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The Dynamism of Character as a Tool for Supporting Teachers in Diverse Educational Environments. The Application of Mazur's Theory in Inclusive Education

Abstract

This publication discusses Marian Mazur's *Cybernetic Theory of Character* in the context of its application in inclusive education and managing diversity in school classrooms. Modern education faces challenges arising from the increasing diversity of students, which requires adapting teaching methods to meet the individual needs of students with varying predispositions and learning styles. Mazur's theory, based on the analysis of character dynamism, offers teachers a tool for better understanding the internal decision-making mechanisms of students, which can support more effective management of diverse groups. The paper also presents the results of empirical research conducted in a Youth Educational Center. These studies demonstrated that profiling the dynamism of character is more relevant than assigning a fixed character category in terms of adapting educational processes to the individual predispositions of students.

Keywords: inclusive education, diversity management, cybernetic of character, educational personalization.

Introduction

Modern education faces unique challenges stemming from the increasing diversity among students. Social and technological changes, as well as globaliza-

tion, require teachers to adapt their instructional approaches in order to effectively work with students who have diverse needs, predispositions, and learning styles (Fullan, 2013; Clarke-Midura & Dede, 2014; Rose & Meyer, 2007; Hehir, 2005).

Adapting education to meet the diverse needs of students becomes even more important in the context of diversity, equity, and inclusion. According to the Salamanca Statement (UNESCO, 1994), every student, regardless of the extent of their educational needs, should have access to high-quality education that supports their individual development by adapting the learning process to their abilities through the integration of diverse methods and tools. The Salamanca Statement emphasizes that mainstream schools with an inclusive orientation are the most effective means of combating discrimination, creating welcoming communities, and promoting education that is accessible to all students, including those with special educational needs. Similarly, the Incheon Declaration stresses inclusivity and equity, placing responsibility on educational systems to eliminate all forms of exclusion and marginalization. However, as Ainscow (2020) notes, the effective implementation of inclusive education requires that teachers are equipped with appropriate didactic tools, enabling them not only to identify students' individual predispositions and needs but also to tailor the teaching process to this diversity. A key challenge remains the development of strategies that allow for the effective management of diversity in the classroom, and, consequently, the full integration of all students into the educational process (Sijuola & Davidova,2022).

In this context, Marian Mazur's *Cybernetic Theory of Character* (*CTC*) offers teachers a practical tool that can help them better understand students' internal decision-making mechanisms and the dynamics of their character. Mazur's cybernetic approach, combining elements of psychology and systems theory, provides teachers with specific guidance on how to manage diverse groups of students by adapting teaching methods to their individual rigid intellectual and energetic properties (Wilsz & Bałł, 2015; Wilsz, 2017). A key aspect of this theory is the modeling of character dynamics as a set of behavior patterns that individuals strive toward, as freely exhibiting these patterns gives them a sense of psychological comfort (referred to as the optimal state) and self-fulfillment.

The aim of this article is to present the *Cybernetic Theory of Character* (CTC) as a tool to support teachers in implementing educational processes in diverse educational environments. The text discusses how Mazur's theory can assist in developing inclusive teaching strategies, helping teachers better prepare to work with students of varying abilities and educational and social needs, thus more effectively fulfilling the goals of modern inclusive education.

Literature review

Inclusivity and diversity are fundamental concepts in modern education that have gained prominence through international documents such as the Salamanca Statement (UNESCO, 1994). This document emphasizes every child's right to participate in the educational system, regardless of abilities or needs, focusing on inclusive education aimed at ensuring equal opportunities for all students. The Incheon Declaration (UNESCO, 2016) represents another step toward eliminating exclusion and marginalization in education, highlighting the need for a commitment to promoting equality and integration within educational systems.

Ainscow and Booth (2006) point out that teaching strategies should not only support students with special needs but also foster empathy and build attitudes of acceptance toward diversity. In their meta-analysis, Kalambouka et al. (2007) demonstrated that in the majority of the studies analyzed, inclusive education had positive effects for both students with disabilities and their peers.

