Abstract
Nowadays teaching process is more and more student-centred. Teachers, however, are well aware that a classroom is not a homogeneous unit of individuals. In fact, it is composed of students who differ in their foreknowledge, expectations, learning styles and learning tempo. Moreover, they have different cognitive capacities, different motivation and different social background with higher or lower degree of encouragement. Nevertheless, they all strive toward a common learning and educational goal, with precisely determined learning standards, the achievement of which is evaluated on the national level. The article presents strategies which may be applied when attempting a more individualized approach in a versatile teaching environment, with the aim of addressing each learner and their specific needs. Advantages and disadvantages of the existing, legally determined forms of individualization are outlined, with special emphasis on both extremities of the varied schooling population, that is children with special needs and learning difficulties on the lower end of the scale and talented students with above-average learning capacities on the upper end. The article suggests some of the possible methods of detecting students’ strong areas of knowledge and their specific interests by means of which teachers can better devise lesson plans with the aim of increasing the effectiveness of teaching, creating stimulating learning environment and responding to students’ various needs, bearing in mind at the same time, however, the fulfillment of learning goals and the achievement of learning standards set in the curriculum.

Sažetak
Suvremena škola izrazito postavlja učenika u prvi plan nastavnog procesa. Učitelji su svjesni da razred nije homogena skupina pojedinaca. Čine ga učenici koji se razlikuju po svom predznanju, očekivanjima, stilu učenja i tempu razumijevanja nastavnog gradiva, koji imaju različite kognitivne sposobnosti, drukčije motivacije te dolaze iz različitih socijalnih okružja u kojima imaju veći ili manji poticaj. A svi su usmjereni prema jedinstvenom odgojno-obrazovnom cilju koji je normiran s precizno određenim standardima znanja čije se postizanje provjerava na jedinstven način na državnoj razini. U članku su predstavljene strategije za diferencijaciju poučavanja sa svrhom da učenje približimo svim učenicima, uzimajući u obzir njihovu raznolikost. Predstavljene su prednosti i slabosti zakonski predviđenih oblika individualizacije i diferencijacije, s naglaskom na dvije krajnje skupine šarolike učeničke populacije – s jedne su strane djeca s posebnim potrebama i poteškoćama u učenju, a s druge daroviti, edukacijski natprosječno sposobni učenici. U članku su predloženi neki načini kako prepoznati učenikova jača područja i specifične sklonosti pomoću kojih učitelj nastavu može planirati tako da poboljša učinkovitost nastavnog procesa, kreira poticajnu okolinu, odazove se na učeničke raznolike potrebe te istovremeno ostvaruje ciljeve i postiže standarde znanja koji proizlaze iz nastavnih planova.

One of the educational goals of the elementary education in Slovenia is to promote social, moral, intellectual and emotional development of the individual and his or her integration in the community. This poses great emphasis on the individual, and the need of a learner-centered teaching environment is stressed. In order to achieve this highly complex and in many ways elusive objective, which requires systemic and holistic view of the educational system as such, we should have a
A closer look at the everyday classroom situation with a very diverse learner population and the role of the teacher within it. In this article a foreign language lesson is taken under closer scrutiny.

The fact that learner differences pose a great challenge to teachers is not new. Penny Ur /1/ states that learners differ according to various parameters: whether they are beginners, intermediate or advanced, their objectives in learning the language, how they are motivated, how heterogeneous or homogeneous the class is, the size of the group and many more personal factors such as preferred learning styles, personality, interests, cultural background - to name only a few.

Slovenian legislation has tried to overcome some of these limitations by proposing several teaching models, which will be discussed briefly. The main question nevertheless remains: how to differentiate but not divide, in other words how to provide the most suitable learning environment for each individual, which incites active learning, without neglecting social aspects of integrated life in the community where people differ a lot, yet manage to work together towards a common goal.

What does a successful differentiation entail?
Dr. Strmčnik /2/ defines it as a form of individualization by dividing large heterogeneous classes into smaller, more homogeneous classes, composed of students which share more compatible characteristics and which enable a subtle tuning to individual needs. Even though such external form of differentiation involves a rather direct intervention in the organization of the educational process, it should be noted that there is no real homogeneity which would enable the classroom population to be treated as a uniform unity. No matter how similar students’ goals and abilities seem to be, they still require a more individualized teaching process to make learning effective. Those in favor of external differentiation in form of streamed classes support the view that individualization may be implemented with greater ease if classes are less numerous and in broad terms homogeneous /3/.

