diversity. As students negotiate culturally diverse virtual environments, their cognitive flexibility and adaptability are heightened, enabling them to thrive in an increasingly globalized world.

In summation, Gamified Teaching serves as a dynamic catalyst for augmenting learners' cultural awareness. By

facilitating immersive cultural engagement, experiential learning, and analytical exploration, gamification empowers students to transcend cultural boundaries, embrace diversity, and contribute to a harmonious global community.

4.3. Thinking Capacity

Gamified Teaching catalyzes the augmentation of learners' thinking capacity. Rooted in the principles of engagement and interactivity, gamification strategically fosters multifaceted cognitive skills characterized by logical prowess, critical acumen, and innovative thinking. By integrating game elements into the pedagogical framework, this approach effectively nurtures the cognitive dimension of English subject core competencies.

Through immersive gamified experiences, learners are prompted to navigate intricate scenarios, unravel complex narratives, and undertake multifarious challenges. This active engagement compels the application of analytical skills, as students discern patterns, identify relationships, and synthesize information within the virtual context. The iterative nature of game-based learning nurtures the refinement of logical thinking by encouraging players to make informed decisions and witness the outcomes of their choices.

Furthermore, gamification encourages critical thinking by presenting learners with dilemmas, puzzles, and uncertainties, necessitating evaluative judgment and thoughtful reasoning. These scenarios stimulate learners to question assumptions, weigh evidence, and articulate well-justified perspectives. Moreover, the diverse cultural contexts embedded in gamified environments necessitate cross-cultural cognitive flexibility, cultivating a comprehensive worldview.

Innovative thinking is sparked through gamified teaching's creative problem-solving demands. Learners are spurred to devise novel strategies, experiment with diverse approaches, and adapt to dynamic virtual landscapes. The inherent feedback loops within games encourage iterative experimentation, fostering a culture of embracing failure as a stepping stone to innovation.

In conclusion, Gamified Teaching adeptly cultivates learners' thinking capacity by imbuing pedagogical processes with engagement, criticality, and innovation. By immersing students in complex scenarios, stimulating cross-cultural considerations, and fostering creative problem-solving, gamification empowers learners to hone their cognitive faculties, rendering them adept analysts, critical thinkers, and innovative problem solvers.

4.4. Learning Ability

Gamified Teaching, as an innovative pedagogical approach, plays a pivotal role in enhancing learners' learning ability, thereby fostering their cultural awareness. Rooted in interactive and immersive experiences, gamification strategically cultivates learners' proactive employment and adaptation of English learning strategies, thus expanding their language acquisition avenues and optimizing their learning outcomes. This approach aligns with the cultivation of English subject core competencies, particularly accentuating the cognitive facet of learning ability.

Gamified teaching nurtures autonomous learning by placing learners at the helm of their educational journey. Learners navigate diverse challenges, make informed choices, and witness the consequences of their actions within the virtual world. This autonomy cultivates a sense of ownership

over the learning process, empowering learners to proactively manage their English learning trajectory and instilling disciplined learning habits.

In the pursuit of gamified goals, learners tap into a diverse array of resources embedded within the game framework. This multifaceted resource utilization cultivates an inclination towards exploring varied learning channels, both conventional and digital, fostering an expansive language acquisition panorama. By engaging with culturally diverse virtual contexts, learners organically develop cross-cultural cognitive dexterity, enriching their cultural awareness as they decipher and adapt to different sociocultural norms.

Furthermore, through gamified learning environments, learners are actively engaged in decision-making processes, necessitating strategic thinking and adaptive learning strategies. The iterative nature of games encourages learners to experiment with various linguistic approaches, enhancing their metacognitive awareness of effective learning techniques. Gamification's dynamic feedback mechanisms facilitate continuous self-assessment, enabling students to refine their learning strategies based on performance outcomes.

In summary, Gamified Teaching serves as a dynamic catalyst for enhancing learners' learning ability, profoundly contributing to their cultural awareness. Through strategic learning strategy employment, autonomous learning cultivation, and diversified resource utilization, gamification empowers learners to optimize their English language acquisition endeavors, fortify their cultural awareness, and seamlessly navigate intercultural terrains.

5. Strategies for Gamified Teaching Under English Core Competencies

This chapter delineates practical strategies congruent with the English Core Competencies within gamified teaching. For the sake of accentuating diverse learning pursuits and their merits, this chapter adheres to a sequential structure, sequentially expounding on Language Ability, Cultural Awareness, Thinking Ability, and Learning Ability.

In each dimension, a triad of pragmatic strategies is delineated. These strategies hold dual utility: as blueprints for software developers in gamification programs and as compasses for educators in seamlessly melding textbook knowledge with classroom pedagogy.