Undoubtedly, research on inclusive education confirms the benefits of inclusive practices. However, Parveen and Qounsar (2018) point out that while inclusive education holds great potential, it faces numerous challenges, such as the lack of adequately trained teachers, insufficient resources, and a lack of positive attitudes towards students with disabilities. The effective implementation of inclusive education requires educational systems to provide the necessary support and infrastructure, enabling students with diverse needs to fully participate in educational processes. As Parveen and Qounsar (2018) noted, the challenges related to inclusive education call for approaches that take into account the unique needs of each student.

Lewkowicz (2019), studying the role of inclusive education in preschools, highlighted the need for teacher training that equips educators to adapt teaching methods to the individual needs of students. Although his work primarily focused on early childhood education, its conclusions can be applied at higher levels of education, particularly in the context of differentiated instructional support. Freeman-Green et al. (2023) emphasize the crucial role of teachers in creating an environment that fosters equity and inclusion, while Lindsay (2007) demonstrated that students with disabilities in inclusive schools developed better social skills and achieved higher outcomes than those in special schools. Similar conclusions emerge from the research by Szumski, Smogorzewska, and Karwowski (2017), which shows that inclusive education in Polish integrative schools improves the outcomes of both students with disabilities and their peers.

Managing diversity thus becomes crucial for effective teaching. Tomlinson (2017) emphasizes that differentiated instruction in classrooms with varying abilities is essential to ensure all students have access to high-quality education.

Appropriate differentiation strategies, such as adjusting the pace of learning and instructional approaches, can help teachers better respond to the individual needs of students and support their development. Tomlinson argues that teachers must be prepared to flexibly apply a variety of methods to meet different learning styles and levels of student advancement (Tomlinson, 2017).

In the context of managing diversity, the *Cybernetic Theory of Character* (CTC) developed by Marian Mazur (1976) can serve as a valuable tool. This theory allows for a better understanding of the dynamism of students' character, which can help teachers adapt teaching methods to the individual needs of students. The application of Mazur's theory in inclusive education can support the development of personalized education tailored to the diverse abilities, requirements, and needs of students.

In summary, inclusive and interdisciplinary teaching approaches, supported by appropriate theories and strategies, are essential in achieving contemporary educational goals based on equity and inclusion.

Cybernetic Theory of Character. Basic assumptions

Marian Mazur's Cybernetic Theory of Character (CTC) is a valuable approach to understanding human behavior through the application of cybernetics, the science of control and communication in biological and mechanical systems. Unlike traditional psychological approaches, which recognize the plasticity of character and its dependence on the environment, Mazur's cybernetic theory formally and mathematically presents character as a set of "rigid control properties" that are not susceptible to external influences unless they are destructive (Mazur, 1999). This means that individuals' behaviors are largely determined by internal autonomous processes (Pawlak, 2020).

This theory is based on the assumption that every person is an autonomous system with the ability to self-regulate. This means that individuals can make decisions independently of external influences, and their character plays a key role in this process (Mazur, 1999). The theory highlights three essential cybernetic mechanisms: feedback, homeostasis, and the dynamism of character:

— Feedback refers to the system's (the person's) ability to respond to stimuli from the environment in a way that is aligned with the internal mechanisms of character (Mazur, 1999).
— Homeostasis represents the ability to maintain internal balance despite changing external conditions (Wilsz, 2017).
— The dynamism of character, as Mazur notes, is one of the key mechanisms influencing how a person reacts to their environment, processes information, and adjusts their behaviors (Mazur, 1999).

The dynamism of character is one of the central aspects of Mazur's theory, describing how an individual processes energy within an autonomous system. Mazur identifies five classes of character dynamism that influence a person's behavior: exodynamism, exostatism, statism, endostatism, and endodynamism (Mazur, 1999). Each type is characterized by a different way of responding to external stimuli, which has a direct impact on the learning process. For example, exodynamics are characterized by high energy dispersion, tend to act spontaneously, and prefer creative, less structured approaches to learning. In contrast, statics, with near-zero dynamism, prefer more organized and predictable teaching methods, where emphasis is placed on systematicity and order (Mazur, 1999; Pawlak, 2020). Endodynamics, focusing on energy accumulation, tend to work independently and strive for power and influence, which may mean they prefer tasks that require planning and analysis.

