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The impact of individually planned instruction on the development of self-image and verbal creativity of pupils

Abstract: This paper examines the related concepts of modern didactic paradigms, didactic theories and educational systems that form the foundation of individually planned instruction to identify thematically associated postulates that can update effective teaching strategies. This one-year experimental and action study aimed to identify and gauge individually planned instruction's impact on the development of pupils' self-image and verbal creativity. The study's sample comprised 150 pupils, and the experimental sample comprised 16 pupils from the experimental group and 16 from the control group. Given the study's complex subject matter, both qualitative and quantitative approaches were employed to overcome potential limitations resulting from glorification of only one approach. Once didactically based, individually planned instruction was applied, pupils from the experimental group scored significantly higher on educational testing than both their initial scores and those of the pupils from the control group who attended non-individualised classes. The present study offers a comprehensive analysis of the dissemination and innovative utilisation of individually planned instruction, which has been validated. Furthermore, potential enhancements to educational achievements resulting from implementation of these classes also are examined.

Keywords: individually planned instruction; verbal creativity; self-image; profile, experimental and action research

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Scientific article

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Introduction

Before defining the concept of individually planned instruction, the following tangential concepts need to be differentiated: individualisation of instruction individual instruction and individualised instruction.

Throughout the didactic-methodical body of literature, the terms *individualisation of instruction* and *individualised instruction* frequently have been used interchangeably (Ilić 1998, 2020). While the former is, indeed, an integral component of the latter, these terms notably are not entirely synonymous. The concept of individualisation of instruction serves as a didactic principle that requires schools and teachers to acknowledge and accommodate pupils' diverse needs. This involves adjusting educational objectives, tasks, content, forms, methods and systems for both individuals and groups of pupils. The ultimate goal is to equip pupils for relatively independent and self-initiated learning, enabling them to maximise their personal potentials (Branković and Ilić 2004). Individualised instruction and the individual form of pupils' work are different concepts. The individual form of pupils' work can be either differentiated or undifferentiated. In undifferentiated individual work, all pupils are given the same tasks, regardless of their prior knowledge and abilities, while individualised instruction entails teaching system that tailors educational activities to pupils' individual capacities, possibilities and interests (Ilić 1998). In individualised teaching, differentiating individual pupils' work takes precedence. An example of this instructional approach entails individually planned instruction, a variant within the individualised instruction system. Unlike other variants that cater to specific groups of pupils with varying differences, individually planned instruction is designed specifically for an individual pupil. According to some didactics scholars (Duane 1975; Đukić 2003; Mandić 1987; Vilotijević and Vilotijević 2016), the concept of individually planned instruction involves the creation and delivery of lessons tailored to each pupil's unique requirements, including their learning pace, interests, understanding of instruction, motivation and study habits. These experts agree that this model is individualised and requires careful planning and execution to ensure that each pupil's needs are met. To comprehend the complexity of these types of

individualised classes, we chose a more comprehensive clarification of the term, according to which individually planned instruction is »a didactic method variant of the individual class system, which entails intensive learning and effective teaching within individual and personalised curricula based on optimal learning outcomes which take into account the following:

– pupil's position in the learning outcome continuum,
– pupil's learning abilities and progress pace,
– motivation level,
– learning habits, techniques and style,
– personal traits,
– self-perception,
– instruction acceptance« (Jerković 2017, pp. 357–358).

Theoretical background

Before verifying individually planned instruction's effects on self-image and pupils' verbal creativity, it was imperative to identify foundations and clarify this system variant' background based on postulates of psychological theories, modern school theories, didactic paradigms, didactic theories and educational system theories. This process also involved defining pupils' positions and activities, as well as teachers' functions and competencies in such classes, including individually planned instruction's macrostructure and microstructure.

To elucidate individually planned instruction fully, postulates of the following theories were followed: humanistic theories of personality (Maslow 1954; Olport 1969; Rogers 1965); Galperin's spiral formation of mental actions (Knežević 1986); Vygotsky's sociocultural theory (1996) and modern school theories, among which the most pertinent are the Quality School (choice theory and reality therapy) (Glasser 2005), Life School (humanistic and personal pedagogy) (Amonašvili 1999) and Summerhill School (Nil 2003).

Individually planned instruction is person-oriented and based predominantly on the didactical phenomenology paradigm (Рудакова 2005). An individual's *phenomenological world* is crucial in understanding a pupil's perceptions, interpretations of reality and behaviour. In the context of individually planned instruction, the pedagogical emphasis is placed on a holistic approach towards the pupil's personality. The fundamental aspect of the teaching and learning process is the continuous progression of the pupil's zones of proximal development, denoting the range of learning outcomes that a pupil can achieve with guidance and support. This constant shift between proximal development zones and pupils' actual development lies at the core of the educational experience in planned classes.

Individually planned instruction also may be rooted in the postulates of constructivist didactics, as such classes focus on independent »knowledge construction«, contextualised learning and teaching, learning how to learn, formative evaluation and self-evaluation (Topolovčan et al. 2017).

