

Pre-Service Teachers' Awareness, Knowledge and Attitude to the Affective Domain in Classroom Teaching and Assessment

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The cognitive, psychomotor and affective domains of learning foster students' academic achievement; conversely, the affective domain is the unnoticed but essential factor that typically influences learners' learning. This study investigated pre-service teachers' awareness, knowledge and attitude to the affective domain in classroom teaching and assessment. Employing a descriptive survey design using multi-stage sampling procedure, data were collected from sixty final-year pre-service teachers at a Nigerian tertiary institution using a structured, close-ended questionnaire. Findings revealed that the majority of respondents did not only demonstrate partial awareness and insufficient knowledge of the affective domain, but also exhibited differential attitude to teaching and assessment of the affective domain. The study confirms that pedagogical gaps exist in teacher education concerning socio-emotional learning, especially in conceptual understanding of the affective domain and actual pedagogical practices, underscoring the critical need for comprehensive training and practical monitoring of pre-service teachers. The study recommended that pre-service teachers be adequately taught the affective domain and be closely monitored during the teaching practice programme for all-around holistic teaching and development.

Keywords: affective domain, knowledge, attitude, awareness, pre-service teachers

INTRODUCTION

The affective domain is an indispensable element for students to achieve academic success. Affective domain is about learners' feelings in the course of learning, together with how they have internalized learning experiences so as to regulate students' perceptions, attitudes and behaviour in the future (Miller, 2005). The core determinants of students' persistence, quality and depth of learning processes and choice of study hinge on the influence of affective factors such as behaviour, motivation, attitude, and interest. For students to perform optimally, the emotional aspect of the learners must be catered for. When students are actively involved in the learning process and their affective traits are harnessed in classroom instructional practices, they learn better (Shakeel, 2019; Boukayoua et al., 2021). Teachers need to plan how to incorporate the affective domain into the course outlines, lesson plans, teaching strategies, and evaluation. If learners lose interest, attention, or are not motivated, it will surely have negative effects on learners' learning outcomes (Moroaswi et al., 2023). The teaching profession requires the incorporation of professional knowledge with the salient components of teaching, and assessment literacy is considered an integral aspect in pedagogy needed for preparing and implementing assessment in classroom (Çetinkaya (2024; Gardon et al., (2025).

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Of all three domains, the cognitive domain is prioritized. The cognitive domain is specifically targeted in both internal and external examinations, unlike other domains, which are not given commensurate attention in examinations (Kasilingam et al., 2014). Parents and guardians, too, are always on the lookout to see their children perform in flying colours in their examinations. Hence, students' academic performance is one of the major reasons why the focus is on students' cognitive domain (Rahman, 2018). Indeed, teaching and assessment of the cognitive domain could produce learners who are test-smart, but might not be capable of producing students who are problem solvers of emotionally related issues in real-life phenomena, efficient in discourse and competent in social skills (Nurfardilla et al., 2010). Shepard (2008) explains that the target of teaching and assessment in tertiary education is not on learners' affective outcomes of attitudes, behaviours and values, but on students' knowledge and understanding of content. This has spiralled into relegation of the affective domain to the background.

One of the targets that teachers in training should look out for is to make learners realize that school subjects are beneficial, interesting and appreciable. Conversely, teachers are insouciant about learners' active participation in the learning process, while learners are not invigorated about the worth of what they learn. Teachers' inability to help students organise and attach value to what they learn, and build a value system that is worthwhile in classroom delivery, has been attributed to the fact that students in schools do not receive the required attention in the development of the affective domain. Of the taxonomy trilogy, the affective domain is considered to be abstract and complicated to understand and assess (Kuboja, 2016; Okoli et al., 2022).

Birbeck and Andre (2009) elucidate that either the affective or cognitive domain is not a matter of choice, but a matter of necessity to promote a blend of the two. Facilitation of the affective domain transcends mere co-opting of affective learning techniques in school curricula during the period that cognitive outcomes are assessed. For learners to acknowledge the significance of the affective domain, affective traits should be constructively developed, aligned, taught, and assessed as outcomes, squarely and explicitly, not as subordinate to other domains..

