

# Optimizing Differentiated Instruction as an Approach to Multiple Intelligence: Training Scheme

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## ABSTRACT

The research assessed the status of differentiated instruction and its effect to the academic performance of the intermediate learners at North District, Mandaue City, Cebu during school year 2018-2019 as basis for an instructional model. The researcher made use of the quantitative of research with the use of the questionnaire as the main tool in the gathering of important data. Quantitative method of research is the method of research in which data can be quantified from the responses of the questionnaire which will then be presented, analyzed and interpreted. The following were the pertinent results of the study: Majority of the respondents were 20-40 years of age, female, married with units in Masteral Degree, 11 – 15 years in terms of the number of years in the service and attended 6 – 10 times number of trainings, seminars and workshops and visual when it comes to their multiple intelligence. In terms of the teachers application of the differentiated instruction, the following were the results: Think pair is to a Greater Extent; Task cards to a Greater Extent; and Learning stations to a Greater Extent. The academic performance of the learners revealed that: English is Very Satisfactory; Math is Very Satisfactory and Science is Very Satisfactory. There is significant relationship between academic performance and the extent of the application of the differentiated instruction. The following are the challenges and barriers in the application of the use of differentiated instruction: lack of training, lack of funding, need for support and the need for motivation. Instructional plan model can be crafted. On the basis of the findings, a conclusion is drawn that the application of the use of differentiated instruction is to a Greater Extent in areas of English, Math and Science. The academic performance of the learners is Very Satisfactory in English, Math and Science. There is significant relationship between academic performance and the extent of the application of the differentiated instruction.

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**KEYWORDS:** *Development Education, differentiated instruction, design, multiple intelligence, academic performance, think pair, task cards, learning instructions, geography*

## THE PROBLEM AND ITS RESEARCH DESIGN INTRODUCTION

### Rationale of the Study

Teachers are endowed with such a significant number of obligations that range from the exceptionally easy to the most unpredictable and testing occupations. Teachers being the central figure in instruction must be capable and proficient so as to give the learning they could provide for their understudies. Viable educating is worried about the understudies as an individual and with the general improvement. They are viewed as the light in the study hall. They assume a significant job in propelling the student.

At its most essential level, separating guidance means shaking up what goes on in the homeroom with the goal that understudies have various alternatives for learning, comprehending thoughts, and communicating what they realize. At the end of the day, a separated study hall gives various roads to obtaining content, to handling or comprehending thoughts, and to creating items with the goal that every understudy can adapt successfully (Tomlison, 2016).

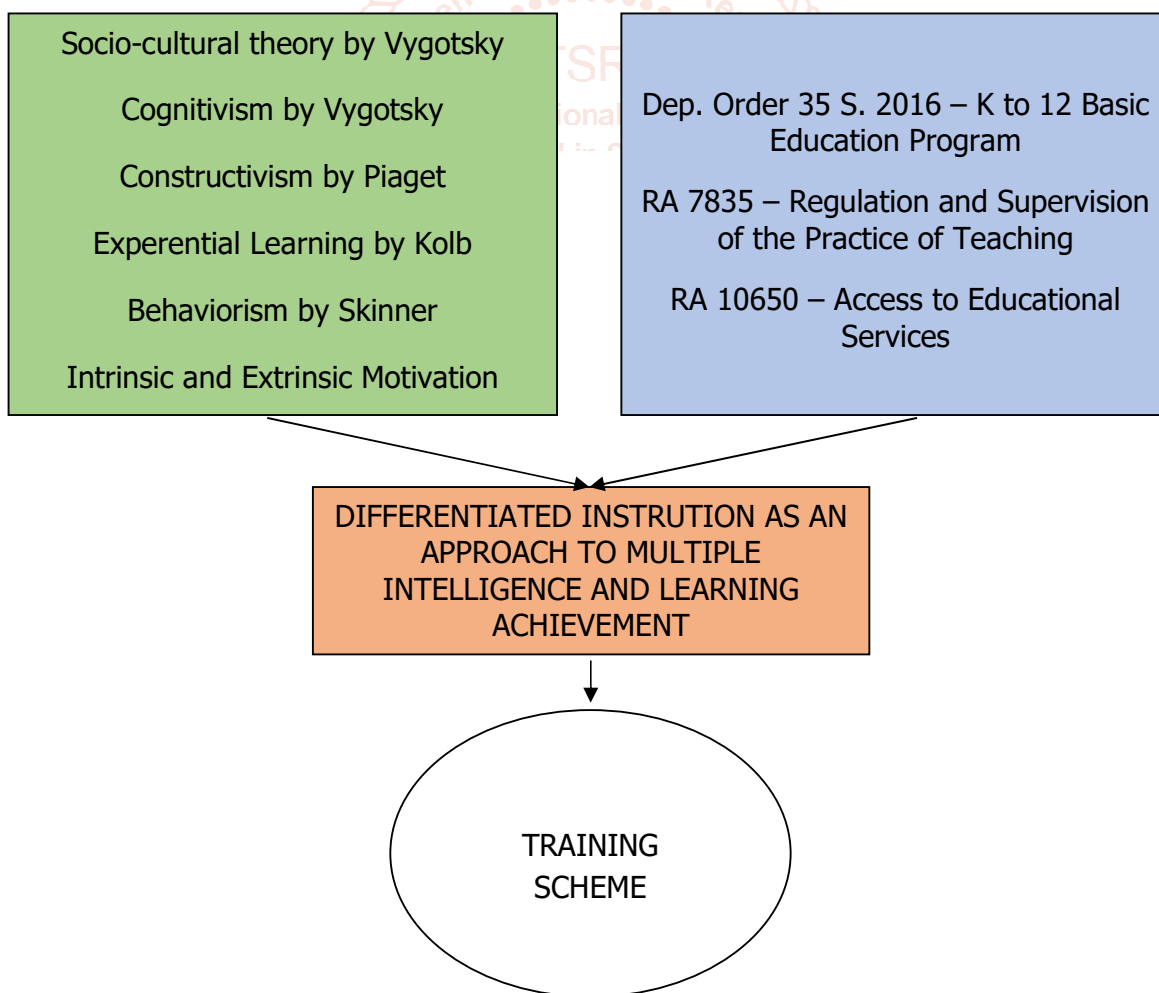
Extraordinary accentuation has been laid on quality instructing by numerous teachers. Similarly, there is a need of expounding the nature and its level, proficient improvement suggestion as a framework, and furthermore the help of guardians and organization. As of late, look into additionally features one of the key highlights of value showing, for example, understudy focused study halls, which plans to profit all understudies learning all together that they could get great performance (Lyles, 2016).

