



EDUCATION OF GIFTED AND TALENTED CHILDREN IN ETHIOPIA: A LITERATURE REVIEW

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Received: July 01, 2024

Accepted: November 13, 2024

Published: December 31, 2024

Suggested Citation:

Kabtyimer, M. T., & Zhao, W. (2024). Education of gifted and talented children in Ethiopia: A literature review. *Turkish International Journal of Special Education and Guidance & Counselling (TIJSEG)*, 13(2), 177-187.



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Abstract

The main purpose of this article is to examine the education of gifted and talented children in Ethiopia by reviewing related international and national policy documents, strategies, guidelines, reports, and research outputs. The paper has provided information concerning the legal and policy intentions, educational provisions, educational challenges, and suggested strategies to improve the gifted and talented education in the country. Accordingly, regarding the legal and policy contexts, there are relevant and related articles and statements in legal and policy frameworks, strategies, and implementation guidelines to accommodate gifted and talented students, and appreciable attempts were made to communicate those documents to the respective stakeholders. However, in terms of its implementation, considerable gaps have been observed at different levels. The major challenges and issues that need reconsideration include gifted students' identification and assessment, the rigidity of the curriculum, teachers' pedagogical skills, employing enrichment and acceleration approaches, utilization of assistive technological devices, and stakeholders' collaboration. Consequently, a paper forwarded general suggestions and scholarly recommended school-wide strategies and teacher-related strategies for supporting and improving the education of gifted and talented students in inclusive schooling.

Keywords: Gifted student, educational provision, educational challenge, inclusive education, literature review

Introduction

From an international perspective, many gifted and talented individuals have helped to change the world and are often seen as the hope of the future (Plucker & Callahan, 2014). These individuals are found across all social groups irrespective of culture, ethnicity, socioeconomic status, and physical and cognitive learning differences (Kearney, Bevan-Brown, Haworth, & Riley, 2008). For instance, Australia identifies the top 10% of its students as belonging to this category (Center for Education Statistics and Evaluation, 2019); in China, the percentage of gifted and talented students is estimated to be between 1% and 3% of the total population of students (Ibata-Arens, 2012); while the target number of gifted students in South Korea is 3%, figures continue to exceed this target (Cho & Suh, 2016); Singapore identifies the top 1% of its national student population as academically gifted (Ibata-Arens, 2012); in the United States the percentage of students receiving gifted education services vary substantially across the country, in eight states, 11% or more gifted and talented students were identified to receive such services (Plucker, Glynn, Healey, & Dettmer, 2018). In Germany, where there is significant academic and political resistance to the very notion of giftedness because of its elitist connotation, the state of Hamburg is considered to have the highest percentage of gifted students, with 0.07% (Tourón & Freeman, 2017). In Spain during the 2015-2016 academic year, the Ministry of Education estimated that 0.27% of the total student population was identified as gifted (Sastre-Riba, Perez-Sanchez, & Villaverde, 2018). This implies that countries' policy approaches to



gifted and talented education, as well as cultural and national differences in the definition, play a crucial role in relaying information about the number of gifted and talented students. Also, the significant variations in legal definition and identification of giftedness prevent the development of international data systems. Nonetheless, several authors consider that a relative convergence of theoretical conceptualization and practices is increasingly observable (Touron & Freeman, 2017) which, to a certain extent, could allow for international comparison.

Regarding the societal conceptualization of gifted and talented children, there are subject of great controversy within the academic literature. Kaufman and Sternberg (2008) mentioned that various social understandings of giftedness influence the way the term is used, but it can be used broadly to refer to individuals who demonstrate high ability across a wide range of learning areas or narrowly to refer to high ability in specific learning domains. Different groups understand giftedness in different ways based on explicit (researched) or implicit (personal) understandings of the term (Miller, 2008). Recent understandings about giftedness are based on a foundational set of theories. Researchers at the beginning of the twentieth century focused on domain-general, IQ models of intelligence that considered giftedness in terms of a number calculated by performance on a general ability test (Binet & Simon, 1916). Later theorists highlighted the different ways in which individuals could be gifted – these are known as domain-specific models (Thurstone, 1938). Systems theorists focused on the interaction between different psychological variables in the expression of giftedness, such as wisdom, intelligence, creativity, and learning behaviors (Renzulli, 2005). More recently, researchers have embraced a developmental model of giftedness that considers the effects of environmental influences on the advancement of gifts into talents (Sternberg, 2005). Contemporary gifted research is particularly interested in the influence of environmental factors in the development of a gifted student's gifted traits. It is believed that the learning environment has been found to play an important role in supporting students' gifted behaviors (Gagne, 2013).