Inhibitors of the use of the affective domain have been identified as lack of action and developmental research on the affective domain, tendency of subjectivity in assessment, vague requirements needed by assessors to employ flexible standards, problems related to credibility gap, test anxiety, anonymousness of participants, dearth of clear-cut definitions with reference to objective statements, the nature of the domain itself; associated problems with categorization of the domain, and tussle between cognitive and affective domains (Page,1993). Though these reasons are real, they do not call for jettisoning the affective domain in schools. Several underrated factors contribute to students' outstanding success in the teaching-learning situation; without these factors, effective learning may not take place. Examples of these unnoticed but essential factors that typically influence learners' learning are attitude, motivation, interest, and beliefs, all of which belong to the affective domain.

In spite of the assessment problems bedevilling the affective domain, Ostinelli (2021) highlights three means to solve these problems: classroom activities, assignments and flexible assessment techniques. Glennon et al. (2015) outline viable steps for creating an affective domain assessment process. They are: identification of the desired behaviour, definition of the desired behaviour, provision of ample opportunities in the classroom for students to practice the desired behaviour, observation and assessment of the expected behaviours, and reflections on assessment data for diagnosis and remediation for improvement.

Relegation of the affective domain in the classroom (Shepard, 2008; Nurfardilla et al., 2010; Kasilingam et al., 2014; Kuboja, 2016; Rahman, 2018; Okoli et al., 2022) could be a result of many factors. Different studies have been conducted on the influence of the affective domain and in-service teachers' knowledge of the domain. These studies attested to the importance of the affective domain

in learning outcomes (Adetayo, 2014; Nkomo & Ojating, 2018; Coffman & Kittur, 2024; Appau et al., 2024), but none has examined the combination of pre-service teachers' awareness and knowledge of the affective domain and their attitude to the domain in teaching practice as probable factors that could cause the neglect of the affective domain. Therefore, the paper investigated pre-service teachers' awareness and knowledge of the affective domain and as well as their attitude to the domain. To this end, research questions were raised for the study:

1. Are pre-service teachers aware of the affective domain?
2. Do pre-service teachers have the knowledge of the affective domain?
3. What is the attitude of pre-service teachers to the affective domain?

LITERATURE REVIEW

The Affective Domain

The affective domain is related to pedagogy in three ways: the approach of the teacher to teaching which emanates from his philosophical view and what this imparts in students; deliberate arousal of learners' affective qualities as a form of engagement; and wilfulness of students to get engaged in the development and understanding of their personality traits with respect to being well-behaved citizens and professionals (Olatunji, 2013). Nande et al. (2013) explain that the affective domain reflects as a motivating force, a catalyst to establish and keep learning interest during classroom interactions and instruction. There are three predominant views on affective education. The first view is rooted in the philosophy of religion, realism and idealism. It expounds that values, morals and ethics, which are the contents of affect, have their roots in sources external to human experience. The second view is rooted in Dewey's philosophy of pragmatism. This school of thought posits that values, morals and ethics are acquired from the breakdown of human experience and are developed through a process in the following stages: interaction with the environment; reflective thought on the meaning of the interaction; in connection with reflective thinking, values or beliefs are formulated; and application of the beliefs or values to new situations and circumstances in life. The third view is humanistic education which considers the role of interpersonal association, self-concept and the discovery of individualistic meaning in the curriculum as the most important (Olatunji, 2013).

Studies on Awareness, Knowledge, Attitude, and the Affective Domain

Awareness is the state of knowing, perceiving, feeling, and being conscious and cognizant of the existence of objects, events, sensory patterns, or something (Gafoor, 2012; Jati et al., 2019). Knowledge means the state of being familiar with, aware of, or comprehending someone or something, such as information, facts, skills, or descriptions, which are acquired through education or experience by learning, discovering or perceiving. Knowledge could be implicit (related to expertise or practical skill) or explicit (theoretical comprehension of a subject) (Women's Training College, nd; Yuldashevna et al. 2019). Attitude refers to beliefs, feelings and reactions of an individual to an event, objects, phenomenon, or persons. Attitude is learnt, relatively stable, but can be modified. It could be negative or positive (Olufemi, 2012).

