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# Differentiated Instruction Lesson Planning with ICT Interventions

Aniket Srivastava<sup>1</sup>, Dr Parul Verma<sup>2</sup>, Dr Atulpati Tripathi<sup>3</sup>

<sup>1</sup>Reserach Scholar, <sup>2</sup>Asst professor, Amity University Lucknow

<sup>3</sup>Co-Founder and CEO A7 Innovations New Delhi

**Abstract:** *Modern classroom settings are greater diverse than ever earlier than. Pre-service trainer applicants must analyze the principles of differentiation and how to apply them to lesson coaching. Lesson planning is multi-faceted and this paper gives a fundamental tool to sell with digital pedagogy based differentiated lesson planning to the novice instructor. Those ideas are provided in a concise, foundational chart aligning the additives with Blooms Cognitive Taxonomy, classroom sports, assessment, scoring guides, and student grouping. Information of those aligned ideas sets the muse to facilitate differentiated lesson planning.*

**Keywords:** *ICT, Digital, pedagogy & Cognitive Taxonomy*

## I. INTRODUCTION

Differentiated guidance and evaluation (also referred to as differentiated getting to know or, in education, in reality, differentiation) is a framework or philosophy for powerful teaching that includes offering different students with distinctive avenues to studying (frequently inside the equal classroom) in phrases of: acquiring content; processing, constructing, or making feel of thoughts; and growing teaching substances and assessment measures so that all college students within a lecture room can study correctly, no matter differences in capacity. College students vary in lifestyle, socioeconomic reput, language, gender, motivation, capacity/incapacity, private pursuits and greater, and teachers should be privy to these varieties as they plan curriculum by way of considering varied learning needs, teachers can develop personalized practice so that each one youngsters within the school room can examine correctly. Differentiated school rooms have also been defined as ones that reply to student variety in readiness stages, hobbies and mastering profiles. it's miles a lecture room that consists of all college students and can be a hit. To do this, teacher units unique expectancies for assignment crowning glory for students primarily based upon their individual wishes.

Differentiated preparation, in step with Carol Ann Tomlinson (as referred to by using Ellis, Gable, Greg, & Rock, 2008, p. 32), is the process of "making sure that what a scholar learns, how she or he learns it, and how the scholar demonstrates what he or she has discovered is a in shape for that scholar's readiness level, pastimes, and preferred mode of learning." teachers can differentiate through 4 methods: 1) through content, 2) system, 3) product, and 4) getting to know surroundings primarily based on the character learner. Differentiation stems from ideals about variations amongst newcomers, how they research, mastering options, and character hobbies (Anderson, 2007). Therefore, differentiation is an prepared, yet bendy manner of proactively adjusting teaching and studying methods to house every infant's gaining knowledge of wishes and preferences to reap maximum increase as a learner. To understand how our students learn and what they recognize, pre-assessment and ongoing assessment is critical. This affords comments for each instructor and student, with the ultimate aim of improving pupil mastering.

Delivery of guidance in the past often followed a "one size suits all" approach. In assessment, differentiation is personally pupil centered, with a focus on suitable educational and evaluation equipment which are fair, bendy, difficult, and have interaction students inside the curriculum in meaningful methods.