Table 1
Character Classes in a Cybernetic Approach

Character Classes	Description
Exodynamism (very distinct positive dynamism).	Exodynamics are students who enjoy being creative and spontaneous, often inventing their own imaginative worlds. They frequently change their minds, quickly forget unpleasant experiences, and act impulsively without much consideration of the consequences.
Exostatism (fairly pronounced positive dynamism)	Exostatics are students who enjoy life and like to stand out in a group, sometimes through interesting or unusual behavior. They respect rules, but may occasionally adjust them to suit their own needs. They enjoy attracting attention by presenting their ideas in a colorful and engaging way.
Statism (dynamism close to zero).	Statics are students who value order and rules, striving to act in accordance with established norms. They like when everything is well-organized and aim to be fair and consistent in their actions and opinions.
Endostatism (quite pronounced negative dynamism)	Endostatics prefer a calm and well-organized life, adapting rules to fit current needs. They avoid risk, are cautious in communication, and enjoy solving problems efficiently, excelling in negotiations and discussions.
Endodynamics (very distinct negative dynamism)	Endodynamics are students who strive for power and influence, often acting according to their own rules. They are highly focused on their goals, may be distrustful of others, and prefer to keep their feelings and plans to themselves, with their primary aim being to achieve success.

Source: Author's own elaboration upon: Mazur, 1999; Wilsz 2013, Pawlak, 2020, Ziebacz 2023.

The application of Mazur's theory in managing diversity and inclusive education

The theory developed by Marian Mazur can serve as an effective tool for personalized teaching, particularly in managing diversity. Biernacka, Obidziński,

and Zaborek (2023) examined character dynamism in a group of adults, highlighting correlations between dynamism and other psychological traits. Although this research did not directly focus on students, its findings may serve as a starting point for further studies on adapting Mazur's theory in education.

Pawlak (2020) highlights the role of Mazur's theory in optimizing decision-making processes, which can be particularly important in education. This theory allows for a better understanding of how character dynamism influences students' decision-making. Although Pawlak's article does not directly address school practice, his interpretation of Mazur's theory points to its broad applications in fields such as psychology, education, and management.

Lechowska and Lechowski (1987) conducted research at the Railway Technical School in Warsaw, which confirmed that adapting teaching methods to students' character dynamism can yield positive results. In this experiment, students whose diploma projects aligned with their dynamism achieved higher results and were more engaged in the learning process. While these findings are promising, it is important to note that the study focused on a specific group, which limits the generalizability of the results.

Paluch (1989) highlighted the application of Mazur's cybernetic theory in managing educational processes. In his research on character dynamism and its impact on student performance, he emphasized that understanding dynamism enables teachers to tailor teaching methods to the individual predispositions of students. Paluch argues that this approach can promote better classroom management and enhance the effectiveness of teaching.

The effective application of diverse didactic interventions within a single group of students, in accordance with the dynamism of their character, requires the use of experimental planning techniques that enable the adjustment of teaching methods to individual needs. By working within confidence intervals, a teacher can more confidently predict the effectiveness of various teaching methods for specific groups of students. For example, students who are exodynamists may prefer engaging in creative and spontaneous tasks, while statists may prefer a more organized and structured approach to learning.

In inclusive classrooms, where an additional supporting teacher is involved in the didactic process, it becomes possible to implement a more efficient variety of teaching methods. The supporting teacher can work individually with students who have special needs, which allows for the simultaneous application of different didactic approaches within one group. This makes it possible to better manage diversity and more effectively tailor teaching methods to the varied dynamism of students' character.

The application of Mazur's theory in education can enable better adaptation of teaching methods to the diverse needs of students. This theory offers tools that support teachers in managing diverse groups of students. As Wilsz (2017)

emphasizes, character dynamism influences how students absorb information and respond to educational stimuli, allowing teachers to gain a deeper understanding of individual student preferences and better tailor the teaching content to their needs.

Modern educational technologies, by supporting the process of personalized learning, enable the dynamic adaptation of teaching content to the specific characteristics of each student. Methodological tools based on cybernetics allow for more effective management of the educational process, especially when working with students with special educational needs (Ziebacz, 2023).

In conclusion, Mazur's theory, combined with modern technologies and adaptive tools, offers teachers unique opportunities to tailor teaching methods to the dynamics of students, while simultaneously supporting the process of inclusive and personalized education.