According to the guidelines issued by Kramar et. al. /4/ differentiating should entail differentiating learning goals, which should be determined in such a way as to set the standard norm attainable to all, with the possibility for each individual to surpass it. In other words, goals should not be accomplished without any effort, neither should they be set so ambitiously as to provoke students’ feeling of failure and incompetence.

Secondly, closely linked to goals is the content, following the syllabus, which should be adapted meaningfully, that is not in terms of quantity (“more capable students more exercises”) but quality. By acknowledging that, the teacher should select topics relevant to individual students and linked to their existing knowledge, and make them comprehensible and accessible. The content may thus vary in terms of complexity, originality, gradualness, the stage of development, the degree of problem orientation, etc.

Furthermore, differentiation involves a principled use of teaching aids, learning tempo and methodology. Methodology should take into consideration different learning styles on the basis of which students access and process information. As Ginnis /5/ points out, the learning process has to be as active as possible since research has shown that we remember 10% of what we read, 20% of what we hear, 30% of what we see, 50% of what we see and hear, 70% of what we tell, 90% of what we say and do at the same time.

Linked to the methodology is differentiation in terms of tasks /6/, which may vary in terms of difficulty, taxonomic level (whether it involves reproduction or analysis and synthesis), source availability (the teacher may provide the working material, different types of it, different media, etc), working procedure (different ways of conducting a research or survey).

Consequently, also the final product may undergo individualization. In its ultimate form it is a manifestation of the comprehension of the topic under discussion as well as the practical application of the newly acquired knowledge according to student’s criteria or relevance. It may encompass a variety of forms, that is from tangible physical objects to a wide range of creative activities such as dramatizations, dance performances, poster presentations, independent pieces of writing, etc... Students’ creativity and fresh insight of the topic manifested in the final products should be particularly stressed and noted by the teacher. Through
final products students may excel in their strong areas, however they should be encouraged to try their hand at areas they are not so brilliant at and approach them as challenges.

Last, but not least, individualization is closely linked to variability and flexibility /7/ in the sense of enabling students to take an active part in the learning process by choosing the topic or the method or the form of classroom interaction. The teacher assumes the role of a mediator and facilitator, guiding each individual toward their goal. Consequently, great effort has to be invested in the preparation phase of the lesson by selecting the appropriate materials, methods and patterns of interaction for individual students.

What are the possible advantages of the individually oriented learning process and which difficulties in assessment are posed?

First of all it creates a stimulating learning environment in which differences are accepted and tolerated. Secondly, it is based on the belief that all students are capable of learning and achieving some results and thus encourages the effort of tackling the tasks to the best of one’s ability and it enables each student’s work to be treated with respect. Thirdly, it cherishes the idea that working task sometimes have to be different for different students in order to distribute them fairly. It also acknowledges that each individual values success in different terms. Furthermore, it supports individual’s sense of responsibility, yet promotes the sense of belief in students’ capabilities, boosting thus their self esteem and consequently paving the way for independent life-long learning /8/.

Nevertheless, in the course of the process of individualization and different working load distribution as well as task assignment, the assessment and grading of students’ work becomes problematic in the sense of fairly evaluating students’ versatile work as well as achieve predetermined objectives. Dr Žagar /9/ examines similar problems in the case of streamed classes in the 8th and 9th grade. He stresses the need that the standards or norms of required knowledge are determined in great detail, and could be in broad terms labeled as minimal standards, fundamental standards and higher standards of knowledge, comprising all the categories in the cognitive domain of Bloom’s taxonomy. In order to specify criteria necessary to achieve a certain standard in greater detail, dr. Žagar proposes a 10 grade scale, which is than translated into 5 grade scale taking into account also the results of the external national examination (NPZ). In the national examination, standards are represented in the following manner: 50% minimal standards, 20% fundamental standards, 20% fundamental standards for average ability streamed class and 10% of higher standards. The final grade at the end of primary schooling would thus comprise teacher’s evaluation based on individual test throughout the school year, the results of the external examination, and streamed class assessments of tasks of various degrees of difficulty by means of a 10 grade scale. The combination of those three types of evaluation would than be translated in a 5 grade scale (mark 1 – point 1; mark 2 – points 2, 3, 4; mark 3 – points 5, 6; mark 4 – points 7, 8; mark 5 – points 9, 10) /10/.