The researcher ran over the study with regards to the necessities of these learners in concocting proper procedures that encourage understanding among the learners to upgrade scholastic performance. Instructors experienced a great deal of difficulties and the need to beat these difficulties through a separated guidance in the improvement of the scholastic performance. They are given a genuine test to manage these separated instructional techniques so learners could profit by such endeavor.

### Theoretical Background

The study is tied down on Vygotsky's theory of sociocultural with key idea of Zone of Proximal Development and Scaffolding (ZPD) that clarifies, to accomplish a significant learning, it needs educator platform, cooperation with companions, and most exceptionally, marginally troublesome assignment that past the solace level of the understudies. This given assignment should be possible through the assistance of somebody who is increasingly talented, which is the instructor (Hurlock, 2016).

Behaviorism accepts a student that is basically inactive, and will be molded through positive or negative support. Learning is in this manner characterized as an adjustment in conduct. Skinner accepted that conduct is a component of its results. The conduct ought not to be rehashed if negative component of its results. The conduct ought not to be rehashed if negative criticism is given. Giving quick criticism, regardless of whether positive or negative, should empower your learners to carry on with a specific goal in mind (Tidbit, 2016).



**Figure 1 Schematic Diagram of Theoretical Framework**

Cognitivism centers around what occurs in the mind, for example, thinking and critical thinking. New

information is based upon earlier information and learners need dynamic support so as to learn.

Changes in conduct are watched, yet just as a sign of what is occurring in the student's brain. It utilizes the allegory of the brain as a PC: data comes in, is handled, and learning happens (Hunt, 2016).

Constructivism is tied in with picking up being a functioning, contextualized procedure of building information as opposed to getting it. The student brings past encounters and social components to a present circumstance and every individual has an alternate elucidation and development of the learning procedure. Vygotsky theory is one of the establishments of constructivism. It states three significant topics: (1) Social association assumes an essential job during the time spent intellectual advancement; (2) The more proficient other (MKO); and (3) The Zone of Proximal Development (ZPD).

Piaget's model is a Constructivist model, implying that understudies ceaselessly expand upon past information, this is additionally called mapping. While concentrating the manner in which learners learn, Piaget concentrated on Assimilation and Accommodation. As indicated by Piaget, absorption is the procedure whereby learners get new data and encounters from their learning condition. Convenience is the pursue on impact from osmosis as the student adjusts their psychological perspectives due to the new data and information they have procured. From his examinations, Piaget reasoned that as understudies developed, so they had the option to comprehend and retain more learning. Piaget accepted learners were not ready to do certain undertakings until they were experienced enough to have the option to do as such. From his discoveries, Piaget made a four phase Model of Cognitive Development. The primary stage is the Sensory Motor Stage and endures generally from birth to two years of age. At this stage, the youngster starts to separate themselves from different articles in their condition as they build up their faculties. Likewise at this stage, the youngster is esteemed conscience driven, as they can't consider other's needs.

They may likewise perceive that they have to accomplish something, so as to make something different occur. The subsequent stage is the Pre-activity. The subsequent stage is the Pre-activities Stage and keeps going generally from two to seven years of age. During this stage the kid starts to create language and jargon. They at that point partner language with items and words. The youngster will for the most part group protests together due to one basic factor, for example, various shapes being classed together in light of the fact that they are a similar shading, regardless of their disparities fit as a fiddle. Piaget contends that kids in this stage are still

personality driven, yet are starting to decenter their perspective on the world and other individuals.

Piaget likewise contends that kids in this stage have a specific measure of animism as they accept that non-living articles, for example, vehicles, share indistinguishable emotions from them. Stage three is the Concrete Operations Stage and keeps going around from seven to eleven years of age. During this phase of advancement, the youngster turns out to be increasingly full grown and animism and egocentric perspective starts to vanish in the vast majority. Likewise during this stage, they start to see protests in various manners. In any case, during the Concrete Operations Stage, kids create 'reversibility', or that things continue as before after they have changed (Hurlock, 2016).

Experiential learning is about the student encountering things for themselves and gaining from them. Kolb proposed a four phase model known as the experiential learning cycle. It is a path by which individuals can comprehend their encounters and, therefore, adjust their conduct. It depends on the possibility that the more frequently a student thinks about an assignment, the more regularly they have the chance to change and refine their endeavors. The way toward learning can start at any stage and is nonstop, for example, there is no restriction to the quantity of cycles which can be made in a learning circumstance. This theory proposes that without reflection, individuals would keep on rehashing their mix-ups (Smith, 2015).

It is bolstered by inherent and outward inspiration. Characteristic inspiration originates from inside the understudy or from components inalienable in the assignment being performed. For instance, understudies who love to peruse are inherently spurred to peruse - there is something in particular about perusing that they appreciate and that makes them need to do it regardless of whether there is no reward for it. Extraneous inspiration originates from sources outside to the understudy and the undertaking. It can come through acclaim, acknowledgment, or an arrangement of remunerations (Hurlock, 2016).

As teachers help to advance inborn inspiration in the understudies as it energizes long lasting learning. It is hard to support natural inspiration constantly, in any case, particularly in light of the fact that they go through more than 900 hours of the year in the homeroom. A few techniques for advancing inherent inspiration incorporate stirring enthusiasm for the topic, looking after interest, utilizing an assortment of intriguing introduction modes and helping understudies set their very own objectives. Various

different systems, for example, understudy decision, showing the significance or convenience of substance and cooperation a likewise help support inborn inspiration.