More comprehensive theoretical foundations of individually planned instruction entail crucial thematically associated postulates that include cybernetics and information theory (Cube 1994), critical-constructive didactics (Klafki 1994), critical communication theory (Winkel 1994), curriculum theory (Möller 1994), theory of developmental education (Davidov 1995) and confluent education theory (Slatina 2005).

Individually planned instruction's theoretical foundations also rest on modern educational systems, particularly classes of varying complexity (Ilić 1998), inclusive classes (Ilić 2012) and, to some extent, problem and responsible classes (Ilić 2002).

The following interconnected global stages have been singled out within individually planned instruction's macrostructure:

– Identification of development potentials, academic achievements and pupils' needs
– Preparation and design of individually planned instruction
– Execution of individually planned instruction (adoption of new curricula, repetition and exercises)
– Evaluation of pupils' achievements in individually planned instruction (Jerković 2019).

When developing individually planned instruction, the process begins by considering pupils' developmental potentials, their position on the continuum of educational outcomes and various other variables documented in the pupils' profiles. These variables encompass aspects such as emotional, cognitive and social development, as well as self-image, verbal creativity, reading technique and logic. Utilising this profile, a personalised pupil programme is formulated with the aim of facilitating attainment of predetermined and expected outcomes that are determined based on the pupil's placement on the continuum of educational achievements.

The microstructure of personalised classes and effective teaching comprises the following stages:

– Preliminary verbal instructions for forthcoming assignments
– Pupils' engagement in self-directed learning with intermittent and effective guidance
– Formative assessment of pupils' achievements
– Analysis of possible obstacles, learning methods and comprehension of curriculum content (Jerković 2019).

Self-perception is a multidimensional construct that encompasses global self-perceptions, as well as specific self-perceptions in different domains. S. Harter (2012) initiated her research with the observation that children have a nuanced perception of their competency levels, experiencing varying degrees of competence across different domains. The study utilised an adapted instrument that incorporated six aspects of self-image: scholastic competence; social acceptance; athletic competence; physical appearance; behavioural conduct and global self-worth. No-

tably, development of a pupil's self-image can take on either positive or negative dimensions contingent on their interactions within the surrounding environment: 'Pupils who have a positive self-concept can be categorised as a growth mindset, and a negative self-concept can be categorised as a fixed mindset. Pupils with a growth mindset are pupils who have an unyielding attitude. He will face all the challenges that are in front of him. Meanwhile, pupils with a fixed mindset are pupils who easily give up' (Wua et al. 2022, p. 3). In the context of individually planned instruction, the teacher considers various factors, including pupils' self-image, to provide them with optimal support throughout the learning process. Within these classes, pupils consistently receive feedback on their performance, a factor that can influence their self-image significantly. Pupils with a more positive self-image tend to approach class tasks with heightened self-confidence, with their subsequent success reinforcing their self-esteem further (Dolenc 2009). Previous experimental studies – such as those focussing on teaching different levels of complexity (Ilić 1998) and inclusive instruction (Ilić 2012), in which individualisation of instruction is implemented have made a notable impact on the development of verbal creativity among younger elementary school pupils. Recent research indicates a correlation between verbal creativity and independence in learning, i.e., pupils with more expressive verbal creativity exhibit greater independence in their learning endeavours (Saragih and Gayo 2022). Another study found that pupils originating from families that value freedom of expression and behaviour highly tend to display higher levels of verbal creativity (Debnath and Sikdar 2015). Based on these findings, it can be asserted that independent learning and verbal creativity share an interdependent relationship. These insights provide a significant foundation for examining individually planned instruction's influence on the development of pupils' verbal creativity.

The following sections outline this experimental study's methodology and individually planned instruction's educational effects.

Research method

The examination of a large body of work suggests that individually planned instruction may be rooted in modern didactic paradigms and theory, as well as innovative teaching systems. Given that these classes are individual-oriented, we based our methodology on both quantitative and qualitative research paradigms. *The subject matter of the research* was to single out individually planned instruction's educational effects.

The subject matter comprised the following aspects:

– generation of a series of diagnostic research instruments, individual pupils' profiles, appropriate curricula and practice systems based on individually planned instruction's didactic foundations
– execution of individually planned instruction and determination of educational effect indicators (pupils' self-perception and verbal creativity)

The present study aimed to estimate didactics-based, individually planned instruction's impact on pupils' achievements experimentally.

– *The independent variable* in the didactic framework comprised didactics-oriented, individually planned instruction, while the dependent variables pertained to the following effects of such classes:
– pupils' verbal creativity
– self-perception

The main hypothesis that guided the research: Didactics-based, individually planned instruction will yield superior educational outcomes for pupils in the experimental group compared with both their own baseline scores and those of the control group, who received conventional, non-individualised instruction.

Profiles were generated for pupils participating in the experimental sample, and personalised programmes subsequently were devised to guide their ongoing development. The instruction was conducted by aligning with anticipated outcomes outlined in the programme. Importantly, pupils in the experimental group were not segregated. Instead, individually planned instruction occurred within a classroom setting that included pupils not participating in the experimental programme. For the pupils in the experimental group, individually planned instruction in their native language and mathematics was conducted during two lessons per week throughout the entire school year.