In my opinion, however, neither learner’s effort nor motivation should be overlooked when deciding on a final grade. Nevertheless, in search of the most suitable form of assessment, it should be borne in mind that the primary aim of assessment is to provide feedback concerning the quality of students’ work and his or her relative progress. Feedback should not be limited exclusively to grades. On the contrary, comprehensive comments are in my experience often more motivating, which provides space for individualized tasks without the pressure of appropriate grading ratio. Furthermore, not every students’ product should be subject to evaluation in form of grades, each, however, should be accompanied by a form of performance information. In order to achieve appropriate feedback, teacher’s expectations and even more importantly, the criteria of assessment should be very specific, clearly presented in the language students understand and know in advance. Students should have the opportunity to choose a particular assignment on the basis of criteria of complexity and difficulty, knowing in advance what kind of grade could be obtained by successfully accomplishing a particular task. Feedback, however, could also come from students’ peers. By clearly presenting the criteria, students could be able to evaluate their peers’ work and consequently also accept evaluation from them. In
this way they can develop their critical self-assessment and become more independent and conscientious in their work.

Who are the individuals in the classroom?

Before the teacher can even begin planning (and later on carry out) effective differentiation, it is essential that she or he tries to detect the abilities, qualities and general characteristics of his or her students that distinguish them one from another. I believe that already in the past, internal differentiation and individualization was carried out and the success of it depended on the instinct the teacher had (and that distinguished good teachers from others) and on the bond he or she managed to establish with his or her students so that they opened up and were willing to share their interests, motivation (or lack of it) for a particular topic, working style, etc. Even nowadays, in my opinion, observant and dedicated teachers instinctively detect many of their students’ characteristics which influence their learning. Nevertheless, the advances in the field of education and findings of researches in psychology, neurolinguistics and other areas have offered even more effective tools to the teacher and enabled him or her to get to know his or her students better.

Heacox /11/, for example, suggests that teachers compile a student profile with records of their achievements, competition results, projects they were involved in, intelligence test results, external examination results, and similar. On the basis of such portfolio teacher is then able to compare past and current work and detect any changes in attitude, motivation and performance and consequently investigate the causes for eventual deviations. Furthermore, she proposes that students fill in a questionnaire about their free time interests which latter on helps the teacher to plan topics and activities which best suit a particular type of students. A good idea is also to involve the parents who offer their view of interests and learning preferences for their children.

As far as learning styles are concerned, there have been numerous studies carried out to detect the appropriate classification. Ginnis /12/ enumerates seven different lines of thought. Each approaches the learning style issue from a different entry point. They may concentrate upon the way information is gathered and processed, on the personality traits, on sensory predominance, environmental factors, social interaction patterns, intelligence, or even “brain landscape” (that is, which brain hemisphere is the predominant one). Some experts, as for example Rita Dunn, go so far as to claim that learning styles may not be classified in predominant groups at all, as they are as individual and specific as a finger print or a signature.

Students with special needs and learning difficulties and talented students with above-average learning capacities

In line with the principles of integration, many children with learning difficulties, as well as special needs children, are included in mixed-ability classes. Children with special needs have an individualized educational program and apart from lessons in which additional practice is offered, some of them may be entitled to individual lessons with a specialized teacher to help him or her overcome learning difficulties.

An exhaustive analysis of an extremely broad issue of learning difficulties is beyond the scope of this article, nevertheless, children with specific learning difficulties such as dyslexia, dyscalculia, dysgraphia, dyspraxia, and ADHD (Attention Deficit Hyperactivity Disorder) have become a very normal part of everyday classroom environment and are therefore subject to everyday differentiating procedure /13/.