DepEd Order No. 35 s. 2016 is the learning activity cell as a K to 12 essential training system school-based proceeding with expert advancement procedure for the improvement of educating and learning. Through the arrangement, the DepEd completely bolsters the proceeding with expert advancement of its encouraging staff dependent on the guideline of long lasting learning and DepEd's pledge to the improvement of teachers' potential pointed towards their accomplishment in the calling. This should be possible through the school-based LAC, which essentially works as an expert learning network for instructors that will enable them to improve practice and student accomplishment.

Republic Act No. 7835 which is a demonstration fortifying the guideline and supervision of the act of educating in the Philippines and endorsing a licensure assessment for teachers and for different purposes. The State perceives the fundamental job of teachers in country building and improvement through a mindful and educated populace. Towards this end, the State will guarantee and advance quality training by legitimate supervision and guideline of the licensure assessment and professionalization of the act of the showing calling ([www.chanrobles.com](http://www.chanrobles.com), 2019).

Republic Act No. 10650 is a demonstration extending access to instructive administrations by standardizing open separation learning in levels of tertiary training and appropriating reserves thereof. It is thus pronounced the arrangement of the State to grow and further democratize access to quality tertiary instruction through the advancement and utilization of open learning as a way of thinking of access to instructive administrations, and the utilization of separation training as a proper, productive and successful arrangement of conveying quality higher and specialized instructive administrations in the nation.

## THE PROBLEM

### Statement of the Problem

This research evaluated the status of differentiated instruction and its impact to the academic performance of the intermediate learners at North District, Mandaue City, Cebu during school year 2018-2019 as basis for an instructional training plan.

Specifically, this answered the following:

1. What is the applicable data as to master teachers'
  - 1.1. age and sex
  - 1.2. civil status;
  - 1.3. highest instructive attainment;

- 1.4. number of years in administration;
- 1.5. pertinent classes, trainings and workshops visited and
- 1.6. learners' multi intelligence results?
2. As seen by the master teachers, to what degree is the teacher application of the separated guidance crosswise over learning regions in English, Math, and Science with regard to the accompanying techniques:
  - 2.1. think – pair,
  - 2.2. task cards and
  - 2.3. learning station?
3. What is the scholarly accomplishment of the learners in English, 'Math and Science exposed to differentiated instruction?
4. Is there an association of the differentiated instruction strategies and academic performance of the learners?
5. What are the hindrances and difficulties identified with the use of differentiated instruction?
6. In light of the discoveries, what differentiated instructional training plan can be structured?

### Statement of Null Hypothesis

There is no relationship of the differentiated instruction methodologies and scholarly execution of the learners.

### Significance of the Study

Surveying the status of differentiated instruction and its impact to the scholarly exhibition of the intermediate learners at North District, Mandaue City, Cebu during school year 2018-2019 as reason for an instructional model that has significant effect to the accompanying:

**Learners.** They are additionally the beneficiaries of the said endeavor through the advantages managed by the separated guidance to their scholarly presentation.

**Teachers.** They are the immediate beneficiaries of the said endeavor in the improvement of the utilization of differentiated instruction in connection to scholastic performance for intermediate learners. Since they are the molders of the psyches of the understudy, they have to guarantee that these learners improve their scholarly performance.

**Parents.** They assume a significant job in managing their children in the upgrade of their scholastic performance.

**School Heads.** They assume a significant job in supporting the endeavor of these instructors in the utilization of differentiated instruction in connection to the scholastic performance of the intermediate learners at North District, Mandaue City, Cebu.

**Future Researchers.** This study will fill in as an additional reference in the event that they make looks into comparative in nature.

