

KEY MOMENTS OF DIFFERENTIATE APPROACH IN TEACHING MATH

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Abstract: This work is about the focus of differentiation, which must be aware of all the ways students are different from one another, and to plan to teach in ways that capitalize on those differences.

Key words: level, type, education, program, students, concept, way, educational process, math, activities, content, learner, different.

We are going to discuss the major thing about interesting technology of teaching math called differentiation approach. Many sources of math claimed two type of differentiation: level (internal) and profile.

Internal differentiation means that education of the same class of the same program and book act in different level of understanding material of a book. The main thing in it is the step of mandatory training (basic level), which is given by patterns of typical tasks. In the base of this level is forming higher level of mastering material or so-called level of possibilities.

Internal differentiation expects every student in a class must hear learning material of a program in whole, see patterns of educational math activity. In this case one learner receive and learn educational material, which offered by teacher or given in a book, others master from it only provided for by mandatory results as minimum. Every single student has chance to choose level of mandatory and reporting in results of his educational work in every noticed theme (chapter), possible in whole course. The obligation of teacher is providing basic action of students to higher level of knowledge and skills.

Profile differentiation is a differentiation of content. It assumes to teach different groups of students with several programs, which are different with their deep and wide content of material. Differentiation of this type is creating among courses of choosing profile education. In this way one student choose common cultural level of learning and mandatory educational material, others – applying, another one – creative, which suitable with their interests, abilities, propensity with a thing about future professional activity.

Experience of many pedagogics show that qualified organization of differentiate approach in teaching math require huge periodically outlay in planning and creating education process. Thus, it is very important for teacher to learn already existing experience.

So what about the process of differentiate teaching, what does it mean in common? It does not mean creating an individualized lesson for each student. It means planning a variety of ways for students to interact with new concepts. It also means controlling speech and using word walls, visuals, and small-group learning activities to make input more comprehensible for different learners.

For example, a mathematics teacher who has non-special base (for example humanitar specialty) at two or three levels of proficiency may use the same teaching strategies for all students, but differentiate instruction by offering support that is tailored to students' levels of their proficiency with a given strategy. When required to record their thinking, all students are encouraged and supported to draw pictures or write sentences.

Other ways the teacher can differentiate instruction for this kind of learners include: accompanying oral presentations with visuals to help students listen with greater comprehension; giving them note-taking outlines or sentence starters to help them capture key concepts in a challenging textbook; and providing hands-on activities to help students “see”, “determine” and actively engage in learning mathematics concepts and procedures. In this way we recommend to begin with “Brain storm”, “Cluster” and

“Conceptual table”, which help to improve their creative thinking abilities. When the teacher presents the big picture or main idea first, as a frame for the information that will follow, students are better prepared to concentrate on what is most important. It is important that direct instruction for them be delivered in small chunks, allowing them time to process the information. Connecting instruction to students’ experiences and offering varied forms of support heighten all students’ interest and personalizes instruction in a way that motivates students.

Some students learn better in small groups (or in pair) than they do individually. Small group talk gives them a chance for their own abilities repetition and practice, so differentiation also means planning for collaborative and cooperative learning activities. The focus of differentiation is to be aware of all the ways students are different from one another, and to plan to teach in ways that capitalize on those differences. In small group work we offer to use such methods like “Problem situation”, “Fish bone”, “Three-part diary”, “Map of perception” etc., which effective to produce their skills in a best way.

To sum up all considered, we are sure that every student has unique ability, so the main obligation of each teacher is supporting every student and providing suitable condition in a way of learning math.

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