According to the law regulating the inclusion of special needs children (Zakon o usmerjanju otrok s posebnimi potrebami) in the school program, they may be classified in the following categories: children with developmental difficulties, blind and visually impaired children, deaf and hearing impaired children, children with speech and language disorders, children with physical disabilities, children with medical issues, children with learning difficulties, children with emotional and behaviour issues. Each child demands an individual approach and systematic differentiation with a range of possible tasks suitable for particular needs. Besides legislatively determined guidelines of adjusting the organization of classes, the assessment, progress, tempo and additional help,
special needs children pose additional challenge to teachers who strive to integrate them in the classroom interaction. Regardless the impairment, however, I believe it is essential not to pose cognitive limitations and, without neglecting or underestimating individual impairment, encourage children to tackle also complex tasks and strive towards progress and personal growth. Furthermore, within their limitations, children should accept their responsibility for learning process and execute their tasks accordingly.

Another challenge is posed by gifted, above-average children. Firstly, their specific talents are sometimes hard to identify, since tests cannot measure the child’s giftedness in all the areas. Most standardized tests approximately estimate the level of intelligence and the effectiveness of the thinking process in general. IQ tests, for example, often concentrate on memory and analytical skills, which are not the defining factors for a child’s being gifted or talented. When a particular talent is detected, individualized educational program for this child is outlined, which specifies the methodology which is to be adopted for each particular student. Nevertheless, even when above average capacity has not yet been proven by tests, it is a good idea to offer additional challenges to high-achievers, make them ponder upon complex, problem solving tasks which demand divergent thinking, which leads to abstract and generalized conclusions /14/. Heacox /15/ suggests that in the process of differentiating tasks and topics, special emphasis should be put on replacing basic topics with more abstract and complex ones, linking the acquired knowledge in an innovative way with the pre-existing knowledge, organize the work in an interdisciplinary way, modify the tempo to enable talented children to devise creative products, and provide expert feedback.

Even a talented pupil, however, may in my experience, sometimes appear less successful in terms of grades and school work in general. Sometimes pupils of above average intelligence suffer from low self-esteem, are hard to motivate for topics out of their range of interest and occasionally show little interest in team work. In some cases they may become quite restless and, if bored, prone to create disciplinary problems.

Nevertheless their general characteristics such as the ability to store a large amount of information in their memory, the ability to grasp the idea quickly, their versatile range of interests, rich vocabulary, original and critical thinking, capacity of drawing abstract conclusions, understanding the consequences, and perseverance in accomplishing goals make them too valuable to be lost in the average mass of homogeneity.

How to differentiate?
A key to successful differentiation is knowing the students and their learning needs. In order to enhance students’ learning potential, it has to be determined where on the learning continuum their knowledge may be placed and adapt the school-work in such a way as to respond to their needs. By adopting a popular strategy called KWL (Know, Want to know, Learned) /16/ teachers get the information about what the students know, what they want to know and what they learned about a particular topic. In this way teachers detect the amount of already acquired knowledge and students’ motivation and curiosity to investigate the topic further.

When deciding upon the appropriate method the teacher should concentrate on detecting the crucial issues of each unit, which is, in simplified terms, the core of the unit and reflects the fundamental understanding of the syllabus. When crucial questions have been detected, differentiation according to different levels of difficulty, method, etc. may begin.

It must be borne in mind that there are numerous models upon which teaching methodology may be based, though I find the combination of Bloom’s taxonomy and Gardner’s idea of multiple intelligences as proposed by Ginnis /17/ and Heacox /18/ particularly useful an applicable when devising differentiated tasks.

According to multiple intelligence theory, conceived by Howard Gardner, there are eight different ways to demonstrate intellectual ability. They are classified as Visual/Spatial Intelligence, Verbal/Linguistic Intelligence, Logical/Mathematical Intelligence, Bodily/Kinesthetic Intelligence, Musical/Rhythmic Intelligence, Interpersonal Intelligence, Intrapersonal Intelligence and Research/Scientific Intelligence. Children learn faster and better if teach-
ers ground their differentiation on students’ strengths, which could be linked to particular type of intelligence. Nevertheless, through time, successful differentiation would also presuppose developing learning strategies which are not predominant and therefore do not represent students’ strengths but rather weak points. By employing also less frequently used learning strategies, students consequently broaden their personal specter of favourite learning strategies and become more successful learners.

In order to classify the tasks according to the level of difficulty, Bloom’s six hierarchically organised cognitive levels of complexity provide a valuable framework. On the base of the pyramid there is remembering, followed by understanding, applying, analyzing, evaluating and creating. By combining the two models, the teacher, while he is differentiating the tasks, moves along two lines, vertical (Gardner) and horizontal (Bloom). On the one hand he or she chooses activities which suit different learning types and on the other he or she adjusts the appropriate cognitive complexity of the task. The intersection of both lines thus determines the type and the difficulty of the task simultaneously.