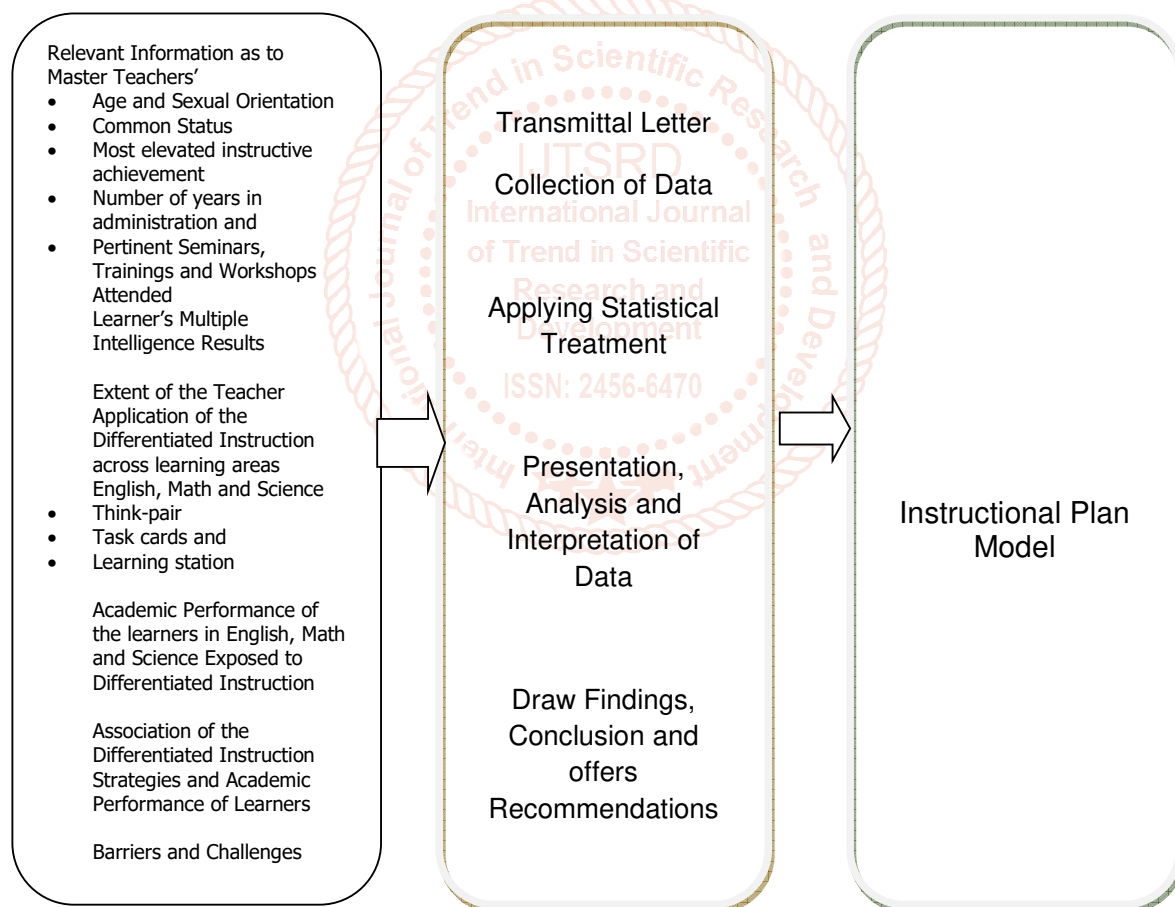
## RESEARCH METHODOLOGY

This area contained the research methodology which incorporated the technique utilized, the progression of the study, research condition, research respondents, research tools, information gathering procedures, statistical treatment of information, scoring methods and definition of terms.

### Research Design

The researcher utilized the quantitative type of research with use survey as the fundamental instrument in the social occasion of significant information. Quantitative strategy for research was the technique for research wherein information was evaluated from the responses of the questionnaire which was displayed, dissected, and deciphered.

## INPUTPROCESSOUTPUT



**Figure 2 Flow of the Study**

## Environment

Mandaue, authoritatively the City of Mandaue (Cebuano: Dakbayan sa Mandaue; Tagalog: Lungsod ng Mandaue) or just known as Mandaue City, is a first class profoundly urbanized city in the island area of Cebu in the district of Central Visayas, Philippines. As indicated by the 2015 evaluation, it has a populace of 362,654 individuals. Mandaue City is situated on the focal eastern waterfront area of Cebu.

North District, Division of Mandaue City has six schools, namely: 1. Basak Elementary School, 2. Labogon Elementary School, 3. Leonard Wood Elementary School, 4. Opao Elementary School, 5. Paknaan Elementary School, and 6. Umapad Elementary School. All the six schools are accessible to any means of transportation.

## The Progression of the Study

The center push of the study concentrated on evaluating the status of differentiated instruction and its impact to the scholarly performance of the intermediate learners at North District, Mandaue City, Cebu during school year 2018-2019 as reason for an instructional model. This is the thrust of the study.

The discourse was focused on the important data as to master teacher's age and sexual orientation, common status, most elevated instructive achievement, number of years in administration and relevant courses, trainings and workshops visited; decided the degree of the instructor use of the differentiated instruction crosswise over learning regions English, Math and Science. The procedure of the study was the engaging correlational strategy for research. The yield of the study was the instructional arrangement model that can be created.



the following: a) that school heads/teacher of North District and b) that they are happy to take interest in the said endeavor. Table 1 demonstrates the dispersion of respondents.

**Table 1 Distribution of Respondents**

Schools	Teachers		Master Teachers		Total	
	f	%	f	%	f	%
Basak	8	13.33	3	5.00	11	18.33
Labogon	7	11.67	2	3.33	9	15.00
Leonard	7	11.67	1	1.67	8	13.33
Opao	8	13.33	4	6.67	12	20.00
Paknaan	8	13.33	4	6.67	12	20.00
Umapad	7	11.67	1	1.67	8	13.33
<b>Total</b>	<b>45</b>	<b>75.00</b>	<b>15</b>	<b>25.00</b>	<b>60</b>	<b>100.00</b>

### Instrument

The tools of the study was the adjusted institutionalized questionnaire taken from Cox, J (2019). Encouraging systems utilizing errand cards. Recovered from <https://www.teachhub.com/instructing-procedures-utilizing-task-cards>. The questionnaire had two (2) sections. The initial segment of the survey managed the important data of school heads/teachers' age and sexual orientation, common status, most elevated instructive accomplishment, number of years in administration and appropriate classes, trainings and workshops. The second piece of the survey managed the degree of the teacher utilization of the differentiated instruction crosswise over learning territories English, Math and Science with regards to the procedures: think-pair, task cards and learning station. This was a 15 thing explanations: 5 things for think-pair, 5 things for assignment cards and 5 things for learning station and a 4 point Likert Scale: 4 for Always, 3 for Sometimes, 2 for Seldom and 1 for Never.

### Data Gathering Procedure

In the information gathering, the research followed a systematic procedure. To start with, the researcher made a letter routed to the Schools Division Superintendent of Mandaue City Division, asking consent that the researcher be permitted to conduct the study amongst the school heads, teachers and learners. After the authorization was approved, the researcher personally conducted the survey to the respondents. The respondents were offered adequate time ideally 10-15 minutes to give their response. After such time, the survey results were gathered and subjected to similarly presentation, analysis and interpretation of data. At that point, a final draft was submitted for finalization and revisions.

### Statistical Treatment of Information

The responses were exposed to statistical treatment with the utilization of the distinctive non-parametric measures:

**Simple Percentage.** This was the non-parametric measure that decided the important data of school heads/teachers/ age and sexual orientation, common status, most noteworthy instructive accomplishment, number of years in administration and appropriate trainings, courses and workshops visited. This was likewise the statistical treatment that decided the scholastic performance of the learners in English, Math and Science presented to differentiated instruction and obstructions and difficulties in the use of differentiated instruction.

**Weighted Mean.** This was the non-parametric measure that decided the degree of the teacher's application of the differentiated instruction over learning regions English Math and Science as to suspect pair, task cards and learning stations.

**Pearson Product Moment of Correlation.** This was the non-parametric measure that determined whether there is an association of the differentiated instruction strategies and academic performance of the learners.

### Scoring Methods

The following were the parametric limits of the study:

Weight	Range	Category	Verbal Description
4	3.26 – 4.00	Greater Extent	This is manifested all the time.
3	2.51 – 3.25	Moderate Extent	This is manifested most of the time.
2	1.76 – 2.51	Lesser Extent	This is manifested on occasional basis.
1	1.00 – 1.75	No Extent	This is not manifested at all.