Empirical section. Psychocybernetic study of character dynamism

The research on profiling character dynamism was conducted from March to June 2024 in one of the Youth Educational Centers in the Opole Voivodeship (Poland). A questionnaire with 35 manifestations of dynamism, based on M. Mazur's matrix, was used to diagnose five classes of character. It should be noted that the research questionnaire was designed with practical application in education in mind. The questionnaire is still in the testing phase and is ultimately intended to be adapted for use by teachers who do not have formal psychological training. The goal of this study is to develop a tool that is simple and intuitive enough for a teacher, based on observing student behavior and completed surveys, to identify the dynamism of the student's character without the need for advanced psychological knowledge. This tool is intended to support teachers in better tailoring teaching methods to the individual needs of students.

The study was anonymous, and the questionnaires from both the students and educators were coded. A total of 40 participants took part in the study, including 10 educators who assessed selected students. The analysis results allowed for the identification of differences in character types and their impact on relationships and educational proces.

Understanding character dynamics can enable more effective relationship-building and allow for the adjustment of educational processes to the individual predispositions of students. Each type of dynamism (exodynamism, exostatism, statism, endostatism, endodynamism) is characterized by specific traits that influence both personal and school life. As a result, adapting communication and teaching methods to these traits can lead to improved educational outcomes.

Table 2
Detailed manifestations of character dynamism (*selected examples*)

	Type of dynamism	**Exodynamism**	**Exostatism**	**Statism**	**Endostatism**	**Endodynamism**
No.	character class	C	BC	B	AB	A
1	Life orientation (method of processing information and energy)	Dispersing information and energy, not accumulating anything	Prevalence of dispersing information and energy over accumulating tchem	Maintaining balance in all aspects of life, equilibrium in accumulating and dispersing information and Energy	Prevalence of accumulating information and energy over dispersing them	Accumulating information and energy (accumulates everything, disperses nothing)
2	Intensity of life	Vivacity, seeking pleasure in life regardless of the possible consequences of such an attitude	Variety, seeking pleasure in life, but not at any cost	Moderation (willing to endure moderate discomfort for pleasure)	Comfort (willing to face only minor discomfort for pleasure, likes to live comfortably)	Calmness (unwilling to endure any discomfort for pleasure, wants to live peacefully, safely)
3	Attitude towards rules	Capriciousness (lack of attachment to rules, does not bend one's actions to anyone's requirements)	Individualism (follows general rules but rejects those that do not suit them)	Principled (adhering to specific rules)	Flexibility (acknowledges general rules with deviations depending on needs)	Arbitrariness (creates rules for one's own benefit but does not adhere to them)
…	…	…	…	…	…	…
35	Winning people over	Personal charm (easily wins others over with personal charm)	Grace, likability (wins people over with grace, an impressive demeanor, witty speech, humor, and elegant dress)	Righteousness, proving correctness (wins people over through righteousness, by proving that his cause is just)	Efficiency, demonstrating usefulness (wins people over with efficiency, by persuading them to adopt his point of view as useful)	Power, providing benefits (does not persuade, but hints that fulfilling his wishes will benefit the other person

Source: Author own's elaborations upon Mazur, 1999.

The research data was analyzed using information entropy according to C.F. Shannon. Information entropy, developed by Shannon, allows for treating a person as a source of information. In this context, entropy was applied to study the uncertainty/complexity of character traits, aiming for a better understanding and classification of various classes of character dynamism. Entropy is particularly useful in research on character dynamics because it accounts for the probability of different intensities of traits, helping to identify patterns and differences between them. In pedagogy, entropy opens new possibilities for understanding individual differences among students, allowing for the adaptation of teaching methods to their specific needs. Since entropy reflects the complexity and diversity of information, it is well-suited for assessing differences in students' characters. The formula used for calculating entropy was:

$$H = -\sum_{i=1}^{n} p_i \log(p_1)$$

where:

$P_i = \frac{p_i}{\Sigma}$ – the probability of the intensities of the detailed manifestations of the dynamism of the character of the researched resource.

The following charts depict the character dynamism profiles of selected students. The charts illustrate the probability of belonging to the five classes of dynamism: exodynamic, exostatic, static, endostatic, and endodynamic, and indicate entropy levels as a measure of variability and stability of behaviors within a given character class. Aggregated data for the selected 10 students is presented in Chart 1.