A five-level affective taxonomy, in order of complexity, from lowest to highest, was proposed by Krathwohl et al. (1964), namely: receiving, responding, valuing, organization, and characterization. i) receiving focuses on awareness, willingness and readiness of the learners to learn and attend to a stimulus such as an instructional experience; ii) responding: learners react to the stimulus by complying with instructions and participating in instructional activities; iii) valuing is related to voluntary acceptance, involvement and commitment to a stimulus by appreciating and accepting a value for its perceived worth; iv) organization means comparing, relating and integrating new information into one's own existing value system; v) characterization means learners incorporate the

values, adopt these values as a life style and their behaviour is characterized by these values (Boyd et al., 2006).

A growing body of research underscores the indispensable role of the affective domain in learning outcomes (Boukayoua et al., 2021; Appau et al, 2024). Previous studies have explored various areas of the affective domain, including its pedagogical implications, taxonomic structures and observable behaviours (Krathwohl et al., 1964; Olatunji, 2013; Adetayo, 2014). These studies align with the understanding that affective factors serve as a motivating force in classroom interactions (Nande et al., 2013). However, the existing literature presents diverse theoretical underpinnings for affective education. This present study, while acknowledging these perspectives, extends the discourse by empirically examining how these theoretical constructs translate into pre-service teachers' practical understanding and application.

Krathwohl et al.'s (1964) five-level affective taxonomy provides a widely accepted framework for understanding the development of affective traits. While this taxonomy offers a robust theoretical model, its practical application and assessment in real-world classroom settings remain a challenge, often leading to its relegation (Kuboja, 2016; Rahman, 2018). While acknowledging these challenges, this research posits that a deeper understanding of pre-service teachers' knowledge and attitude are essential to overcome these barriers, rather than abandoning the affective domain altogether.

Furthermore, while studies like those by Ostinelli (2021) and Glennon et al. (2015) propose strategies for assessing the affective domain, there remains a divergence in opinion regarding the efficacy and feasibility of these methods in diverse educational contexts. Zach and Rosenblum (2021) organized an emotion-based programme for novice Physical Education teachers in Israel and assessed the influence of the programme on their perception of the affective domain. Although the programme was a simulation, participants were not observed in their real classes while teaching, and their emotional attitude towards their students was determined by their reports. However, along the course, it was reported that social-emotional orientation of the participants was fostered, and awareness and recognition of the affective domain were heightened. Rumbaugh (2014) worked on affective domain applications in standards-based education. Findings showed that students in high-level standards-based education instruction were not sufficiently exposed to the affective domain. The academic performance of students is associated with standards-based education instruction, and not as a result of the application of the affective domain. Rumbaugh (2014) affirmed that there is a detachment between teachers' attitudes and the application of the affective domain. Most of the teachers in the research self-reported they there is likelihood that teachers may not be aware of the affective domain, or lack the knowledge of how to utilize best evidence-based practices for teaching Affective skills in the classroom.

The current study's novelty lies in its focused investigation into the preparedness of future teachers to integrate the affective domain, bridging the gap between theoretical frameworks and practical pedagogical implementation. By examining pre-service teachers' awareness, knowledge, and attitude, this research offers a unique contribution to the literature by identifying specific areas for intervention in teacher training programs, thereby strengthening the theoretical and methodological approaches to affective education. This study distinguishes itself by investigating the confluence of pre-service teachers' awareness, knowledge, and attitudes towards the affective domain within the specific context of teacher education, a gap not comprehensively addressed by prior research which often focuses on in-service teachers or isolated aspects of the domain (Nkomo & Ojating, 2018; Coffman & Kittur, 2024).

METHOD

The study is a descriptive survey that employed a quantitative approach. The design was selected because the study described a phenomenon involving a specific group within the teacher training programme without manipulating variables.

Participants

Respondents in the study were final-year students in the Faculty of Education at Ekiti State University, Nigeria. The finalists were selected because it is assumed they must have acquired knowledge during the first and second phases of their teaching practicums. A multi-stage sampling procedure was employed to select a sample of 60 respondents. Fifty-five per cent of the respondents were females, while 45 per cent were males. Their ages ranged between 19 and 25 years. The respondents were consulted for consent, and they were informed about the purpose of the study. The ethics of research were strictly followed. Respondents' confidentiality was assured, and their identities were kept anonymous.