Educational legislation
It has already been noted that large heterogeneous classes make effective differentiation and individualization very difficult. In order to overcome this problem there are some ways of forming student groups during their final years of primary education proposed by legislation. In 1996 a law, regulating primary school education has been passed (Zakon o osnovni šoli) and a new proposal of the legislation reform is under way (Zakon o spremembah in dopolnitvah zakona o osnovni šoli). Currently there is an ongoing public debate among members of the public initiative movement What kind of school do we want? (Kakšna šolo hočemo), expert compilers of The White Paper on Education in the Republic of Slovenia (Bela knjiga o vzgoji in izobraževanju v republiki Sloveniji) and the rest of the interested members of the public. The public debate on the conceptual changes of the Slovenian educational system concludes in May 2011.

The present form the educational legislation (Zakon o osnovni šoli) presupposes the following ways of enabling students’ differentiation:

**Internal differentiation** is carried out throughout the schooling (from the 1st till the 9th grade) and maintains natural, that is heterogeneous, mixed ability classes, striving however to fulfill each individual’s wishes, potentials and needs by adopting different patterns of interaction (choral response, group work, pair work, individual work), learning goals and objectives, technology and methods, compensating at the same time learning difficulties by providing individual support to those who need it /19/.

**Flexible differentiation** is not obligatory, but it is possible in the 4th, 5th, 6th, and 7th class, in mathematics, mother tongue and foreign language classes. It is a combination of heterogeneous and homogeneous classes. The majority of lessons is carried out in a heterogeneous class, whereas in not more than one quarter of the lessons (that is approximately once per week) the pupils form groups according to abilities and work in homogeneous classes. Students choose among three levels of difficulty and with the help of teachers and parents decide upon the most suitable group for them. If the choice latter on proves to be inappropriate, students may change the difficulty level anytime during the school year. The aim of the flexible differentiation is to offer pupils additional practice or provide more complex tasks to deepen the understanding and application of the subject matter.

**Obligatory differentiation** must be carried out in the 8th and 9th grade. There are different possibilities. Firstly, students may be grouped in various, numerously smaller, yet still heterogeneous groups. There is also a possibility of tandem teaching, in which case two teachers constantly or occasionally work simultaneously in the classroom. Students may also be permanently (that is for the entire school year, for all lessons in mathematics, mother tongue and foreign language) divided in homogeneous mixed-ability groups, where they can choose among three levels of difficulty. This is so called external differentiation, setting model /20/. Again, after consulting with the teacher and with parents’ approval, students may, in the course of the school year, switch to another level if they find the level the chosen group unsuitable. Legislation also enables the combination of the three above mentioned forms of differentiation.
Each school is autonomous in the choice of the differentiating model, the decision, however, though proposed by the principle, should be formed on the basis of the expert opinion of the teachers of a particular subject in dialogue with parents’ committee and confirmed by the school board for each individual school year. The decision is based upon the experience from the previous year model and acknowledgement of the fulfillment of the learning objectives. The national education institute of the Republic of Slovenia has been monitoring the effects of differentiation and has come to the following conclusions: firstly, the number of children and parents who are satisfied with the chosen difficulty group in the form of external differentiation is relatively high. Secondly, parents are well aware of the flexibility in group formation and the possibility of moving from one level to another. Thirdly, teachers must be aware of the necessity to reach the goals determined in the syllabus and meet the standards of knowledge. The teacher’s personal qualities, such as empathy, patience and perseverance should be especially evident with groups with pupils who struggle to achieve minimal standards of knowledge /21/.

Primary school Louis Adamič Grosuplje has carried out the analysis of the existing differentiation model in foreign language classes, that is flexible differentiation in the 7th grade and streamed-class differentiation (3 levels of difficulty) in the 8th and 9th grade. The conclusions were as follows:

- In case of flexible differentiation, one quarter of the lessons in the 7th grade dedicated to revision and additional practice, could be more flexible in the sense of offering the possibility to group the students not as much on the basis of their general ability as on the current need of specific work (e.g. before tests, projects, field work tasks etc.), which seems unlikely in the present rigid timetable schooling system.