Two other sub-hypotheses emerged from the main one:

– perception compared with their own initial condition and those of the control group, who received conventional, non-individualised instruction,
– Pupils, due to experimental factors, will exhibit improved verbal creativity compared with their own initial condition and those of the control group, who received conventional, non-individualised instruction.

In this study, various scientific research methods were employed, along with appropriate techniques and instruments.

The following scientific research methods were employed:

– Theoretical analysis and synthesis method
– Parallel study method
– Survey research method
– Action method

The following research techniques were used:

– Scaling
– Testing
– Systematic observation
– Qualitative content analysis
– Case study.

The following experimental action research instruments were employed:
– developmental assessment and diagnostics instruments
– research instruments

In this study, developmental assessment and diagnostic instruments were utilised to identify relevant indicators that then were recorded in the pupils' portfolios, which were employed subsequently to design individual curricula for pupils who were within their zones of proximal development. The research instruments also were used to estimate individually planned instruction's effects by comparing intermediate and final assessment results with those of the initial assessment. This approach allowed for a scientific evaluation of the customised educational programmes' effectiveness.

The following instruments were used for experimental verification of individually planned instruction's educational effect:
– Estimation scale - Self-Perception Profile for Children – What I Am Like (Harter 2012)
– Verbal Creativity Test VCT (Forms A and B) (Schoppe 1975)

Self-Perception Profile for Children – What I Am Like is an instrument that we used for developmental assessment and diagnostics, but also for scientific research purposes. The instrument covers six aspects of self-perception: scholastic competence; social acceptance; athletic competence; physical appearance; behavioural conduct and global self-worth (Harter 2012). For this study's purposes, the original instrument comprising 36 statements was modified, and the instrument's validity was evaluated using a sample of 255 pupils. This initial Cronbach's alpha coefficient was determined to be 0.80, while the final measurements resulted in a coefficient of 0.85. These findings suggest that the adapted instrument is a reliable measure of the construct being assessed.

The results from the initial assessment were recorded in the pupils' portfolios and served as a basis for the design of tailored curricula and exercises for pupils who underwent self-perceived competency testing. The study's objective was to determine whether the experimental group, which received individually planned instruction exhibited greater improvement in self-perceived competencies compared with the control group and their own baseline performance.

German psychologist Karl-Josef Schoppe designed the verbal creativity test (VCT). The following Guilford concepts were used in nine VCT subtests: verbal fluency; idea fluency; associative fluency; expressive fluency; spontaneous flexibility; adaptive flexibility and originality. The initial phase used Schoppe's VCT Form A, as Form B was not available (Schoppe 1975). We used the form designed by Mile Ilić, while considering Form A's theoretical postulates and content (Ilić 1981).

The experimental action research procedure on individually planned instruction's educational effects comprised these steps:
– Preliminary assessment of needs, abilities and potential obstacles in implementation of individually planned instruction

- Initial assessment of dependent variables, identification of developmental potentials, pupils' academic achievements and portfolio design
- Planning and preparation of individually planned instruction
- Harmonisation of experimental and control groups
- Realisation of individually planned instruction in the experimental group and traditional (non-individualised) classes in the control group (first semester)
- Intermediate assessment of dependent variables
- Valorisation and adaptation of the experimental factor (independent variables)
- Realisation of the experimental factor and traditional (non-individualised) classes in the control group (second semester)
- Final assessment of dependent variables
- Quantitative and qualitative evaluation of procedures and individually planned instruction's educational effects.

The target population for this research comprised fourth- and fifth-grade pupils attending primary schools in Banja Luka, Bosnia-Herzegovina, during the 2014-2015 academic year. After this study was conducted, no other new scientific research was published, so the established findings remain current and relevant for improvement of theory and teaching practice.

Altogether, 150 pupils from both the experimental and control groups were included in the sample. The experimental groups comprised three subgroups with a combined total of 71 pupils. The control groups comprised three subgroups with a combined total of 79 pupils. Fourth and fifth-grade pupils were included in the sample because we started from the expectation that fourth-grade pupils, who are less capable of independent learning than fifth-grade pupils, also would exhibit improved verbal creativity and self-image development. The basic sample (150) was used to draw the experimental subsample of 32 subjects, i.e., individually planned instruction (16 pupils) and control group (16 pupils). The aim was to identify 16 pairs of pupils from the experimental and control groups who were matched based on relevant variables. After initial diagnostics on the pupils from the experimental group were collected, individual programmes in mathematics and the mother tongue were implemented in their classrooms, i.e.,no special classes were organised for them, and pupils from the experimental and control groups did not attend the same school.

To ensure comparability between experimental and control groups, the pupils were paired based on their z-scores on seven variables: 1) average grades; 2) mother tongue grades; 3) math grades; 4) general cognitive abilities; 5) ability to learn the mother tongue independently; 6) ability to learn math independently and 7) self-perception assessment. The harmonisation process was conducted by matching pupils from the experimental and control groups who shared similar z-scores on these variables. The table below displays the combined z-values for each of the seven variables from every pupil in the experimental group and their corresponding counterparts in the control group.