When it comes to gifted and talented education, it is among pertinent issues for countries of the world in the current global era of knowledge economy. In order to be competent in this global era of knowledge economy, there is concern among countries of the world with issues of academic giftedness, behavior, and high academic performance of students. Existing literature suggests that gifted and talented students have special psychological and learning needs. Research supports the importance of gifted and talented students often requiring a faster pace and greater depth or complexity in their curriculum, along with the opportunity to choose the way they show what they learn and have opportunities to understand the ways ideas are connected at a higher level of thinking (Kanevsky, 2002). They require a differentiated, adaptive curriculum embedded within an optimal learning environment to maintain their learning motivation and to reach their potential (Chan, 2001; Cheung & Hui, 2011; Graffam, 2006; Hertberg-Davis, 2009; Mills, 2003; Sisk, 2009; Tomlinson, Brighton, Hertberg, Callahan, Moon, Brimijoin, & Reynolds, 2003). To Mwaura and Wanyera (2002) a learner who is gifted and talented usually does much better than learners of the same age group and hence requires services or activities not ordinarily provided for the ordinary learner. Regular schools are the most suitable place to instruct gifted and talented students to avoid segregation or parallel systems, applying strategies that greatly promote the abilities of people with high abilities by adapting those used for each student (Barrera, Durán, González, & Reina, 2008). With this regard, the Salamanca Declaration on Special Needs Education stated that every child has a fundamental right to education. Talented and gifted children must be given an opportunity to achieve and maintain an acceptable level of learning (UNESCO, 1994).

In Ethiopia, gifted and talented students are considered intellectually advanced, creative, different in specific subjects or leadership skills, or those who show different skills in painting, sculpture, music, dance, sports, etc (MoE, 2022). The country's Education and Training Policy on special needs education promises to identify gifted and talented children early and provide them with special programs that will increase the development of special gifts and talents (MoE, 1994; Oriedo, 2003). Therefore, this review paper intends to examine the education of gifted and talented students in



Ethiopia by reviewing the legal and policy contexts, the educational provisions, the educational challenges, and strategies to improve the education of gifted and talented students in general classrooms. For this purpose, it was made an intensive review of different international and national legal documents and an attempt to highlight some empirical results conducted by different scholars. These reviewed national documents include the Federal Democratic Republic of Ethiopia Constitution, Education and Training Policy, Education Sector Development Programmes, Master Plan for Special Needs/Inclusive Education in Ethiopia, Special Needs/Inclusive Education Strategy, and different implementation guidelines.

Legal and Policy Contexts on the Education of Gifted and Talented

Over the years, the government of Ethiopia has committed to making education accessible to all citizens. In alignment with the rest of the world, Ethiopia has already accepted and signed the UN Convention on the Rights of the Child (1989), its African version, the African Charter on the Rights and Welfare of the Child (1999), and other several international declarations and conventions that protect and promote the survival, development, and education of children. The country also showed further commitment by enshrining these conventions in different national laws, including the Constitution. Some articles and statements of the Constitution, Proclamations, Education and Training Policy, Programs, National Plans, Strategies, and Guidelines promote inclusive education. For instance, the 1995 Constitution of the country boldly mentioned that all international agreements ratified by the country are an integral part of the law of the land. It also upholds the rights of citizens to equal access to publicly funded services and the support that shall be given to accommodate their needs, and national standards and basic policy criteria for education shall be established and implemented (Federal Democratic Republic of Ethiopia, 1995).