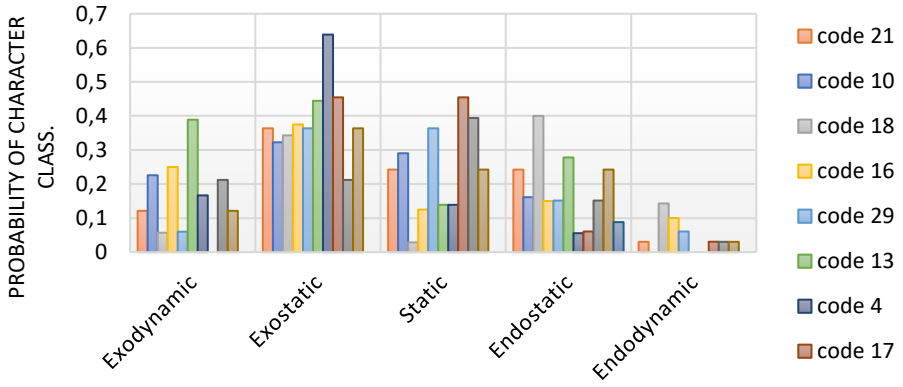
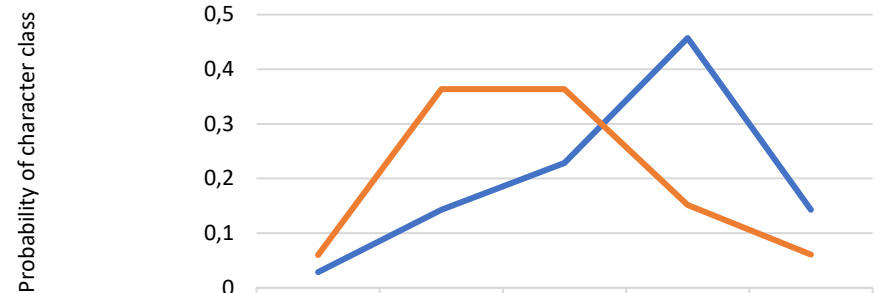


Chart 1
Character dynamism profiles of selected students

Source: Author's own elaboration.

Chart 1 shows significant variation in character dynamism within the studied group of students, even though the sample presented in the chart includes only 10 individuals. Such diversity poses substantial challenges for the teacher, as it makes it impossible to apply uniform teaching methods to the entire group.

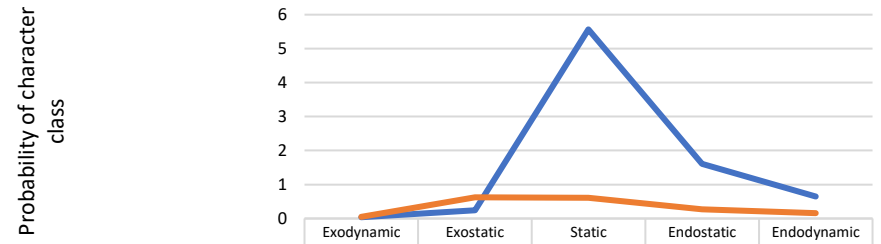
Chart 2 shows the probability of the student (code 29) belonging to different cybernetic character classes. The student's profile indicates that the likelihood of belonging to various character types is not evenly distributed, which allows for several conclusions about their personality and potential behaviors.



	Exodynamic	Exostatic	Static	Endostatic	Endodynamic
Student's results - code 29	0,0286	0,1429	0,2286	0,4571	0,1429
Educator's results - code 29	0,06	0,3636	0,3636	0,1515	0,0606

Chart 2
Character dynamism profile – student code: 29

Source: Author's own elaboration.



	Exodynamic	Exostatic	Static	Endostatic	Endodynamic
Student's results/ entopy/code 29	0,037351	0,244076	5,566617	1,609424	0,643968
Educator's results/entropy/code 29	0,049496	0,623595	0,609499	0,269212	0,155506

Chart 3
Chart of entropy – student code: 29

Source: Author's own elaboration.