## DEFINITION OF TERMS

Terms are operationally characterized as how it is utilized in the study:

**Academic Performance.** This relates to the achievement and accomplishments of the learners at North District, Mandaue City, Cebu.

**Differentiated Instruction.** It relates to the system or reasoning for successful training that includes giving all the student inside their various homeroom network of learners a scope of various roads for understanding the exercise with the utilization of think-pair, task cards and learning stations in North District, Mandaue City, Cebu.

**Learning station strategy.** It utilizes work areas or tables which are assembled by a specific aptitude or members' scholastic level in a gathering in North District, Mandaue City, Cebu.

**Task-cards.** It pertains to a great activity to add to any learning center. They encourage learners to work together in order to complete a task. They can also be used individually by a small group of learners so that each student is working on a different activity based on the same concept in North District, Mandaue City, Cebu.

**Think-pair.** It is a cooperative learning methodology where understudies work to issue or respond to an inquiry concerning an allocated perusing in North District, Mandaue City, Cebu.

**Instructional Plan Model.** This phrase pertains to the proposed output of the enhancement of the differentiated instruction among the learners at North District, Mandaue City, Cebu.

**Relevant Information.** This indicates the statistic attributes of school heads/teachers' age and sexual orientation, common status, most noteworthy instructive achievement, number of years in administration and relevant classes, trainings and workshops visited.

## 2. REVIEW OF RELATED LITERATURE AND STUDIES

This section gives the audit of related literature and studies that have direct orientation to the present study. This makes the study advancing and substantial.

### Related Literature

Eight distinct sorts of insights were recognized in 1983 by Howard Gardner. They are as per the following: semantic, legitimate numerical, spatial, substantial sensation, melodic, relational, intrapersonal and naturalist. The semantic student is word keen implying that they are verbal learners. The legitimate numerical student is one who learns

through numbers and thinking. The spatial student is a visual one, the sort that learns through representation and pictures. Bodily-kinesthetic relates to the individuals who learn through development. Melodic learners are firmly identified with sensible scientific learners and learn through music.

Differentiated instruction techniques enable teachers to empower and in understudies by pleasing every one of their diverse learning styles. One accommodating strategy to utilize differentiated instruction methodologies is called learning stations – an approach to supply their class with various approaches to learn and get ideas. Much like a menu offers benefactors an assortment of choices to fulfill their craving, learning stations open understudies to an assortment of systems and decisions that address numerous student's needs (Cox, 2019).

Classrooms are brimming with differing learners in this second decade of the 21st century, both socially and phonetically. Decent variety is normal in each classroom, and in each room we can discover unmistakable points of view and attributes of youthful people prepared and ready to learn, and encouraging various understudies is constantly an extraordinary test to each teacher. It is essential to the teachers to be careful on how the understudies adapt best with the goal for them to fulfill the necessities of their different understudies. Instructing understudies that have singular contrasts and with the assortment of learning styles extremely a major duty of the teachers that need to create and upgrade. Teachers ought to consider the scholastic contrasts of the learners to enable them to coordinate the substance of the educational plan to their own lives and change the unpredictability of guidance so all understudies experience learning achievement therefore, making learning important and fascinating to them. Having assorted homeroom and training differing understudies will help find the numerous advantages and learning openings both for the understudies and the teachers (Gregory and Chapman, 2015).

Think-Pair-Share (TPS) is a synergistic learning system where understudies cooperate to take care of an issue or answer an inquiry concerning a doled out perusing. This strategy expects understudies to (1) ponder a point or answer to an inquiry; and (2) share thoughts with cohorts. Examining an answer with an accomplice serves to augment interest, center consideration and draw in understudies in grasping the understanding material. The Think-Pair-Share procedure is an adaptable and straightforward strategy for improving understudies' understanding perception. It offers understudies time to consider a response and initiates earlier information. TPS improves

understudies' oral relational abilities as they talk about their thoughts with each other. This system helps understudies become dynamic members in learning and can incorporate composition as a method for sorting out musings created from discourses. The instructor settles on the content to be perused and builds up the arrangement of inquiries or prompts that target key substance ideas. The teacher at that point portrays the motivation behind the system and gives rules to dialogs. Similarly as with all technique guidance, they should show the system to guarantee that understudies see how to utilize the methodology. Teachers should screen and bolster understudies as they work. T: (Think) Teachers start by posing a particular inquiry about the content. Understudies "think" about what they know or have found out about the theme. P: (Pair) Each understudy ought to be matched with another understudy or a little gathering. S: (Share) Learners share their speculation with their accomplice. Teachers grow the "share" into an entire class dialog (Millis, 2015).

The task card is a little card and has a movement or question on it. Some task cards have cut craftsmanship on them, while others may incorporate brief directions, models, or a fast definition that may help with the assignment. There are two varieties of task cards; one that poses an inquiry and requires a reaction from understudies, and one that recommends a movement for understudies to finish. Question undertaking cards can be different decision or in short-or long-answer structure. The second variety which is called a activity card, which basically proposes an action for the understudies to finish, however as a rule requires additional materials all together for the errand to be cultivated. Numerous teachers favor the inquiry assignment cards as showing procedures since they are anything but difficult to make, and can be utilized in games or for test readiness (Cox, 2019).

In the classrooms during the present time, numerous teachers are picking errand cards for worksheets. One of the primary reasons is on the grounds that they can be utilized in an assortment of ways, and can be utilized to strengthen or audit an expertise. How about we pause for a minute to think about why they should utilize a task card over your customary worksheets. Errand cards are rousing, particularly to the understudies that battle with learning every day. Envision that they are simply figuring out how to peruse and the teacher gives them a worksheet with a lot of words that they can't peruse. This can be very overpowering to a little youngster. Be that as it may, when put the troublesome words on an errand card, the kid can chip away at each sentence in turn and it

won't feel so overpowering. These understudies will feel a similar feeling of achievement working through these assignment cards, as they complete their sight word cards (Cox, 2019).