As an instrument for enacting the Constitution, the Ethiopian Education and Training Policy (MoE, 1994) underscores the implementation and development of inclusive education by promoting the “education for all” agenda. The general objectives of the policy affirmed the provision of quality basic education and training to all citizens without discrimination, recognition of the rights of nations/nationalities to learn in their language, and special support to disadvantaged groups. More specifically, one of the policy objectives stipulates that all learners, including gifted and talented students, learn according to their full potential and needs (MoE, 1994). To this end, the government has developed a strategy, incorporated it into the ongoing sector development programs, and extended it to regional and local action plans. For instance, the 2012 Special Needs/Inclusive Education Strategy was designed to build an inclusive education system that would provide quality, relevant, and equitable education and training to all children, youth, and adults with special needs and ultimately enable them to fully participate in the socio-economic development of the country. Towards this end, the strategy was directed to create awareness among school managers and teachers about the need to provide support to all groups of learners, creating identification procedures, developing support systems, and availing appropriate materials and equipment (MoE, 2012a). Therefore, the country's Constitution, Education and Training Policy, and strategies serve as a cornerstone legal and policy framework for the educational rights of all citizens, including the gifted and talented.

Moreover, to achieve this national agenda, the MoE has designed a goal to ensure access to inclusive quality education for children and students with special educational needs. Targets have been set for the participation rate of children with special educational needs in primary education. By the end of Education Sector Development Programme VI (2020/21– 2024/25), the participation rate will increase from 11% to 32.6% (MoE, 2021). Besides, due consideration has been given to the expansion of educational opportunities for all learners, including the gifted and talented in the education system through implementing the Master Plan for Special Needs/Inclusive Education in Ethiopia (2016 – 2025) that aimed at strengthening the structures and environment enabling inclusive education (MoE, 2017a). In line with this, the Education Development Roadmap of the country has stipulated its concern of delivering quality education that meets the diverse learning needs of all children, youth, and adults through applying flexible curriculum and differentiated instruction (MoE, 2018). The very

recently revised Education and Training Policy of the country also emphasized the education of gifted and talented students in the statement, "A curriculum that accommodates students with special gifts and talents, disabilities, and other special learning needs will be prepared and implemented accordingly" (MoE,2023).

In general, all the aforementioned legal and policy movements to address the educational needs of all students have created motivation among educational stakeholders, policymakers, professionals, community-based rehabilitation workers, and non-governmental organizations (Tirusew, 2005). Also, these legal and policy frameworks are very critical and guarantee to create equal access of education for all, expand education equitably, teach and support all children including gifted and talented, and build an inclusive education system in Ethiopia.

Educational Provisions for Gifted and Talented

In fact, inclusive education demands that general education teachers become innovative, creative, flexible, ready to accept diversified learners, learn from the learners, and capable of initiating active learning. Regarding teachers' training and preparation, the Ministry of Education mentioned that to accommodate the educational needs of all students, including the gifted and talented, teachers will be prepared with ability, diligence, and professional interest. To realize this, the teacher education and training institutions will emphasize the basic knowledge of the professional code of ethics, methodology, and practical training to address diversity. The policy also said that the teachers' training for special needs education would be provided in teacher training programs (MoE, 1994). In addition, all of the Education Sector Development Programmes listed the issue of teachers' preparation under their priority activities, and they made clear that the preparation system should be increased to provide adequate numbers of qualified teachers to address the needs of the learners. The 2012 MoE Special Needs/Inclusive Education Strategy also confirmed that all teachers will be prepared or equipped with appropriate attitudes, values, and skills to teach diverse populations, including those learners with special needs (MoE, 2012a).

With this regard, when reviewing the pedagogical courses at the university level, in both pre-and in-service training programs for first-degree teaching programs, general teachers are taking related courses in the Post Graduate Diploma in Teaching (PGDT) program. For instance, a course specifically addressing the education of gifted and talented students is Introduction to Inclusive Education (PGDT 424). In particular, the third chapter of this course, under the topic "Education of the gifted and talented children in inclusive schooling," clearly focused on the meaning of gifted and talented children, developmental characteristics, educational program, identification and assessment, individualized educational plan, and curriculum modification to accommodate their learning preference (MoE, 2014). Additionally, according to the course modules reviewed in Teacher Education Colleges, of several pedagogical courses offered for teacher trainees in the Diploma program, Inclusive Education in Primary Schools (SNIE 202) is a major course that includes the education of gifted and talented students. In this course, the ninth chapter specifically focused on teaching gifted and talented children with its sub-topics - definition of gifted and talented children, identification and assessment of giftedness, developmental characteristics of gifted and talented children, and psycho-educational support and provisions (educational considerations) of gifted and talented children (MoE, 2013).