Instrument and Procedure

A questionnaire titled "Pre-service Teachers and the Affective Domain: Awareness, Knowledge and Attitude" was used for data collection. The instrument had three sections. Section A elicited demographic information of the respondents' age and gender. Section B addressed pre-service teachers' awareness and knowledge of the affective domain in classrooms. Section C addressed pre-service teachers' attitudes to the affective domain in classrooms. Section B was measured using a Yes/No format. Section C was measured using a four-point Likert-type scale ranging from Strongly Agree (SA), Agree (A), Strongly Disagree (D) to Strongly Disagree (SD). The affective domain explored in this research was based on Krathwohl et al. (1964)'s taxonomy.

Validity and Reliability of the Instrument

The face and content validity of the instrument were validated by research experts in the fields of language education, guidance and counselling, and measurement and evaluation, before the final version of the instrument was confirmed appropriate for the study. The instrument was subjected to a reliability test on 35 pre-service teachers through the test-retest method, and correlated after two weeks using Pearson's Product-Moment Correlation. A reliability coefficient of 0.76 was obtained. Frequency counts and percentages were employed for data analysis.

FINDINGS

The results show pre-service teachers' awareness, knowledge and attitude to the affective domain in the classroom.

Table 1
Pre-service teachers' awareness and knowledge of the affective domain

No	Statement	Yes	No
Pre-service teachers' awareness of the affective domain		Response (%)	
1	I am familiar with the affective domain	35 (58.3%)	25 (41.7%)
2	I am aware of the importance of the affective domain	33 (55%)	27 (45%)
3	I am aware of the levels of the affective domain	18(30%)	42 (70%)
4	I am aware that there are specific learning objectives that address the affective domain	15(25%)	45(75%)
5	I am aware of the assessment strategies that could be used to assess students' affective domain	19(31.7%)	41(68.3%)
6	I am aware of behavioural verbs that could measure affective learning objectives	14(23.3%)	46(76.7%)
Pre-service teachers' knowledge of the affective domain		Response (%)	
7	Among the following options, which option represents the affective domain?	Response (%)	
	• the development of intellectual abilities, skills and students' academic performance	12 (20%)	
	• students' intrinsic qualities such as emotions, feelings, attitudes, interests, and values, which are evident in learners' behaviours.	38(63.3%)	
	• the use of physical movement, motor skills and coordination.	10 (16.7%)	
8	Among the following options, which option represents the levels of the taxonomy of the affective domain?		
	• knowledge, comprehension, application, analysis, synthesis, and evaluation	28 (46.7%)	
	• perception, set, guided response, mechanism, complex/overt response, adaptation, and origination	17 (28.3%)	
	• receiving, responding, valuing, organization, and characterization.	15 (25%)	
		Yes	No
9	Learning could be enhanced if teachers are aware of students' interest towards the lesson of the day?	45 (75%)	15 (25%)
10	Learning could be enhanced if teachers are aware of students' feelings towards the lesson of the day	45 (75%)	15 (25%)
11	Teachers' knowledge of learners' affective domain could help teachers plan how to get students' attention during instruction.	49 (81.7%)	11 (18.3%)
12	I am familiar with how to integrate the affective domain into classroom practices	22 (36.7%)	38 (63.3%)
13	I am capable of relating affective content during lesson development	21 (35%)	39 (65%)
14	I know different behavioural verbs that could measure affective learning objectives	14(23.3%)	46(76.7%)
15	I know how to assess learners' learning outcomes in the affective domain	19(31.7%)	41(68.3%)

Table 1 shows that the majority of the respondents are familiar with the term "affective domain" and its importance. Most of the respondents know the correct definition of the affective domain. However, apart from the definition of the affective domain, a significant portion of the respondents are unaware of the following: the levels of the affective domain, specific learning objectives that address the affective domain, assessment strategies that could be used to assess students' affective domain, and behavioural verbs that could measure affective learning objectives. However, most of them do not have a good mastery of the various levels of the affective domain and its aspects. A substantial number of the respondents have the understanding that teachers' knowledge of learners' affective traits can enhance learning and can assist teachers in how to arrest and sustain students' attention when planning for lessons and during instructional delivery. In spite of their knowledge, most of them are not competent to integrate and relate the affective indices into lesson plans and classroom instructions.