The pupil's serial no. from the exp. group	Total z-values for exp. group pupils	The pupil's serial no. from control group	Total z-values for control group pupils
1	-1.46	1	-1.13
2	0.45	2	0.56
3	0.45	3	0.28
4	0.20	4	0.23
5	0.32	5	0.65
6	-1.45	6	-1.12
7	-0.81	7	-1.09
8	-0.82	8	-0.42
9	-0.77	9	-0.55
10	0.26	10	0.26
11	1.06	11	0.79
12	0.45	12	0.28
13	-1.33	13	-2.28
14	-1.52	14	-2.28
15	0.75	15	0.72
16	0.77	16	0.90

Table 1: Harmonisation of corresponding counterparts from experimental and control groups based on standardised z-values.

Following harmonisation of corresponding counterparts from the experimental and control groups based on z-values, the equivalencies of mean values of each of the seven aforementioned variables between the groups were verified using a t-test.

Variables	Group	M	SD	t-ratio	p
Average grades	E	4.44	0.62	-0.26	0.80
	C	4.50	0.73		
Mother tongue grades	E	4.06	0.85	0.19	0.85
	C	4.00	1.03		
Math grades	E	3.88	1.08	-0.16	0.87
	C	3.94	1.12		
General cognitive abilities	E	33.12	9.39	0.20	0.84
	C	32.38	11.49		
Ability to learn mother tongue independently	E	22.48	3.32	-0.23	0.82
	C	23.39	7.04		
Ability to learn math independently	E	20.03	5.16	-0.53	0.60
	C	21.21	4.25		
Self-perception assessment	E	77.25	12.68	0.19	0.85
	C	76.50	8.80		

Table 2: Harmonisation of experimental and control groups at initial assessment

Before beginning the experiment, teachers for both the experimental and control groups were selected based on consistent criteria pertinent to the experiment's nature and results. The teachers who administered the programme shared similar qualifications, including having the same degree, a comparable number of years of service and a similar number of professional development programmes throughout their careers. Based on statistical indicators in Table 2, we inferred that the experimental and control groups were harmonised in terms of all relevant variables.

In line with the research aim and hypotheses, we followed these statistical procedures:

– standard normal distribution and z-values
– single-factor repeated measures analysis of variance (ANOVA)
– single-factor analysis of covariance (ANCOVA)

Results and discussion

In this section, we present the results on individually planned instruction's impact on the development of pupils' self-image and verbal creativity.

Individually planned instruction's impact on development of self-image

Our study's goal was to determine whether individually planned instruction would impact self-perception among the experimental group, and if so, to what extent. We hypothesised that self-perception would improve as a result of these classes however, based on the data presented in the table, our hypothesis was not supported. The pupils in the experimental group who received personalised classes in their mother tongue and math did not exhibit improvements in self-perception and actually became more self-critical due to the constant objective feedback they received on their academic performance. According to the analysis using partial eta squared, the experimental factor's effect was almost insignificant ($\eta^2 = 0.06$).

Group	Assessment	N	M	SD
E	Initial	16	77.25	12.68
	Final	16	79.69	11.99
	($F_{(1.15)} = 1.02$; $p = 0.33$; $\eta^2 = 0.06$)			
C	Initial	16	76.50	8.79
	Final	16	79.56	11.41
	($F_{(1.15)} = 3.70$; $p = 0.07$; $\eta^2 = 0.20$)			

Table 3: Results from the single-factor, repeated measures ANOVA of self-perception in the experimental group

The table also indicates a slight, but potentially statistically significant, difference in the self-perception evaluation of pupils in the control group between initial and final assessments. During the final assessment, the pupils' self-perception tended to be more positive than at the beginning, possibly because the control group received non-individualised classes and, therefore, received feedback on their academic performance less frequently than the experimental group. As a result, they may have been less self-critical overall.

Based on our statistical analysis, we found no significant difference between the experimental and control groups on their self-perception scores during the final assessment. We used univariate analysis to compare the self-perception scores' mean values between the two groups while also controlling for any differences in initial self-perception scores. The F-ratio andcorresponding statistical significance, indicating that the lack of a significant difference was not due to chance (F =

0.03; p = 0.87). The control group was placed non-individualised classes were not focussed on catering to individual pupils' needs. Instead, the pupils were viewed as part of a larger group, without much emphasis on planning, preparation or evaluation of learning outcomes tailored to individual needs. Essentially, the classes in the control group were not individual-oriented and did not prioritise each pupil's unique needs.

Covariance	Assessment	Group	M	SD	F	p
Initial	Final	E	79.69	11.99	0.03	0.87
		C	79.56	11.42		

Table 4: Univariate differences between mean values of self-perception assessment among the experimental and control groups (ANCOVA)

However, the individually planned instruction resulted in pupils becoming more self-critical due to the constant feedback they received on their academic achievements. This feedback was provided in a pedagogically acceptable manner, even when it was unfavourable. Throughout the experiment, pupils experienced both success and failure, which led to an intense phase of accepting objective evaluations of their academic performance. The individually planned instruction helped pupils develop a more realistic self-concept, which led to increased self-criticism, which we believe emerged from an imbalance between the pupils' realistic self-perception and their ideal self-perception. Self-concept is influenced not only by what happens outside the person, but also what happens inside due to comparisons of real and ideal self-image (Irtelli et al. 2021).