Specific to gifted and talented students' educational practices, the MoE reported that there are two approaches have been employed to provide support for students who are gifted and talented; (1) providing educational materials and activities that go beyond the normal classroom activities to accelerate the level of learning, and (2) teaching the students that can be given activities found in subsequent lessons. Instruction that uses both acceleration and enrichment should be provided for teaching gifted and talented students. Teachers can use approaches like inquiry, creativity, solving problems, and making strong connections across the curriculum(MoE, 2017b). In addition, the MoE (2012b) in the national guideline for curriculum differentiation and the individual educational



program emphasized that when teachers teach gifted and talented students in general classrooms, the core issues taken into consideration include integrating multiple disciplines in areas or themes of study; encouraging choice through extended study activities, taking concepts in general education units and extending them by conducting in-depth studies of one or more topics of interest; providing advanced reading materials; accelerating the curriculum (through early admission to school, grade skipping, early college admission); compressing the curriculum; using mentorship or apprenticeship programs and providing enrichment activities (MoE, 2012b).

Educational Challenges of Gifted and Talented

According to MoE, in formulating the education policy, even though attempts were made to make sure that all children, youngsters, and adults acquire the competencies, skills, values, and attitudes enabling them to participate fully in the social, economic and political development of Ethiopia, however, a wider gap remains to address the needs and interests of every learner (MoE, 2010). More specifically, when evaluating the practices of gifted and talented students' education, it seems that an issue that has long been neglected due to extreme demands on the educational system. In supporting this, the analysis section of the ten-year Master Plan for Special Needs/Inclusive Education stated that in the country, inclusive education particularly refers to education for children and youth with disabilities, omitting learners with temporary learning difficulties and specially gifted and skilled children (MoE, 2017a).

Concerning challenges due to teachers' training and professional development, the MoE analysis mentioned the insufficiency of course training offered at the college level and a lack of continuous professional development training at the school level. The report also mentioned the current general teachers' pedagogical skill gaps in effectively teaching all children and teachers are not adequately prepared to identify and support the needs of learners with special educational needs including gifted and talented (MoE, 2017a). In most cases, general teachers who are teaching in regular schools find it difficult to accommodate gifted and other needy learners as a result of inadequate knowledge, skills, and preparation. As a result of this, gifted and talented learners sit in classrooms bored and frustrated, they are left out and are not really benefiting from an equal educational opportunity as their peers, and their full potential is not considered (MoE 2005). In supporting this, a study conducted by Idle (2019) in the Jig-Jiga city administration reflected that in the model secondary school, some gifted and talented students manifest negative experiences like depression, fear, community relationship problems, misunderstanding, lack of appetite, aloneness, and sadness (Idle, 2019).

On the other hand, when seeing the challenges related to the school system, most of the schools are not sufficiently equipped with teaching-learning materials, stationery, equipment, assistive devices, and teaching aids that suit the needs of all learners and gifted in particular (MoE, 2012a). According to the MoE analysis documents and local researchers' reports, the implementation of gifted and talented education has been deterred by several variables. Of these factors, the rigidity of the curriculum is frequently mentioned by educators, and this indicates the curriculum is not leaving flexibility for local adaptations for teachers to experiment and try out new approaches, and it has become very challenging for schools and teachers to welcome and to accommodate all learners according to their learning potential and pace of learning (MoE, 2017b; Dagnew, 2013; Dano, 2018). In addition, other researchers (Alemihun, Mulat, Kassahun, Gebeyehu, and Meseret, 2012) also reported that low level of awareness towards giftedness and lack of comprehensive identification and support strategies were the major recognized problems in the practices of identification and support systems of gifted and talented students.

Furthermore, according to the MoE evaluation analysis of the 2012 Special Needs/Inclusive Education Strategy, one of the identified weaknesses of the content of the strategy was the lack of identification tools and support for students with learning difficulties and gifted and talented students (MoE, 2022). Whereas, in the evaluation of the implementation of strategy, one of the identified weaknesses was the contents of the curriculum, teaching methods, learning-teaching materials, and

method of assessment are not adapted to people with special educational needs to learn and achieve according to their needs and potentials (MoE, 2022).