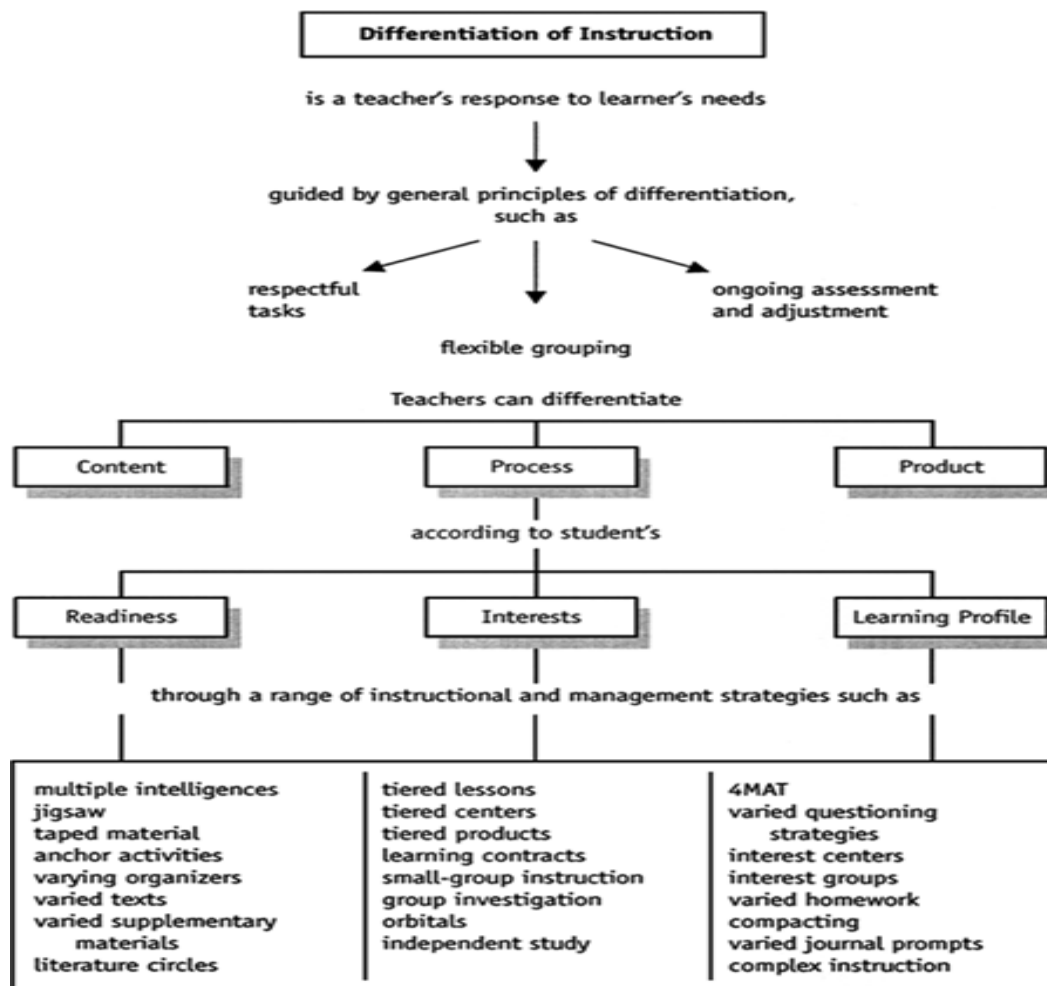


Image Source: Leadership for Differentiating Schools & Classrooms by Carol Ann Tomlinson and Susan Demirsky Allan

#### A. Lesson Planning in Differentiated Instruction

There are some (properly, maybe more than a few) primary factors to differentiation so one can make the journey smoother for you and your college students. do not forget, you are likely the usage of diverse aspects of differentiation proper now in your lecture rooms. However are you being express approximately the ways in which you differentiate? In others phrases:

- 1) Are you aware of the efforts you are making to meet the wishes of all your college students?
- 2) Do you preserve tune of the methods you deal with individual learning patterns and options?
- 3) Do you set up lecture rooms and shape lessons to growth pupil motivation?
- 4) on every occasion possible, do you offer college students with options and selections regarding how they are going to examine and how they're going to reveal their mastering?
- 5) Do you range the methods in which you verify student mastering?
- 6) Do you operate cooperative gaining knowledge of and grouping strategies to increase pupil participation?

Odds are that you already incorporate a few or most of those factors of differentiation for your lecture rooms. As you venture into the world of differentiated preparation, study what you are already doing. Then do not forget the ideas and techniques provided on this e-book. Pick and use those that supplement the efforts you already make to fulfill the various desires of your college students. Understand that differentiation shouldn't be something that complicates your day or existence. Even though extra paintings and effort are required up front, the payoff comes later inside the lesson of observe or maybe inside the faculty yr. The payoff comes whilst college students obtain greater in your school rooms, end up extra worried in study room discussions, smile more during their faculty days, and, yes, even score higher on diverse checks. Inside the Differentiated study room: Responding to the wishes of All freshmen, Carol Ann Tomlinson gives the following framework for supporting teachers differentiate inside the study room.