— Self-Assessment – The student (code 29) perceives themselves in a varied manner, assigning different probabilities to each character class. In the Exo-

dynamic category, the assigned probability is 2.86%, with an entropy of 0.037351, indicating very high predictability and low variability in behavior. For the Exostatic type, the probability is 14.29%, and the entropy is 0.244076, suggesting moderate stability and predictability of behaviors in this category. In the case of Static, with a probability of 22.86%, the entropy value is 5.566617, indicating very high variability and unpredictability of behaviors in this category. The Endostatic class, to which the student assigns the highest probability (45.71%), has an entropy of 1.609424, meaning moderate variability. However, with such a high probability, the student's behaviors may require flexibility in the educational approach. In the Endodynamic class, the assigned probability is 14.29%, with an entropy of 0.643968, indicating moderate variability, though the student's behaviors in this category are more stable than in the Static class.

— *Teacher's Assessment of Student* (*code 29*) – The teacher's assessment of the student with code 29 differs somewhat from the student's self-assessment. In the Exodynamic category, the teacher assigns a probability of 6%, with an entropy of 0.049496, indicating stability and predictability of behavior. For the Exostatic class, the teacher assigns a probability of 36.36%, with an entropy of 0.623595, suggesting moderate variability in this category. In the Static class, also with a probability of 36.36%, the entropy is 0.609499, indicating moderate predictability of behavior, though the teacher perceives the student as relatively stable in this category. In the Endostatic category, with a probability of 15.15%, the entropy is 0.269212, suggesting behavioral stability in this category. For the Endodynamic class, the teacher assigns a low probability of 6.06%, with an entropy of 0.155506, also indicating relative stability and predictability of behawior.

— *Guidance for the Teacher* – A comparison between the student's self-assessment and the teacher's assessment reveals significant differences in the perception of behavioral dynamics. Notably, the student perceives themselves as more variable in the Static category, where entropy in the self-assessment is much higher than in the teacher's evaluation. These differences may indicate a need for a more individualized approach to the student, particularly in terms of flexibility in responding to their dynamic behaviors. It would be valuable for the teacher to take into account the student's perception of their own behaviors as more complex and unstable, especially in the Static and Endostatic types, where entropy in the self-assessment suggests greater variability than in the teacher's evaluation. Adjusting the educational approach to these dynamic traits may help the student better understand and stabilize their behawior.

Other examples of student profiles, along with their analysis, are presented in Charts 4 and 5.

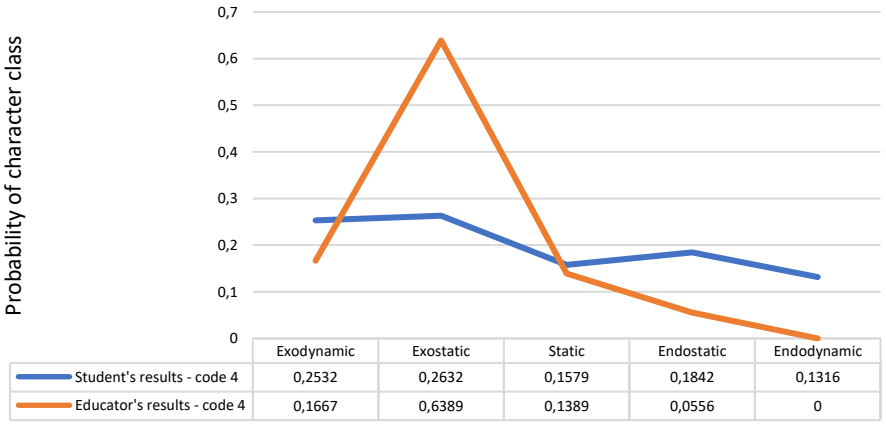


Chart 4
Character dynamism profile – student code: 4

Source: Author's own elaboration.

Table 3
Entropy distribution of results for teacher and student (*self-assessment*) *with code 4*

	Exodynamism	**Exostatism**	**Statism**	**Endostatism**	**Endodynamism**
Student's results	0,298808	0,549171	0,477138	0,662704	0,53664
Educator's results	0,12374	0,956179	0,277045	0,134606	0

Source: Author's own elaboration.