Next, we present the individual standardised z-values of the pupils' self-perception assessments. As presentedin the table below, more than half the pupils in the experimental group experienced improvements in their self-perception. Notably some pupils who had below-average grades in math and their mother tongue still had above-average positive self-perception when compared with their peers. This was observed in the cases of Pupil Nos. 6 and 14.

In this study, we aimed to see how individually planned instruction impacts verbal creativity and self-perception among pupils in the experimental group compared with those in the control group taking a quantitative approach. Alongside group-level effects, we were equally keen on tracking the progress of each pupil who had their own customised programme, and how their development stacked up against their initial condition and those of their peers in the class, i.e., the qualitative aspect. Scrutinising an individual's achievements is crucial in this context, as planned instruction's main goal is to ensure that each pupil makes the most progress possible during their educational journey. This type of teaching focuses primarily on the pupil.

Furthermore, we discuss the case of Pupil No. 14 in detail. [1]

1 The pupil's portfolio is fully presented in the author's doctoral dissertation titled Didactic foundations and individually planned instruction's educational effects.

The pupil's serial no. from the exp. group	Assessment	
	Initial (z)	Final (z)
1	0.30	0.43
2	1.07	1.23
3	-0.49	-0.91
4	-0.68	0.96
5	-0.68	0.07
6	1.17	1.14
7	-0.39	0.20
8	0.00	-3.03
9	-0.19	0.60
10	-0.39	0.25
11	-0.39	-0.46
12	-1.85	-1.79
13	-0.29	0.96
14	1.36	1.05
15	0.20	0.16
16	-0.49	-0.73

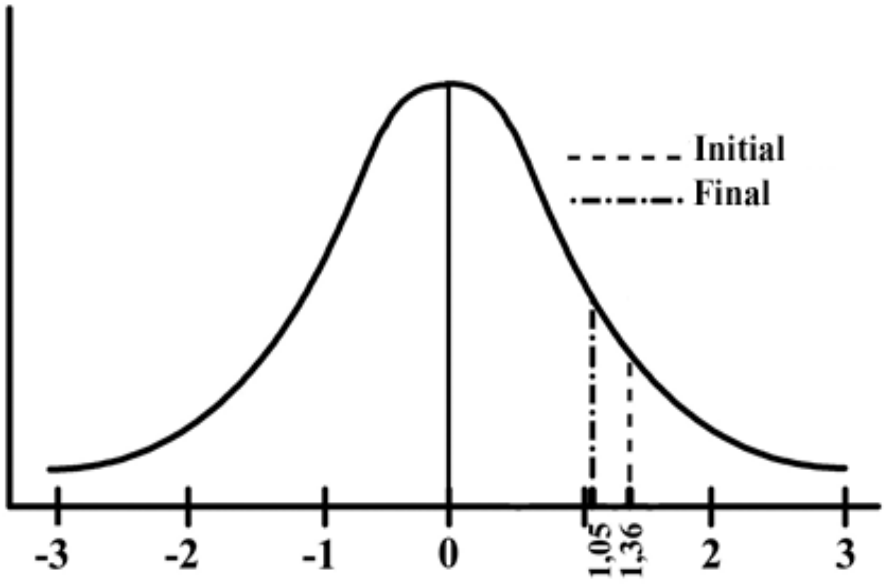
Table 5: Standardised z-values of pupils' self-perception assessment during the initial and final phases

According to the z-value obtained during the initial assessment (z = 1.36), Pupil No. 14 exhibited a notably positive self-perception, surpassing approximately 91.31% of his peers (Graph 1). This pupil demonstrated a pronounced lack of self-criticism and exhibited a passive attitude towards both success and failure. Notably, he appeared disengaged from the academic environment, as highlighted by his apparent indifference towards scholastic achievement, aligning with Glasser's concept of school not being within his sphere of personal significance (Glasser 2005). Outside of academic pursuits, the pupil devoted his time to practical endeavours, such as crafting *ikebana* and decorative items. Furthermore, he experienced a higher frequency of health and psychological challenges, prompting his parents to adopt a more lenient approach in their expectations. Consequently, the pupil internalised these expectations, which, while not excessively demanding, facilitated the cultivation of a positive self-image through fulfilment of relatively attainable standards.

Albert Bandura (1991) proposed a theoretical model for self-regulation in which he postulated that initially, children's behaviour is regulated externally

through modelling, consequences (rewards and punishment) and directed instruction. Over time, children learn to predict others' reactions and use this knowledge to regulate their own behaviour. Thus, self-perception is not an innate quality, but rather develops gradually as a result of social interactions (Harris and Orth 2019; Kumari 2013; Pugnerová and Pospíšilová 2020). Children internalise rules set by adults, forming their own standards (Bandura 1991). Subsequently, children's behaviour is under the influence of the evaluating reactions directed towards them. »They observe that their behaviour aligns with adopted standards, and the sanctions employed are either self-approval or self-disapproval« (Vasta et al. 1998, p. 491).