In addition, task cards are likewise separated. Every understudy can finish a card that suits her own one of a kind adapting needs. A battling understudy can finish an assignment card that is various decision, while a progressively capable understudy can finish one that is short or long answer. Every understudy is finishing a task card that is organized to their very own needs. Task cards are very adaptable and can utilized in an assortment of ways. For instance, they can utilize them in their learning focuses, with autonomous work, in little or entire gatherings, for games, schoolwork, or they can even offer them to their initial finishers. Generally, it can be utilized on numerous occasions though a worksheet can't. They should simply overlay the cards and they can utilize them consistently. On the off chance that they do overlay them, at that point every one of them to do is have understudies compose their answers or reactions in their diaries or on a different bit of paper (Cox, 2019).

With an end goal to advance dynamic getting the hang of during all phases of the instructive procedure, a system that uses learning stations was created for use in a basic topography course. Learning stations are physical areas in the classroom where understudies are approached to take care of an issue and answer a few inquiries utilizing the materials gave. The understudies are permitted to work independently or with upwards of three other individuals. For learning stations to be powerful in improving understudy learning, it is significant that: 1) each station have an issue for the understudy to tackle, 2) exercises be genuinely direct, and 3) significant ideas be expressed unequivocally by the understudies.

The benefits of learning stations are that they: 1) decline the measure of material and time required for set-up, 2) make open doors for a various understudy populace to have some obligation regarding their learning condition, 3) free the teacher to assist understudies with progressively troublesome ideas, and 4) help understudies see the fundamental rules that oversee their comprehension of geologic highlights. This strategy, which was utilized principally to present fundamental ideas toward the start of a unit, is entirely significant in enabling understudies to be effectively occupied with their learning and to manufacture ideas dependent on their own encounters.

The teachers, being the central figure in training, must be capable and learned so as to grant the information they could provide for their understudies. Great instructing is an individual way. Viable educating is worried about the understudy as an individual and with his general advancement. The teacher must perceive singular contrasts among his/her understudies and alter directions that best suit to the learners. It is constantly a reality that as teachers, we assume differed and essential jobs in the classroom. They are viewed as the light in the homeroom. We are depended with such a large number of obligations that range from the easy to most unpredictable and extremely testing occupations. Regular they experience them as a component of the work or crucial they are in. It is fundamental that we have to comprehend and should be spurred in doing our function admirably, in order to have propelled learners in the classroom. At the point when understudies are spurred, at that point learning will effectively happen. Nonetheless, spurring understudies to learn requires an extremely testing job with respect to the educator. It requires an assortment of showing styles or methods just to catch understudies' interests. Most importantly, the teacher must himself come into ownership of sufficient information of the targets and measures of the educational program, abilities in instructing, interests, gratefulness and beliefs. He/She needs to apply exertion to lead youngsters or understudies into an actual existence that is enormous, full, invigorating and fulfilling.

A few understudies appear to be normally eager about adapting, yet many need or anticipate that their educators or instructors should move, challenge or invigorate them. "Powerful learning in the classroom relies upon the teacher's capacity to keep up the premium that acquired understudies to the course the primary spot. Not all understudies are spurred by similar qualities, needs, wants and needs. A few understudies are persuaded by the endorsement of others or by beating difficulties (Barberos et al, 2018).

One of the most troublesome parts of turning into a teacher is figuring out how to rouse your understudies. It is additionally one of the most significant. Understudies who are not persuaded won't adapt viably. They won't hold data, they won't take part and some of them may even end up troublesome. An understudy might be unmotivated for an assortment of reasons: They may feel that they have no enthusiasm for the subject, discover the teacher's strategies unconnecting with or be occupied by outer powers. It might even become visible that an

understudy who seemed unmotivated really experiences issues learning and is need of unique consideration (Hurlock, 2016).

While persuading understudies can be a troublesome errand, the prizes are more than justified, despite all the trouble. Roused understudies are progressively eager to learn and take an interest. Basically: teaching a class brimming with persuaded understudies is agreeable for teacher and understudy the same. A few understudies are self-propelled, with a characteristic love of learning. In any case, even with the understudies who don't have this normal drive, an incredible teacher can make learning fun and motivate them to arrive at their maximum capacity (Hunt, 2016).

Understudies seek teachers for endorsement and encouraging feedback, and are bound to be excited about learning on the off chance that they feel their work is perceived and esteemed. You ought to empower open correspondence and free intuition with your understudies to make them feel significant. Be energetic. Acclaim your understudies frequently. Remember them for their commitments. On the off chance that their classroom is an agreeable spot where understudies feel heard and regarded, they will be increasingly anxious to learn. A great job or decent work can go far (Hurlock, 2016).

One approach to energize understudies and encourage them duty is to get them engaged with the classroom. Make taking an interest fun by giving every understudy a vocation to do. Give them the obligation of cleaning up or improving the homeroom. Dole out an understudy to eradicate the writing board or go out materials. On the off chance that you are going over a perusing in class, request that understudies alternate perusing areas so anyone can hear. Make them work in gatherings and allocate each an errand or job. Giving understudies a feeling of proprietorship enables them to feel achieved and supports dynamic interest in class. Setting desires and making sensible requests urges them to take an interest, however some of the time, they need an additional push the correct way. Offering understudies little impetuses makes learning fun and rouses understudies to propel themselves. Motivations can run from little to enormous giving an extraordinary benefit to a commendable understudy, to a class pizza party if the normal test score rises. Prizes give them a feeling of achievement and urge them to work in light of an objective.

With an end goal to advance dynamic getting the hang of during all phases of the instructive procedure, a system that uses learning stations was created for use in an early on geography course. Learning

stations are physical areas in the classroom where understudies are approached to take care of an issue and answer a few inquiries utilizing the materials gave. The understudies are permitted to work exclusively or with upwards of three other individuals. For learning stations to be successful in upgrading understudy learning, it is significant that: 1) each station have an issue for the understudy to settle, 2) exercises be genuinely direct, and 3) significant ideas be expressed unequivocally by the understudies. The upsides of learning stations are that they: 1) decline the measure of material and time required for set-up, 2) make open doors for a various understudy populace to have some duty regarding their learning condition, 3) free the teacher to assist understudies with progressively troublesome ideas, and 4) help understudies see the hidden rules that oversee our comprehension of geologic highlights. This method, which was utilized principally to present fundamental ideas toward the start of a unit, is entirely significant in enabling understudies to be effectively occupied with their learning and to fabricate ideas dependent on their own encounters (Schweitzer, 2018).