— Self-Assessment – Student 4 perceives themselves in a balanced way, assigning similar probabilities to class 1 (25.32%) and class 2 (26.32%). The entropy value in class 1 is 0.298808, indicating stability and predictability of behaviors in this area. The entropy in class 2 is 0.549171, suggesting moderate variability, but behaviors in this category remain fairly predictable. Class 4, with a probability of 18.42%, has a high entropy of 0.662704, indicating greater behavioral variability in this category, which may require a more flexible approach from the teacher.
— Teacher's Assessment – The teacher assigns the student the highest probability of belonging to class 2 (63.89%), with a very high entropy of 0.956179, indicating that the student's behavior in this category is perceived as highly variable. Additionally, for class 4, the probability is only 5.56%, and the entropy is 0.134606, suggesting that the teacher perceives the student's behavior in this category as stable.

— Guidance for the Teacher – The student perceives themselves as more dynamic than the teacher's assessment suggests. The teacher should take note of the differences between the student's self-assessment and their observations, adjusting their approach to help develop the student's dynamic traits. It is worth leveraging the student's tendency to engage in activities, while also providing support in stabilizing their behaviors in more complex situation.

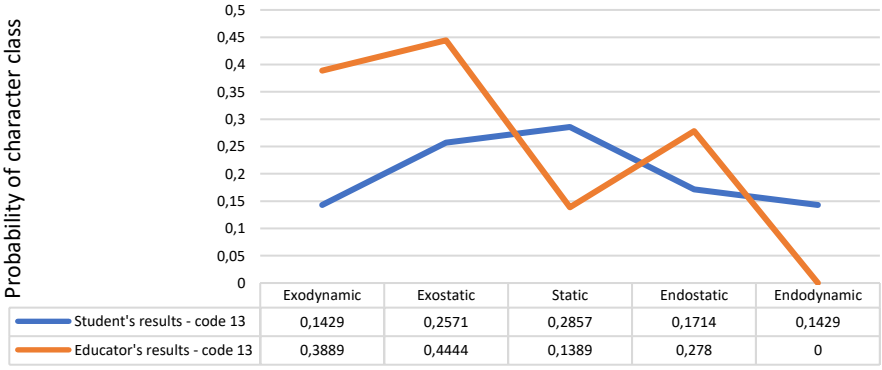


Chart 5
Character dynamism profile – student code: 13

Source: Author's own elaboration.

Table 4
Entropy distribution of results for teacher and student (*self-assessment*) *with code 13*

	Exodynamism	**Exostatism**	**Statism**	**Endostatism**	**Endodynamism**
Student's results	0,149404	0,488152	0,715707	0,47336	0,53664
Educator's results	0,346472	0,623595	0	3,36515	0,077753

Source: Author's own elaboration.

— Student Self-Assessment (code 13) – The student with code 13 perceives themselves as most belonging to the Static class, with a probability of 28.57% and high entropy of 0.715707, suggesting significant variability in their behavior within this category. The Exostatic class also has a high probability (25.71%) and moderate entropy of 0.488152, indicating relatively stable behaviors in this category, though some differences may occur. For the Endostatic class, the probability is 17.14%, with entropy of 0.47336, suggesting moderate behavioral variability. In the Exodynamic and Endodynamic

categories, each with a probability of 14.29%, entropy is 0.149404 and 0.53664, respectively, indicating greater stability in the Exodynamic class and moderate variability in the Endodynamic class.

— Teacher's Assessment (code 13) – In the teacher's assessment, student 13 is perceived as more dynamic, with the highest probability assigned to the Exodynamic class (40%) and moderate entropy of 0.346472, suggesting that the student is active but relatively predictable. The Exostatic class is assigned a probability of 42.86% with entropy of 0.623595, indicating greater behavioral variability in this category than reflected in the student's self-assessment. For the Endostatic class, the probability is 14.29%, but with entropy as high as 3.36515, suggesting very high unpredictability in this category. The teacher perceives the student as stable in the Endodynamic category (2.06% probability, entropy 0.077753), while the Static class is not assigned (0% probability, 0 entropy.
— Guidance for the Teacher – The differences between the student's self-assessment and the teacher's evaluation, particularly in the Exodynamic and Static classes, indicate the need for a flexible approach. It is important to consider the student's behavioral variability and provide support in situations that require greater predictability. Additionally, efforts should be made to stabilize behaviors, especially in areas where entropy indicates high variability, such as the Endostatic category.