- Tandem teaching, ignored in the present proposal of the legislative changes (Zakon o spremembah in dopolnitvah zakona o osnovni šoli), and not allowed in the 7th grade in combination with flexible differentiation, would, in our opinion, offer possibilities of addressing individual students’ needs effectively.

- Streamed classes show good results in the 1st and 3rd level of difficulty since they enable greater individualization of the learning process by paying due attention to students’ learning capacities, interests and needs as well as enabling suitable tempo adjustments. We believe that a great deal of sensitivity has been present on the part of the teachers with the aim to prevent the phenomenon of stigmatisation of students in the 1st level of difficulty. We believe we have been successful by providing extra support and encouragement to promote students’ self esteem and incite their belief to overcome learning difficulties. On the other hand, learners in the 3rd level have been faced with more demanding challenges, especially in the student exchange program, with the possibility to deepen, expand and integrate their knowledge.

- Nevertheless, it is sensed that sometimes the choice of the level is not a realistic reflection of students’ needs and abilities. Rather, it echoes parents’ ambitions and projections of their wishes. Consequently it reveals parents’ persuasion of choosing a higher level of difficulty, with which the students can sometimes hardly cope. Furthermore, peer pressure occasionally forces a pupil to base the choice of level on the level which the majority of his or her friends have selected instead of thinking about one’s own abilities.

- As one negative aspect of streamed classes it may be noted that children belonging to the 1st difficulty level have little opportunity of peer learning (weaker students acquiring knowledge from successful students during the lesson), since the only truly apt language model is the teacher.

- Another negative aspect is linked to the 2nd level of difficulty which gathers average ability students. They are usually more numerous groups with extremely versatile range of students, often characterized by low motivation, prone to creating disciplinary problems.

- By assessing students knowledge in the form of uniform test for all three levels of difficulty, we believe the requirement to enable students always to reach beyond their current capabilities is fulfilled.

- Our proposal for the future implementation of differentiation would be to adopt the combination of two forms of differentiation, that is a combination of heterogeneous and homogene-
ous classes. In that way we would form a homogeneous group of students belonging to the 3rd level of difficulty and divide the rest of the schooling population in less numerous, yet heterogeneous classes, enabling thus challenge to above average students with greater learning abilities and providing at the same time support and peer learning to weaker students.

Though division in groups (either heterogeneous or homogeneous) decreases the number of pupils, it is still important that individualization is carried out effectively. In order not to ignore socially delicate issues of inclusion or exclusion, implicitly labelling students as “capable” or “less capable”, it is essential that the formation of learning groups (in the general context of predominately homogeneous or heterogeneous classes), either in group work formations in the classroom or during the assignment of tasks for subsequent activities in the form of home projects, is not rigid and uniform. It fact, group forming should be flexible enough so as to enable students to tackle more or less demanding issues in various phases of their learning process, according to their strong points, interests or inspiration without any previously formed conclusions or labels.

Detecting pupils’ characteristics on which to base individualization takes time and effort. It must also be noted that children are a combination of strengths and weaknesses, many having a particular impairment on the one hand and a talent or extremely strong area on the other. In other words, a child with special needs may be a high achiever in another area and a talented child may lack appropriate social skills. A proper choice of strategies to balance between developing the capacities and overcoming difficulties poses yet another challenge to the teacher.

Even though differentiation is not a new concept, it is however hard to implement effective individualization in the classroom with all its limitations. It demands from the teacher a great deal of involvement in preparatory phase, and flexibility and originality in the phase of its execution and final assessment. Therefore it is best to approach it gradually, founding it on the existing teaching practice and expand the tasks and methods step by step, getting each time closer to individual learner’s needs and potentials.

Notes

/3/ Ibidem
/7/ Ibidem
/8/ Ibidem
/10/ Ibidem
/14/ Ibidem
/17/ Ibidem
/20/ Ibidem
Literature


6. Pravilnik o izvajanju diferenciacije pri pouku v osnovni šoli (Ur. l. RS št. 63, 16. 6. 2006).


10. Zakon o spremembah in dopolnitvah zakona o osnovni šoli. Ljubljana 2011

11. Zakon o usmerjanju otrok s posebnimi potrebam. Ljubljana 1996