The most critical aspect was towards the »physical self« (z = -0.31). His motor skills and movement coordination were poorly developed, resulting in clumsiness during physical activities. However, the class widely accepted him, thanks to the teacher who cultivated an inclusive atmospher in which every student was accepted just the way they were. He grew up in a similar environment in his parents' home.



Graph 1: Self-perception during initial and final assessments of Pupil No. 14

At the final examination, the student exhibited a notably more positive self-image (z = 1.05) than approximately 85.31% of his classmates, a marked improvement from his initial assessment (Graph 1). During his academic journey, the student engaged in individually planned classes tailored to meet the requirements

of national development standards. These classes were structured to accommodate the student's unique learning needs, with exercises meticulously planned based on specific instructions. However, Pupil No. 14 notably demonstrated a tendency to disengage from lengthy instructions and often sought clarification from the teacher when encountering difficulties. He displayed a preference for template tasks and exhibited a tendency to pause frequently when accomplishing tasks within his proximal development zone, awaiting assistance from the teacher.

In line with the analysis and interpretation of the overall results, we may infer that our first sub-hypothesis was not supported, i.e., the pupils exposed to individually planned instruction did not exhibit improved self-perception compared with their own initial condition and those of the control group, who received conventional, non-individualised instruction.

Individually planned instruction's impact on pupils' verbal creativity

Our objective was to investigate whether pupils who were placed in individualised classes demonstrated improvement in their verbal creativity compared with their initial scores. We used the verbal fluency test to assess their proficiency in various aspects of verbal communication, such as verbal fluency, idea fluency, associative fluency and expressive fluency. The experimental group of pupils who received individualised mother tongue lessons exhibited greater verbal creativity in literary, grammatical, reading and orthographical aspects. Specifically, the most successful pupils were more likely to express their creativity frequently and demonstrate greater awareness of their peers' creative abilities. Moreover, other pupils were able to accomplish tasks that lied within their zones of proximal development, allowing them to tap into their cognitive, connotative and creative potentials to the fullest extent.

Group	Assessment	N	M	SD
E	Initial	16	23.81	15.73
	Final	16	37.56	18.08
	($F_{(1.15)} = 8.20$; $p = 0.012$; $\eta^2 = 0.36$)			
C	Initial	16	20.47	11.51
	Final	16	20.94	12.00
	($F_{(1.15)} = 0.27$; $p = 0.61$; $\eta^2 = 0.02$)			

Table 6: Results from the single-factor, repeated measures ANOVA for verbal creativity in both the experimental and control groups

According to the results from the single-factor repeated measures ANOVA for verbal creativity, the experimental group's pupils made significant progress compared with the initial assessment, as suggested by the F-ratio and the statistical significance values (F [1.15] = 8.20; p = 0.012). Partial eta squared was 0.36,

suggesting a large impact from the experimental factor. Individually planned instruction encourages pupils to use the unconventional and nonconformist approach to problem solving, which supports creative attitudes further. According to Kvaščev, such attitudes make a long-term impact in terms of encouraging pupils to abandon stereotypical behaviour (Kvaščev 1976, p. 27). Nevertheless, creative attitudes still do not necessarily result in creative thinking. We assumed that encouragement of creative attitudes would generate greater creative and verbal abilities. Our goal was to establish whether verbal creativity was boosted among the control group, who were assigned identical tasks regardless of the pupils' knowledge of literary terms and comprehension of literary texts.

Table 6's indicators suggest that the control group's students, who attended traditional classes, did not demonstrate a significant increase in verbal creativity between the initial and final assessments. The traditional classes' effects on the control group were found to be minor, as indicated by a partial eta squared value of 0.02. Furthermore, even the highest-performing pupils in the control group were not presented with tasks that required divergent and evaluative thinking. Consequently, the pupils' responses were predictable and did not deviate from what was expected typically.

Another goal was to determine whether a difference existed between the experimental and control groups in terms of verbal creativity.

Covariance	Assessment	Group	M	F	p
Initial	Final	E	37.56	9.89	0.00
		C	20.96		

Table 7: Univariate differences between mean values of verbal creativity assessment among the experimental and control groups (ANCOVA)

The results from the univariate analysis comparing the mean values of initial and final verbal creativity assessments between the experimental and control groups, while controlling for the initial assessment's covariate impact, indicate that the experimental group exhibited a significant improvement in verbal creativity compared with the control group. This improvement was achieved through individualised planning of literature, grammar and orthography classes, with an emphasis on motivating pupils to achieve their maximum creative expression. The pupils in the experimental group were provided with timely feedback on their progress, and motivation and creative thinking were viewed as complementary processes in the individualised classes. However, the pupils in the control group placed in traditional classes were accustomed to providing expected answers and quickly learned not to take chances in pursuit of better grades that they might not receive. As a result, »these pupils did not develop task-oriented motivation, which is essential for creative production« Maksić (1998 p. 24) noted. In the individualised classes, the demands placed on the pupils were deliberate and tailored to their abilities, with no fear of low grades. The pupils were oriented towards tasks