### B. Content Process And Product

Differentiation generally includes one or greater of the subsequent regions:

#### 1) Content (what college students analyze)

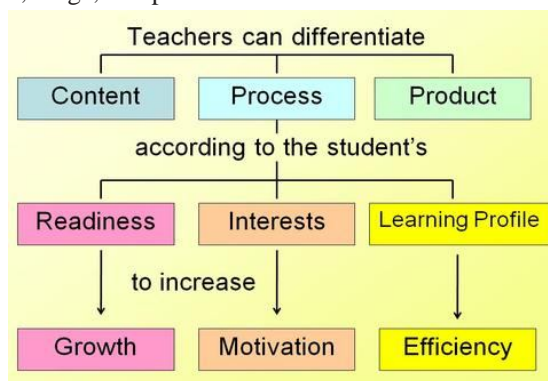
- Includes curriculum topics, principles, or topics
- Reflects nation or countrywide standards
- Offers vital records and capabilities
- Differentiates through pre-assessing pupil talents and understandings, then matching novices with appropriate activities
- Presents college students with alternatives with a view to add intensity to mastering
- Gives students with extra resources that fit their stages of information

#### 2) Process (how college students research)

- Refers to how college students make feel or understand the information, ideas, and skills being studied
- Displays student learning styles and possibilities
- Varies the studying procedure depending upon how college students examine

#### 3) Product (the give up result of student learning)

- Tends to be tangible: reviews, tests, brochures, speeches, skits
- Reflects student information
- Differentiates through supplying task, range, and preference



ImageSource:<http://differentiatedinstruction.wiki.inghamisd.org/>

Carol Ann Tomlinson offers the learning surroundings as a fourth way to distinguish. She suggests that the getting to know surroundings is the “weather” of a lecture room and consists of the lecture room’s operation and tone. Class guidelines, fixtures association, lighting, techniques, and strategies all affect the study room’s temper.

### C. ICT Intervention

Globally isn't the same schooling as the one wherein we lived simply ten years inside the past. To be truly prepared for the 21st century, our college students need colleges that replicate the ones variations. These days students are digital and visual novices who thrive on collaboration through the use of computers, video device, audio device, virtual cameras, and phones. If we reflect on consideration on differentiating the look at room content, product, approach, and analyzing surroundings with the virtual learner in thoughts, the scholars becomes extra actively concerned of their Learning. Multimedia packages combine video, sound, text, animation, and images which deal with the severe getting to know types of our university college students. Frank and Catherine Townsend perceive six advantages of the usage of multimedia based instructions to fulfill getting to know desires:

- 1) Multimedia reaches a variety of senses. This permits the person to tailor or awareness their mastering to the man or woman fashion, whether or not or no longer it's far verbal, auditory, or physical.
- 2) Multimedia tasks validate self-expression by way of permitting students to decide how they need to create a undertaking or assimilate data.
- 3) Generation offers a sense of ownership to the consumer. The scholars clearly create evidence of What they've found out, which can later become part of a portfolio.
- 4) Multimedia creates an active in desire to passive surroundings for analyzing, which requires student participation and makes college students count on.



- 5) Era fosters communique among university college students as well as between pupil and trainer. They speak the content cloth, organization of content material fabric, and the way to gift it to others (subjects which won't have in any other case been mentioned).
- 6) Using technology and multimedia makes experience because it is already constructed into the regular life of all university students. (Townsend, 1992)