Strategies to Improve the Education of Gifted and Talented Students

To prepare gifted and talented students to become lifelong learners who are productive and responsible citizens making significant, valuable, and creative contributions to society, will require a supportive environment and experiences to develop their unique potential. They will need intellectual and creative stimulation to help them develop their abilities in their academic or performance areas of giftedness and talents, and they will need support and guidance to develop healthy and realistic self-understandings. In this regard, to address the educational needs of gifted and talented students, existing literature stresses the need for compacting and enrichment programs, tutored learning, accelerating education, and additional or extracurricular assignments, within the zone of students' autonomous decision-making in gifted programs, to challenge and motivate them for learning in school (Bentley, 2001; Eyre, 2002; Hoogeveen, Van Hell, & Verhoeven, 2011; Renzulli & Reis, 2000; VanTassel-Baska, 2006; VanTassel-Baska, Feng, Brown, Bracken, Stambaugh, French, & Bai, 2008; Vialle & Quigley, 2002).

In addition, according to some researchers (Graffam, 2006; Kanevsky, 2011; Little, 2012; Philips & Lindsay, 2006), teachers of gifted students should differentiate to students' cognitive level and time to learn, provide opportunities for greater complexity and depth in the organization of content, and promote choice and independence in students' learning. Another local study reported that promoting awareness of teachers, principals, and supervisors through training and developing clear criteria for identification and support strategies of gifted and talented students in primary schools are essential to cater to the potential and performance of these learners (Alemihun, et al., 2012). Furthermore, this section deals with the specific strategies related to school-wide strategies and teacher-based strategies for supporting gifted and talented students' education.

School-wide strategies for supporting gifted and talented students

According to different scholars, several strategies can be used in schools to appropriately provide for gifted and talented learners. These include:

(1) develop shared school-wide understandings of the terms 'gifted' and 'talented': an evidence-based school definition is necessary to inform the development of school processes and procedures for identifying and creating programs for gifted students (Renzulli & D'Souza, 2014). These shared understandings will also be useful in supporting the transition of students from one school to another;

(2) use multiple methods of assessment to identify giftedness: taking into account personal factors such as motivation, creativity, wisdom, resilience, and initiative as well as environmental factors such as the number of extra-curricular opportunities the student has received (Kaufman & Sternberg, 2008). Multiple methods of assessment might include portfolios of learning/performance, demonstration of academic capabilities on standardized tests and in competitions, specialist reports, extra-curricular activities, and nomination by parents, caregivers, and teachers. Triangulating the student's levels of academic, socio-emotional, and cognitive ability and readiness can also provide a fuller picture of their abilities and needs and help in developing appropriate opportunities;

(3) give careful consideration to the kinds of specialist programs that are offered: no two gifted students are exactly alike with respect to their educational needs: they vary in personality, learning traits, interests, and abilities across a wide variety of learning domains (Riley, Bevan-Brown, Bicknell, Carroll-Lind, & Kearney, 2004). As the regular curriculum is unlikely to appropriately cater to the unique needs of each gifted student, teachers need to be able to differentiate programs and methods of delivery. Offering a single program will be insufficient to provide for the diverse array of gifted students' learning requirements. Rather, variety needs to be offered within any proposed gifted program, including opportunities for learning advanced content, enrichment of the curriculum in domains of interest, enrolment in competitions and for mentorships, opportunities for developing

leadership and cultural abilities, and so on. Gifted students also benefit from learning from like-minded peers, so they must have opportunities to interact with other gifted students (Kulik, & Kulik, 1992). This helps to ensure they are stimulated and challenged; and

(4) provides teachers with opportunities for professional learning and development: in the field of gifted education. Gifted students have particular socio-emotional and cognitive requirements alongside their academic needs, and studies have shown that they benefit most from instruction by teachers with specialist training in the field of gifted education (Croft, 2003). Targeting this professional learning and development provision at teachers with a particular interest in gifted education will help to encourage the development of gifted-specialist capability in schools, and developing a gifted and talented ‘team’ that integrates teacher expertise with school leadership will help ensure that programs are effective and sustainable over time.