Table 2
Attitude of pre-service teachers towards the affective domain

S/N	Items	Strongly Agree (SA)	Agree (A)	Disagree (D)	Strongly Disagree (SD)
1	The taxonomy of learning that takes too much time and energy is the affective domain	40(66.7%)	10(16.7%)	8(13.3%)	2(3.3%)
2	The affective domain is not as important as the cognitive and psychomotor domains	20(33.3%)	25(41.7)	10(16.7%)	5(8.3%)
3	I rarely incorporate the affective domain in lesson content.	35(58.3%)	10(16.7%)	10(16.7%)	5(8.3%)
4	I focus my attention on the cognitive domain because curricula emphasise it, and it is always assessed in examinations.	30(50%)	10(16.7%)	12(20%)	8(13.3%)
5	The affective domain cannot be easily assessed like other domains	39(65%)	10(16.7%)	3(5%)	8(13.3%)
6	I frequently assess students' affective domain in my classroom	15(25%)	6(10%)	20(33.3%)	19(31.7%)
7	Students' academic performance is paramount than students' affective qualities	37(61.7%)	8(13.3%)	9(15%)	6(10%)
8	Affective learning outcomes is not immediate, but represent long-term internalized values	23(38.3%)	27(45%)	6(10%)	4(6.7%)
9	Teachers do not need to consider the affective domain so far as learners acquire skills and knowledge in the classroom.	33(55%)	15(25%)	4(6.7%)	8(13.3%)
10	Large class size debars me from paying attention to the affective domain	25(41.7%)	15(25%)	12(20%)	8(13.3%)

Table 2 reveals that many respondents agree that the affective domain is burdensome, takes too much time and saps energy. It is shown that many of the respondents concur that the affective domain is not as important as the cognitive domain. Also, a sizeable portion of the respondents rarely incorporate affective domain in lesson content, but rather focus on the cognitive domain. They do not incorporate the affective domain in lesson content because of the large class size. They emphasise the cognitive domain in school curricula because examination questions are primarily drawn to assess the cognitive domain. Also, a considerable number of the respondents agree that the affective domain cannot be easily assessed. They do not regularly assess students' affective domain because they are of the notion that students' academic performance is essential compared to learners' intrinsic qualities. In addition, the majority of the respondents are of the notion that affective learning outcomes are not immediate, but rather represent long-term internalized values. Furthermore, a large number of the respondents noted that teaching and learning should focus on the acquisition of knowledge and intellectual skills, and not on learners' emotions.

DISCUSSION

The study's findings reveal a significant discrepancy between pre-service teachers' conceptual understanding of the affective domain and their practical application in classroom settings. While a majority of respondents demonstrated a foundational awareness and could correctly define the affective domain, a substantial portion exhibited insufficient detailed knowledge, particularly concerning its integration into teaching and assessment. Their reported classroom instructional practices did not consistently reflect their professed knowledge and attitudes toward the affective domain. This outcome suggests a disconnect between declarative knowledge and procedural knowledge. The finding is corroborated by Musemburi and Gomba (2025) who reported that there was a huge difference between what the pre-service teachers were taught at the school and what was on the ground at a rural boarding in Zimbabwe.

This disparity can be theoretically explained through several lenses. While attitudes and subjective norms (awareness and knowledge) influence behavioural intentions, perceived behavioural control (the practical skills to implement) is a crucial mediator (Falcón-Linares, 2023). In this context, pre-service teachers may possess positive attitudes and some knowledge, but a lack of concrete strategies, or practical experience in assessing and fostering the affective domain could hinder their actual implementation. The abstract nature of the affective domain, as highlighted by Kuboja (2016) and Okoli et al. (2022), further complicates its integration, leading to a reliance on more tangible cognitive assessment methods (Kubojá & Ngussa, 2015).

Secondly, the sociocultural theory of learning posits that learning is deeply embedded in social and cultural contexts. The prioritization of the cognitive domain in Nigerian educational examinations and parental expectations (Kasilingam et al., 2014; Rahman, 2018) creates a powerful sociocultural environment that implicitly devalues the affective domain. Pre-service teachers, having been educated within this system, may internalize this prioritization, leading to a focus on cognitive outcomes even when they intellectually understand the importance of the affective domain. Their instructional practices, therefore, become a reflection of the dominant educational culture rather than their individual beliefs. The observed lack of alignment between knowledge and practice is not merely an individual failing but appears to be a systemic issue influenced by the broader educational ecosystem (Eshun (2013; Appau et al. (2022).