### Related Studies

The study of Stanford (2015) on the impacts of teacher's styles and experience on rudimentary understudies in Mathematical accomplishment underpins the present endeavor yet the thing that matters is its concentration and accentuation. The discoveries of this examination uncovered the AABE scientific scores of understudies in classrooms with teachers utilizing facilitator and delegator showing styles altogether higher than understudies in homerooms of teachers utilizing master, formal power, and individual model educating styles. Learners in classrooms with teachers with five or less long stretches of training knowledge scored fundamentally lower than educators with over five years of instructing background. The quantity of understudies who made AEP in arithmetic who were educated in classrooms with facilitator encouraging styles surpassed the quantity of understudies who were required to make AEP in those classroom.

The study of Mutatic (2015) on the connection between instructing styles and understudies' inspiration bolster the present endeavor yet the thing that matters is its concentration and accentuation. English teacher must utilize different training styles so as to build up understudy's inspiration in learning the language. As indicated by numerous etymologists understudies will neither use language learning methodologies nor go out on a limb utilizing a language if there is little aim to learn it, which means

if understudies are not spurred enough the learning won't occur. Consequently, it is critical for English language teachers to realize how to spur their understudies and how to utilize educating styles. This examination plans to distinguish the prevailing showing styles of the IUS teachers and the understudies' inspiration in the classroom. To test the principle theory this study will utilize inferential insights, the Pearson Correlation Coefficient, t-test and One-way ANOVA.

The study of Cabrilana and Mayan (2015) on instructing styles and accomplishment bolster the present endeavor. These discoveries are vigorous to thinking about elective meanings of instructing rehearses. The researchers acquire heterogeneous impacts of instructing styles by sexual orientation and kind of school yet just when utilizing understudies' answers. The discoveries feature the significance of the wellspring of data, teacher or understudies, to reach sufficient determinations about the impact of showing style on accomplishment.

The study of Blazar and Kraft (2017) on teacher and training impacts on understudies' demeanors and conduct bolster the present endeavor however the thing that matters is its concentration and accentuation. Research has concentrated transcendently on how educators influence understudies' accomplishment on tests in spite of proof that a wide scope of mentalities and practices are similarly critical to their long haul achievement. They locate that upper-rudimentary teachers effectively affect self-revealed proportions of understudies' self-adequacy in math, and satisfaction and conduct in class. Their dispositions and practices are anticipated by showing rehearses most proximal to these measures, including teachers' enthusiastic help and homeroom association. Notwithstanding, teaches who are viable at improving test scores regularly are not similarly successful at improving understudies' mentalities and practices. These discoveries loan observational proof to entrenched hypothesis on the multidimensional idea of instructing and the need to recognize systems for improving the full scope of teachers' aptitudes.

The study of Bal (2016) on the impact of the separated training approach in the arithmetical learning field on understudies' scholastic accomplishments bolster the present endeavor yet the thing that matters is its concentration and accentuation. Results uncovered that the separated showing approach in a 6th grade polynomial math exercise builds understudy get to and during this period, their indicated positive subjective and full of feeling advancements. It is clear that a separated

encouraging methodology applied to 6th grade polynomial math exercises builds understudies' scholastic achievement, and during this period, such a methodology gives positive subjective and full of feeling improvements. Since this study is constrained as far as their measurements, more investigations ought to be directed on various subjects and at class levels in which teachers' sentiments about application stages can likewise be researched. Moreover, this study analyzed various showing strategies for separated educating. In future research, trial studies with respect to the application or correlation of various systems can be sought after.

The study of Rojo (2015) on examining the impacts of differentiated instruction in the Science classroom bolsters the present endeavor. In this study separation systems were actualized to improve understudy commitment and learning in both individual and gathering work settings. Gathering work exercises were separated by student profile. Despite the fact that exhibition on summative evaluations didn't show checked improvement following the treatment, the understudies demonstrated improved developmental appraisal scores. They additionally communicated an increasingly uplifting frame of mind with respect to their degree of fearlessness in the picking up setting. A sum of forty eight understudies from two normal science classes were utilized as the example for this study. The accompanying instruments were utilized as the information gathering source: part test scores, level of finished schoolwork assignments, understudy lab reports, understudy' studies and interviews, parental overviews, teachers' intelligent diary and study, and educator assessment by the administering manager.

The study of Ogunkunle and Henrietta (2015) on impact of separated instructional systems on understudy's maintenance in Geometry in FCT senior auxiliary schools in Abuja, Nigeria bolster the present endeavor yet the thing that matters is its concentration and accentuation. The outcome appears among others that separated instructional methodologies was increasingly viable in advancing significant learning and upgrading arithmetic understudies' accomplishment than the regular strategy. The consequence of the post-present test regulated on the trial and control bunch understudies' a month after the principal post-test likewise demonstrate that maintenance capacity was fundamentally higher in the test bunch understudies than in the control bunch understudy.

The study of Aranda and Zamora (2016) on utilizing differentiated instruction in improving the scholarly performance of understudies in Filipino language

bolster the present endeavor. The learning styles of the understudies were distinguished utilizing the Grasha-Riechmann Student Learning Style Scale which filled in as the reason for planning separated exercises in the Filipino subject. The exploratory gathering got separated guidance for two months while the control gathering got conventional educating guidance. The outcomes uncovered that the scholarly performance of the understudies in the test gathering is higher contrasted with the control gathering. This study reasons that differentiated instruction dependent on various learning styles was compelling in showing the Filipino subject to review ten understudies.

### **3. PRESENTATION, ANALYSIS, AND INTERPRETATION OF DATA**

This chapter shows the analysis of data, interpretation, and discussion of the outcomes. The discussions are presented following the order of the research problem presented in Chapter 1.