Teacher strategies for supporting gifted and talented students

According to Azzam (2016), while not all teachers have access to specialist training, there are several teaching strategies that can be incorporated into classroom practice to provide help for gifted and talented learners. These include:

(1) pre-assess prior knowledge: this is a useful strategy for all students as it can help make student misconceptions about a topic obvious. For gifted students, it provides an opportunity to examine and demonstrate what they know and what they might need to learn. Curriculum provision can then be focused on areas of learning that are new to the student, and activities can be included that encourage depth and complexity in exploring the topic;

(2) offer the most difficult first: this strategy involves offering the five most difficult problems associated with a task first to high-ability students. Those students who demonstrate mastery by solving the problems correctly get to move ahead onto a more challenging learning task or objective. This helps to eliminate mindless repetition that often frustrates gifted learners;

(3) explore student interests: gifted students typically are highly engaged with their learning in areas of interest, so exploring these areas of individual interest can help with provision. Different tools can be used to examine an individual’s interests across a variety of subject areas;

(4) differentiate tasks and activities by offering a variety of opportunities to investigate content, employ different processes of learning, and design various forms of learning products. Choice boards are an easy way to stimulate thinking about content, process, or product design. Under teacher supervision, students decide what, why, and how they present their learning. Teacher guidance is essential to help ensure agreed-upon learning objectives are met. Inquiry-based learning also provides teachers with a way of differentiating classroom provision. By using different formats of inquiry-based learning such as structured, guided and open inquiry, gifted students develop not only content knowledge but also skills in investigating problems and justifying an adopted position;

(5) allow and encourage gifted students to work together: research has shown that gifted students benefit from and enjoy time spent learning with gifted peers (National Association for Gifted Children, 2011). When given time to work with other gifted students, gifted individuals are challenged to develop and refine their ideas through feedback from the group. This helps them to grow intellectually, cognitively, and socio-emotionally as they learn that others might be as if not more capable than they are in specific fields of learning. These experiences are beneficial to an individual’s development but should be balanced by more heterogeneous grouping with non-gifted peers in the regular classroom; and

(6) encourage students to take responsible risks: gifted students can be hindered by perfectionist tendencies that result in them not taking on challenges, but it is important to encourage them to attempt new activities such as tackling a project in a learning area they haven’t explored before, entering a competition, or developing their creative side or leadership skills. Even if they don’t



succeed, they probably will have learned something interesting about themselves! Such experiences can help in the development of persistence and resilience in the face of future challenges.

Conclusion

So far, internationally and nationally declared legal and policy views and widely explored research findings commonly describe the right to education and equal access to public services in inclusive settings. In Ethiopia, there are clear and relevant legal and policy frameworks, development programs, strategies, and implementation guidelines that help to address the education of students with special needs, including gifted and talented. Concerning implementation, the responsible education sectors are hierarchically working and making an effort to raise the stakeholders' awareness of the policy and guidelines, providing educational materials, creating an inclusive school environment, and offering training for teachers and school administrators. This attempt implies the government's great interest and commitment to restructuring the education system to refine and address the educational needs of gifted and talented students and other disadvantaged groups. However, even though there exist well-articulated and relevant legal and policy frameworks that promote the provision of education for these students and some attempt was made, there are considerable gaps in terms of practices and obtaining the required blessings of their gifts and talents. Surprisingly, in most schools, let alone the provision of educational provisions, gifted and talented students are not properly identified and known. As reported in the MoE report, the familiar educational approaches to accommodate the gifted and talented, like enrichment and acceleration are not well communicated and implemented. In addition, several social, economic, and practical barriers appeared to limit the effective realization of the country's policy frameworks concerning gifted and talented students' education. Of these barriers, issues that need to be reconsidered include the identification and assessment of gifted and talented students, the rigidity of the curriculum, insufficient teaching-learning materials and assistive devices, implementation of special educational programs, teachers' pedagogical skill gaps, shortage of teachers, and collaboratively working with different stakeholders. Finally, the paper forwarded scholarly suggested school-wide strategies and teacher-based strategies for supporting and improving the education of gifted and talented students.

Declaration of Conflicting Interests

The authors declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article. Furthermore, the authors affirm that no conflicts of interest exist among them about this article's research, publication or authorship.

Funding

The authors received no financial support for the research, authorship, and/or publication of this article.

Ethics

All requisite research ethics guidelines were meticulously followed during the study's execution.

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