Furthermore, the findings align with Bandura's social cognitive theory, particularly the concept of self-efficacy. If pre-service teachers do not believe in their ability to effectively teach and assess the affective domain, perhaps due to inadequate training or a perceived lack of institutional support, they are less likely to engage in such practices, regardless of their awareness or positive attitudes. The study's revelation that a significant portion of respondents were uninformed of the details of the affective domain underscores a gap in their professional preparation, limiting their attitude in this critical area. This theoretical perspective helps explain how the results came out the way they did: a combination of external systemic pressures and internal self-efficacy beliefs collectively shape instructional behaviours, often overriding intellectual understanding.

In essence, the findings indicate that while initial awareness of the affective domain is present, the depth of knowledge and the attitude to translate this knowledge into practice are lacking. This points to a need for teacher education programs to move beyond mere theoretical instruction to provide robust practical training, mentorship, and opportunities for pre-service teachers to develop positive disposition in integrating the affective domain effectively. The current situation, where classroom practices do not correspond with knowledge and attitude, suggests a significant theoretical implication: that the mere transmission of knowledge about educational domains is insufficient; it must be coupled with explicit strategies for implementation and a supportive environment that values and reinforces affective learning outcomes.

CONCLUSION

This study unequivocally demonstrates that while pre-service teachers possess a foundational awareness of the affective domain, their detailed knowledge and, critically, their practical integration of this domain into classroom teaching and assessment remain insufficient. The observed disjunction between espoused theories and theories-in-use highlights a significant pedagogical gap in current teacher education programs. Addressing this gap is paramount for fostering holistic student development and preparing educators who can effectively nurture both cognitive and affective learning outcomes.

LIMITATIONS, PEDAGOGICAL IMPLICATIONS AND SUGGESTIONS

The study involved a limited sample of sixty pre-service teachers in a geographical setting in a single tertiary institution. This restricts the generalizability of the findings to wider populations. The responses of the respondents were based on self-reporting of quantitative survey responses, which could be influenced by social bias, without qualitative sources like interviews or open-ended questions that could provide deeper insights into classroom practices. The data analysis was very simple (only frequencies and percentages). There were no further statistical tests (e.g. gender comparisons, attitude indices, or composite scores). Further studies could cover these areas.

To further advance the understanding and integration of the affective domain in teacher education, the following methodological research avenues could be explored: in-depth qualitative studies, utilizing interviews, focus groups, and classroom observations, are needed to explore the specific barriers that pre-service teachers encounter when attempting to integrate the affective domain. Comparative research examining how different countries and educational systems effectively integrate the affective domain into teacher education could be investigated. Future research could focus on mixed methods and experimental research, and/or longitudinal designs which involve tracking cohorts of teachers from their training through their early years of practice.

The findings of the study would be of benefit to teachers, students and schools. Teachers would gain better knowledge of learners' emotional needs and how to cater for them in classroom delivery. Also, teachers would learn not to focus on the academic performance of students alone, but also create a support system for their emotional and personal growth. Students, too, would learn that their emotions contribute to their overall performance, classroom participation and positive peer interactions. Schools would create an enabling environment where a holistic education system is prioritized. Further research could be carried out on live performances of pre-service teachers in classrooms in different states of the country. Research instruments like the classroom observation scale and interview could be employed for data collection.

RECOMMENDATIONS

It is therefore recommended, based on the findings and conclusions made in the present study, that:

- i. teacher preparation programs must implement mandatory, comprehensive coursework on the affective domain. This curriculum should not be an isolated unit but rather integrated across all pedagogical courses, demonstrating how affective considerations are woven into lesson planning, instructional design, classroom management, and assessment.
- ii. pre-service teachers need more opportunities for experiential learning. This involves structured micro-teaching sessions, simulated classroom environments, and extended teaching practice placements where they can actively experiment with affective strategies.
- iii. teacher education must equip pre-service teachers with the skills to design and implement authentic assessments for affective outcomes. This includes training in observational techniques, rubric development for socio-emotional skills, self- and peer-assessment strategies, and the ethical considerations involved in assessing the affective domain.

The authors confirmed that there is no conflict of interest in the research.

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