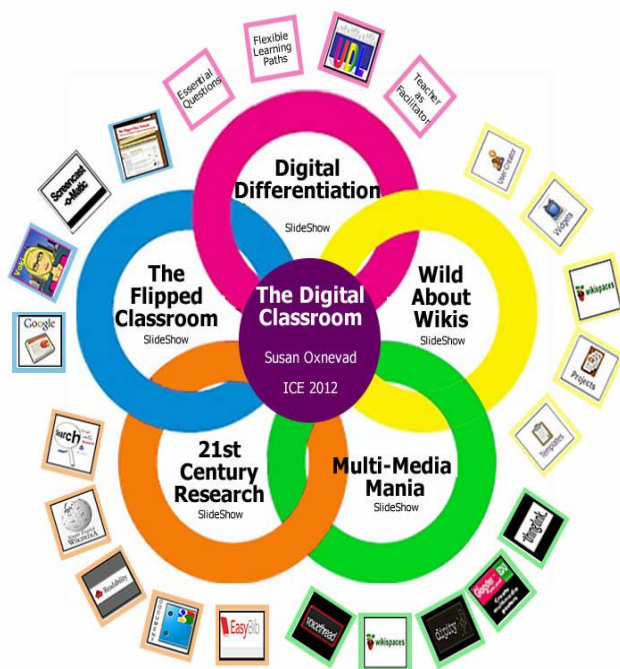


Image Source: Susan thinglink.com

The tables on the following pages replicate the use of multimedia to sell differentiation in the school room. The 3 awareness areas are the interactivity on the net, hand-held technologies, and software. every provides extremely good sources to guide picks in the classroom. The web offers each component of interactivity for each studying style. pics, pictures, and The tables on the subsequent pages reflect the use of multimedia to promote differentiation in the study room. The three cognizance areas are the interactivity at the net, hand held technology, and software program. Every teaching resources to manual picks in the school room. The web offers every factor of interactivity for every studying style. Pics, photographs, and video resource the visual learner, while interactive tools assist the kinesthetic learner. The auditory learner benefits from video and audio and the textual learner reveals stores for analyzing and writing which may be extra motivating than the paper/pencil layout of the past. Handhelds offer an array of makes use of. College students can use them for organization, writing, file studying, document sharing, facts collection, visualizations, concept maps, calculating, assessing, and idea mapping. The ones devices are powerful in lively learning conditions, wherein students ask questions, acquire information and look at statistics and percent outcomes. Most significantly, handhelds facilitate a collaborative mastering environment. College students can percentage a record by means of beaming to every other, or they may upload or down load files to or from the web. Putting a palm-sized pc within the pupil's hand will allow educators to unharness gaining knowledge of opportunities afforded through this small, but modern technology.

## II. CONCLUSION

Teachers are regularly stuck up within the catch 22 situation of weighing ICT assited content material region expectancies against the want to encourage students to come to be confident, curious learners. Differentiated training with ICT tools is a method that addresses student needs and alternatives even as additionally respecting the excessive demands of responsibility in today's global of standards and standardized trying out. Differentiation embraces a few of the tactics, strategies, and strategies supported through quality practice and studies. At the same time as not restricted to a single content vicinity or a specific grade level, the differentiated method to lecture room guidance is one which could be carried out to any content region at any grade level. Instructors who differentiate are teachers who keep in mind student mastering alternatives, skills, patterns, and pursuits. At the excessive school or college level, instructors can enforce a spread of techniques to meet the getting to know attributes and characteristics of the various scholar populace in their classrooms.



## REFERENCES

- [1] Tomlinson, Carol (2001). How to Differentiate Instruction in Mixed-Ability Differentiated Instructions provides access for all students to the general education curriculum. The method of assessment may look different for each child, however the skill or concepts taught is the same. Classrooms (2 ed.). Alexandria, VA: Association for Supervision and Curriculum Development.
- [2] Tomlinson, Carol Ann (1999). "Mapping a Route Toward a Differentiated Instruction". Educational Leadership. 57 (1): 12.
- [3] Lawrence-Brown, D (2004). "Differentiated Instruction: Inclusive Strategies For Standards-Based Learning That Benefit The Whole Class". American Secondary Education. 32 (3): 34–62.
- [4] Knotts, J. Dusteen Ph.D. (2016) "Creating Order Out of the Chaos of Differentiated Lesson Planning for the Novice Teacher Candidate," *Kentucky Teacher Education Journal: The Journal of the Teacher Education Division of the Kentucky Council for Exceptional Children*: Vol. 3 : Iss. 1 , Article 4.
- [5] Tomlinson, Carol Ann. The Differentiated Classroom: Responding to the Needs of All Learners. Alexandria, VA: ASCD, 1999.
- [6] Heacox, Diane. Differentiating Instruction in the Regular Classroom: How to Reach and Teach All Learners, Grade 3-12. Minneapolis: Free Spirit, 2002, pages 10-11.
- [7] Tomlinson, Carol Ann. Fulfilling the Promise of the Differentiated Classroom: Strategies and Tools for Responsive Teaching. Alexandria, VA: ASCD, pages 4-6.
- [8] Campbell, Bruce. "Using Tiered Activities to Differentiate." 2nd Annual SDE National Conference on
- [9] Differentiated Instruction: Theory Into Practice. Las Vegas, NV. 18 July 04-21 July 04. Heacox, Diane. Differentiation Instruction in the Regular Classroom: How to Reach and Teach All Learners, Grades 3-12. Minneapolis, MN: Free Spirit, 2002, pages 91-96.
- [10] "Tiered Instruction." PowerPoint Presentation. Montgomery County Public Schools: Rockville, MD.
- [11] Wormeli, Rick. Fair Isn't Always Equal: Assessing & Grading in the Differentiated Classroom. Portland, ME: Stenhouse, 2006, pages 56-60.



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