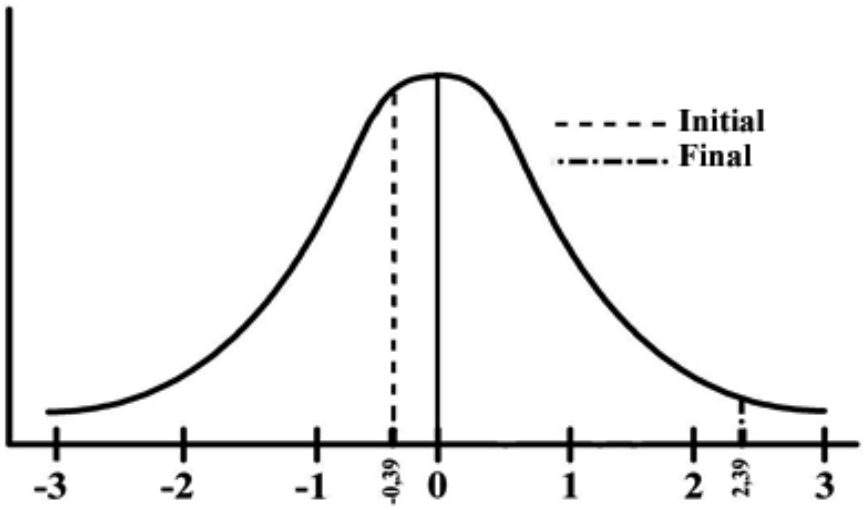
that could be accomplished with specific intellectual effort, which helped cultivate their motivation and creativity.

In the next section we present the individual standardised z-values for verbal creativity from both the experimental and control groups for the initial and final assessments. These z-values are displayed in Table 8. According to the data presented in the table, it can be inferred that 13 pupils in the experimental group exhibited improvement in their verbal creativity in the final assessment compared with their peers in the control group. Notably, all three pupils who initially displayed below-average verbal creativity exhibited progress. Among the four pupils who initially exhibited above-average verbal creativity, three demonstrated progress, while among the nine pupils who initially exhibited average verbal creativity, seven demonstrated progress. These findings suggest that individually planned instruction exerted a predominantly positive effect on development of verbal creativity among all pupils, regardless of their initial performance levels. Moreover, a detailed qualitative analysis was conducted to examine individually planned instruction's possible effects own development of verbal creativity. As part of this analysis, we interpreted initial and final assessment achievements on verbal creativity for a specific pupil, No. 16.

The pupil's serial no. from the exp. group	Assessment	
	Initial (z)	Final (z)
1	-1.85	-0.85
2	1.06	2.26
3	0.93	0.09
4	2.30	2.82
5	1.59	1.80
6	-0.83	-0.64
7	-0.26	0.60
8	0.53	0.26
9	-0.79	0.51
10	0.67	1.67
11	0.67	2.09
12	3.00	1.50
13	-1.10	-0.17
14	-1.80	0.98
15	-0.39	2.39
16	-0.39	2.39

Table 8: Standardised z-values of verbal creativity in the experimental group for initial and final assessments

As Graph 2 indicates, No. 16, a fifth-grader, was tested for verbal creativity during the initial assessment and registered an average score compared with his classmates (z = -0.39). The teacher observed the following traits pertinent for development of verbal creativity: resourcefulness; ingenuity; flexibility; criticism; verbal fluency; nonconformity and productivity.



Graph 2: Verbal creativity at initial and final assessments of Pupil No. 16

Based on our analysis, we concluded that Pupil No. 16 could benefit from individually planned instruction in literature reading and comprehension to encourage his verbal creativity. During initial testing to determine the pupil's position on the learning outcome continuum for literature reading and comprehension (T-PLOC-LRC), the pupil scored better than 97.67% of his peers, which was recorded in his portfolio.[2] The pupil's position on the continuum was determined to be at Level 3, which required critical and creative reading comprehension and creative information processing. During the individually planned instruction, the pupil was given opportunities to alter, redefine and reinterpret information and take a new perspective on perceiving phenomena, characters and events. Level 3 exercises required resourcefulness in predicting new ideas and relations based on text and their application in new situations. These activities likely provided an environment that encourageddevelopment of the pupil's verbal creativity. According to S. Maksić (1998), a creative pupil feels the need to:

– offer unexpected, original and witty answers
– generate many ideas and solutions for different tasks and problems

2 The pupil's portfolio is displayed in the author's doctoral dissertation.

– ask as many questions as possible on different topics
– accept risks in solving problems
– act as a nonconformist individual, i.e., one who is different from others, etc.

The following are some examples of questions asked during individually planned instruction, which supported the aforementioned pupil's needs:
– Can you explain the significance of the title 'Silver dancers' instead of 'White dancers' in the poem?
– Pretend you are the Moon and you need to explain to your grandmother why you continuously drift in the sky. Use expressive language to convey your emotions!

We attempted to encourage the pupil's verbal creativity through individually planned instruction in grammar and orthography. For example, the pupil practised direct and indirect speech when asked these questions: 'Carefully examine the photo of Cinderella and her prince! Use it to write down at least seven indirect speech sentences, then write those sentences in direct speech! Try to apply all three direct speech options in the second part of the assignment. What are Cinderella and her prince talking about'?