Disscusion

The analysis of the profiles of students 29, 4, and 13 revealed significant discrepancies between the students' self-assessments and the teachers' evaluations, particularly regarding the stability and variability of behaviors, which were measured using entropy indicators. These results show that students' self-assessments often do not fully reflect the teachers' perceptions, which may lead to inappropriate educational interventions if these differences are not taken into account. Entropy-based profiling provides a more detailed insight into the dynamics of behavior, allowing for more effective adaptation of teaching methods to the individual needs of students.

The research clearly shows that each student is characterized by a unique dynamism of character, which further complicates the teaching process in diverse educational environments, especially in the context of inclusive education. Teachers must not only deal with individual differences but also with inclusivity, which introduces additional challenges related to the diversity of educational and social needs of students. Therefore, it becomes essential to use tools that allow for precise examination of this diversity. With such tools, teachers can

more effectively adapt their teaching methods, leading to more efficient classroom management, regardless of the level of student diversity. Undoubtedly, the application of Mazur's theory in managing diversity in inclusive education holds great potential.

Conclusion

Mazur's theory, based on entropy analysis and character profiling, offers teachers a tool for better diagnosing and understanding the complex traits of students. This can enable more effective management of diversity and inclusivity in education. Utilizing entropy and profiling the dynamics of students' behaviors can help adapt teaching methods to the individual needs of students, increasing the effectiveness of the educational process.

Although Mazur's theory is complex and requires specialized teacher training, it serves as a valuable tool for working in diverse classrooms. Its application in inclusive education can significantly contribute to a better understanding of students' individual needs and more effectively support their development. So far, this theory has not been widely used, mainly due to its formal-mathematical nature and the lack of available translations into English, which has limited its reach and availability in the international academic community. However, in recent years, there has been a growing number of interdisciplinary publications indicating increased interest in Mazur's theory. To fully harness its potential, further research involving larger groups of participants and diverse educational contexts is necessary to confirm the anticipated benefits of applying this theory. Experimental studies, in particular, would be helpful to broaden the scope of Mazur's theory to a wider population of students. It is also important to note that the sample size (40 participants) and the specific context (Youth Educational Center) may limit the generalizability of the results to other educational settings. In general, Mazur's method itself does not have direct limitations related to the age of students or the type of disorders, as the theory of character dynamism assumes that every individual possesses varied rigid character traits, regardless of specific conditions. For this reason, the theory can be applied to a broad population, including in inclusive education. However, to effectively adapt the tools for school practice, further research is needed, particularly regarding students with special educational needs. Diagnostic tools must be developed that can account for the actual capabilities of these students and adjust the teaching process to their specific needs. It is crucial to conduct research in diverse educational environments to verify how Mazur's theory works in practice with students with different types of disorders and across various age groups. Further large-scale studies, conducted in more diverse environments,

could provide more comprehensive evidence of the applicability of Mazur's theory in the context of modern inclusive education.

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Dynamizm charakteru jako narzędzie wspierające nauczycieli w zróżnicowanych środowiskach edukacyjnych. Zastosowanie teorii Mazura w edukacji inkluzywnej

Streszczenie

Niniejsza publikacja omawia teorię *Cybernetyka charakteru* Mariana Mazura w kontekście jej zastosowania w edukacji inkluzyjnej oraz w zarządzaniu różnorodnością w klasach szkolnych. Współczesna edukacja stoi przed wyzwaniami wynikającymi z rosnącej różnorodności uczniów, co wymaga adaptacji metod nauczania do indywidualnych potrzeb uczniów o różnych predyspozycjach i stylach uczenia się. Teoria Mazura, oparta na analizie dynamizmu charakteru, oferuje nauczycielom narzędzie umożliwiające lepsze zrozumienie wewnętrznych mechanizmów decyzyjnych uczniów, co może wspomóc bardziej skuteczne zarządzanie zróżnicowanymi grupami. W pracy przedstawiono również wyniki badań empirycznych, przeprowadzonych w Młodzieżowym Ośrodku Wychowawczym. Badania te wykazały, że profilowanie dynamizmu charakteru jest bardziej zasadne niż nadawanie indywidualnej kategorii charakteru, w kontekście dostosowywania procesów dydaktycznych do indywidualnych predyspozycji uczniów.

Słowa kluczowe: edukacja włączająca, zarządzanie różnorodnością, cybernetyka charakteru, personalizacja edukacji.