The cultivation of these competencies represents a holistic process wherein distinct facets harmoniously interrelate, precluding isolated examination. However, this structured approach acknowledges the interrelation between the competencies while highlighting specific pedagogical nuances. By organizing the chapter in this manner, it furnishes an elucidative framework facilitating the assimilation of salient insights and fostering a cohesive understanding of how gamified teaching synergistically fosters English Core Competencies. In the course of practical practice, it is necessary to pay attention to the integrity of educational activities when designing a gamified teaching program. A teaching activity should take into account all aspects and be prominent at the same time.

5.1. Language Ability

(1) Language Immersion Quests

Create game quests where students must communicate, negotiate, and solve problems using only the target language.

This immersive approach reinforces language skills and contextual understanding.

(2) Translation Challenges

Design puzzles or challenges that require students to translate idiomatic expressions or cultural references, promoting deeper language comprehension and cultural awareness.

(3) Interactive Conversations

Incorporate chatbot characters that engage students in simulated conversations, providing real-time language feedback and encouraging spontaneous language use.

5.2. Cultural Awareness

(1) Cultural Exploration Missions

Develop game missions where students virtually travel to different cultural locations, interact with virtual characters, and make decisions that reflect cultural sensitivities and values.

(2) Cross-Cultural Collaboration

Introduce collaborative challenges where students from different cultural backgrounds must work together to solve problems, fostering mutual understanding and cross-cultural communication.

(3) Historical Scenarios

Create historical reenactments within the game, allowing students to experience and navigate critical cultural events that shaped societies and values.

5.3. Thinking Capacity

(1) Critical Decision-Making

Craft scenarios where students must critically evaluate different options and predict the consequences of their choices, enhancing critical thinking and decision-making skills.

(2) Problem-Solving Quests

Design intricate puzzles or mysteries that require students to analyze clues, gather information, and deduce solutions, promoting analytical thinking.

(3) Divergent Thinking Challenges

Incorporate open-ended challenges that encourage students to generate multiple creative solutions to complex problems, fostering innovative thinking.

5.4. Learning Ability

(1) Self-Reflection Journals

Integrate journaling tasks within the game where students reflect on their learning strategies, progress, and areas for improvement, cultivating metacognition.

(2) Personalized Quests

Allow students to select quests aligned with their learning preferences or areas of interest, promoting autonomy and self-directed learning.

(3) Resource Hunt Challenges

Create challenges that require students to explore various online resources, encouraging them to acquire learning materials independently and broaden their learning channels.

In summary, incorporating these strategies into gamified teaching can effectively enhance students' language ability, cultural awareness, thinking ability, and learning ability. By immersing learners in dynamic and engaging scenarios that address each core competency, educators can create a comprehensive learning environment that nurtures well-rounded language learners.

6. Conclusion

Overall, this paper underscores the symbiotic relationship between gamified teaching and core English literacy. It accentuates the potential of gamification to transcend traditional pedagogical approaches and to harness technology's prowess for enhanced learning outcomes. Moreover, it underscores the role of educators as facilitators, guiding students through gamified activities that enrich language ability, cultural awareness, thinking capacity and learning ability.

Gamified teaching facilitates language ability development by immersing students in interactive language contexts, enhancing listening, speaking, reading, viewing, and writing skills. Adaptive language challenges, real-time feedback, and immersive scenarios enrich language competence and engagement. Similarly, gamification effectively nurtures cultural awareness through diverse scenarios, fostering intercultural sensitivity. Moreover, it enhances thinking quality via challenging scenarios, promoting critical analysis, problem-solving, and cognitive skills. In learning ability, gamified teaching employs technology for personalized pathways, encouraging resource exploration and self-directed learning, thus enhancing metacognition and effective learning management.

However, the implementation of gamified teaching also presents challenges that require consideration. Balancing game mechanics with educational objectives necessitates meticulous planning to ensure that learning goals remain paramount. Addressing individual differences in student preferences and learning styles requires adaptability in designing gamified experiences. Moreover, issues pertaining to access to technology and equitable participation among diverse student groups warrant careful attention.

In the future, continued research and practical exploration in this domain will be invaluable. Investigating the long-term impact of gamified teaching on students' language proficiency, cultural sensitivity, critical thinking, and self-directed learning could yield insights into its sustained effectiveness. Additionally, refining and expanding the array of gamified teaching tools and techniques to suit various educational contexts will be a fruitful avenue for future development.

In conclusion, the integration of gamified teaching holds immense potential for reshaping junior middle school English education. This paper's comprehensive elucidation of how gamification enhances core English literacy and its provision of practical strategies bridge theoretical concepts with

tangible educational benefits. As education becomes increasingly dynamic and technology-driven, gamified teaching emerges as a promising approach to nurture students' multifaceted development, equipping them with the competencies necessary for success in an interconnected global landscape.

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