What we observed was that the pupil was not fully engaged in accomplishing the task. Instead, he attempted to proceed at his own pace and objected to any intervention from the teacher. We noted further that the pupil was highly motivated to achieve his self-imposed high standards and goals, which also included meeting his ambitious parents' expectations.

Once he completed the tasks, the pupil received prompt feedback from the teacher. The pupil appeared to take the teacher's feedback seriously and expressed a sense of pride and satisfaction upon receiving compliments and enthusiastic responses from the teacher. In one of the interviews, the pupil said, 'I prefer challenging tasks which allow me to express myself in a creative manner! I don't like it when someone helps me. I can do it myself'.

After the one-year individually planned instruction class ended, on the verbal creativity test (VCT) this pupil scored better than 99.16% of his peers ($z = 2.29$), which Graph 2 presents. Although a single case cannot be used to draw general conclusions, some evidence has suggested that individually planned instruction can provide a wide range of opportunities for development of verbal creativity. However, such a process may be difficult to achieve within traditional classroom settings designed for average pupils because the nonconformist, personalised approach inherent to individually planned instruction is more conducive to unlocking creative potential.

Based on our analysis and statistical indicators, we found evidence to support our second sub-hypothesis, which posits that exposure to individually planned instruction can lead to improvements in verbal creativity. Specifically, our results indicate that the experimental group demonstrated greater improvements in verbal creativity than both their baseline scores and those of the control group, who attended non-individualised and occasionally interactive classes. Taken together,

our findings partially support our main hypothesis, suggesting that individually planned instruction may exert a more favourable educational effect than non-individualised classes.

Concluding remarks

The coherent basis for individually planned instruction is the result of combining didactic foundations with thematically relevant postulates from modern didactic paradigms, theories of alternative schools, physiological theories and modern educational systems. This synthesis provides an adequate methodology for diagnosing each pupil's developmental needs, potentials and positions along the educational achievement continuum, as well as other personal traits that are relevant for designing pupils' portfolios, developing and implementing individual curricula, and designing personalised exercises. A comprehensive research methodology was utilised that examined both the problem and paradigm to assess the effectiveness of introducing individually planned instruction to pupils' creativity levels. The experimental group, which received individually planned instruction, demonstrated greater educational effects in terms of encouraging creativity when compared with their initial assessment and the results from the control group, which attended non-individualised classes.

From this study, two significant conclusions emerged, warranting critical examination through longitudinal research:

– In individually planned instruction, pupils exhibited increased self-critique and a more realistic self-perception.
– Verbal creativity manifests development in all pupils, regardless of their academic standing (i.e., below average, average and above average).

A significant methodological limitation in experimental research on teaching models' impact including individually planned instruction on the profound development of verbal creativity and self-image, is the experiment's duration, which was limited to one school year. Conducting longitudinal research using interdisciplinary teams within research institutions would be more valuable investigating individually planned instruction.

The experience gained from implementing the experiment and the obtained results suggest:

– for further research, based on potentials and prospects, into individually planned instruction's effects on the development of pupils' self-image and verbal creativity across all levels and types of schools
– the need to enhance professional development programmes to ensure effective implementation and dissemination of individually planned instruction
– the need to train teacher education students on planning, executing and evaluating individually planned instruction

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VPLIV INDIVIDUALNO NAČRTOVANEGA POUKA NA RAZVOJ SAMOPODOBE IN BESEDNE USTVARJALNOSTI UČENCEV

Povzetek: Članek obravnava povezane koncepte sodobnih didaktičnih paradigem, didaktičnih teorij in izobraževalnih sistemov, ki so temelj individualno načrtovanega pouka, in prepoznava tematsko sorodne postulate, ki lahko nadgradijo učinkovite strategije poučevanja. Namen te enoletne eksperimentalne in akcijske raziskave je bil ugotoviti in oceniti vpliv individualno načrtovanega pouka na razvoj samopodobe in besedne ustvarjalnosti učencev. V vzorec raziskave je bilo vključenih 150 učencev, v eksperimentalni vzorec pa 16 učencev iz eksperimentalne in 16 učencev iz kontrolne skupine. Zaradi kompleksne narave raziskave sta bila uporabljena kvalitativni in kvantitativni pristop, s čimer smo se izognili morebitnim pomanjkljivostim, ki bi nastale zaradi uporabe le enega pristopa. Po uvedbi didaktično utemeljenega individualno načrtovanega pouka so učenci iz eksperimentalne skupine pri preverjanju znanja dosegli bistveno višje rezultate kot pri začetnem preverjanju in kot učenci iz kontrolne skupine, ki niso sodelovali pri individualno načrtovanem pouku. Raziskava ponuja celostno analizo diseminacije in inovativne uporabe ustrezno preizkušenega individualno načrtovanega pouka. Poleg tega smo proučili tudi možnosti za izboljšanje učnih dosežkov, ki bi jih prineslo izvajanje tovrstnega pouka.

Ključne besede: individualno načrtovani pouk, besedna ustvarjalnost, samopodoba, profil, eksperimentalno in akcijsko raziskovanje

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