It also deals arrangements with the introduction, gives the examination of information and elucidation. This section is separated into five (5) sections. The initial segment of the part manages the significant data as to master teachers' age and sexual orientation, common status, most noteworthy instructive fulfillment, number of years in administration and relevant courses, trainings and workshops visited. The second piece of the study manages the degree of the teacher utilization of the differentiated instruction over learning territories in English, Math and Science with regards to the various methodologies: think-pair, task cards and learning station. The third piece of the study manages the scholastic performance of the learners in English, Math and Science presented to differentiated instruction. The fourth part bargains whether there is a relationship of the differentiated instruction methodologies and scholastic performance of the learners. The fifth part manages the hindrances and moves identified with the use of differentiated instruction.

#### **APPLICABLE DATA OF MASTER TEACHERS**

The initial segment of the section manages the significant data as to master teachers' age and sexual orientation, common status, most noteworthy instructive accomplishment, number of years in administration and relevant courses, trainings and workshops visited.

The principal area manages the statistic attributes of ace educators age and sex, common status, most noteworthy instructive fulfillment, number of years in administration and relevant courses, trainings and workshops visited.

### Age and Gender Profile.

Two of the significant independent variables that should be surveyed are age and sexual orientation profile. Age decides the development and psychosexual phases of development and advancement of the respondents as indicated by Erick Erickson. Then again, the sexual orientation alludes to the genders where the respondents are guys and females. Table 1 demonstrates the age and sexual orientation profile of the respondents.

**Table 1 Age and Gender Profile**

Age	Frequency	Percentage
41 – 55 years of age	19	31.67
20 – 40 years of age	41	68.33
<b>Total</b>	<b>60</b>	<b>100.00</b>
Gender	Frequency	Percentage
Male	7	11.67
Female	53	88.33
<b>Total</b>	<b>60</b>	<b>100.00</b>

Regarding age profile, a large portion of the respondents had a place with the age section of 41 – 55 years old with responses of 19 or 31.67 percent. Then again, 19 or 31.67 percent had a place with the age section of 41-55 years old. The majority of the respondents had a place with the time of Early adulthood which is as indicated by Erick Erickson is the time of closeness versus separation. It is in this concur they are into relationship and are submitted and committed in the presentation of their obligations and duties.

Another significant independent variable is Gender. It decides if the respondents are males or females. The motivation behind surveying the sexual orientation profile is to figure out what sex rules in the educating calling. Table 2 demonstrates the sexual orientation profile of the respondents.

As far as the sexual orientation profile, the majority of the respondents are females as obvious by 53 or 88.33 percent are females while seven (7) or 11.67 percent are guys. Ladies keep on being altogether overrepresented in educating, which is frequently put down sex contrasts in word related inclinations (womensagenda.comn, 2019).

### Civil Status

Civil status is a significant independent variable which decides the genders whether the respondents are males or females. Table 2 demonstrates the common status of the respondents.

**Table 2 Civil Status**

Civil Status	Frequency	Percentage
Single	3	5.00
Married	55	91.67
Widow/Widower	2	3.33
<b>Total</b>	<b>60</b>	<b>100.00</b>

As reflected in the table, the vast majority of the respondents are married with responses of 55 or 91.67 percent. Then again, three (3) or 5.00 percent are singles while 2 or 3.33 percent are singles. Being married involves duty, commitment and diligent work in the exhibition of their obligations and duties knowing their core interest. It is on the express that they are being married and that they have their obligations in dealing with their vocation and their family.

### Most Elevated Instructive Attainment.

The achievement of instruction among the respondents is significant since it evaluates their capacity to tackle and deal with issues. Table 3 demonstrates the most noteworthy instructive accomplishment of the respondents.

**Table 3 Most Elevated Instructive Attainment**

Most Elevated Instructive Attainment	Frequency	Percentage
With units in Doctorate Degree	3	5.00
With Master's Degree	15	25.00
With units in Master's Degree	28	46.67
BEEd/BSEd Graduate	14	23.33
<b>Total</b>	<b>60</b>	<b>100.00</b>

Regarding most noteworthy instructive accomplishment, greater part of the respondents are with units in Master's Degree as apparent by 28 or 46.67 percent. It was then trailed by 15 or 25.00 percent with Master's Degree and 14 or 23.33 percent with BEEd/BSEd graduate. The discoveries inferred about the significance of seeking after a degree for expert development and advancement.

#### Number of Years in Administration.

Another independent variable that should be surveyed is the number of years in administration. It alludes to the length of administration they have rendered in the presentation of their obligations and duties. Table 4 demonstrates the number of years in administration of the respondents.

**Table 4 Number of years in Administration**

Number of years in Administration	Frequency	Percentage
More than 15 years	19	31.67
11 – 15 years	25	41.67
6 – 10 years	14	23.33
Less than 5 years	2	3.33
<b>Total</b>	<b>60</b>	<b>100.00</b>

As far as the number of years in administration, greater part of the respondents have been in the calling for 11 – 15 years with responses of 25 or 41.67 percent. Then again, 19 or 31.67 percent have been in the calling for over 15 years. Fourteen or 23.33 percent have been in the administration for 6 – 10 years and in conclusion, two (2) or 3.33 percent have been working for under 5 years. The suggestions that larger part have been working in normal number of years and there is a requirement for them to be inspired to be beneficial and effective in the exhibition of their obligations and duties.

#### Pertinent classes, workshops and trainings visited.

Another significant independent variable that should be surveyed is the number of appropriate, classes, workshops and trainings visited. It is an approach to help the resolve of the workers and in this manner add to profitability and productivity. Table 5 demonstrates the number of appropriate classes, workshops and trainings visited.

**Table 5 Number of appropriate classes, workshops and trainings visited.**

Number of years in Administration	Frequency	Percentage
16 and above	10	16.67
6 to 10 times	20	33.33
Less than 5 times	11	18.33
<b>Total</b>	<b>60</b>	<b>100.00</b>

In terms of number of pertinent classes, workshops and trainings visited, most of the respondents attended 6-10 times, 19 or 31.67 percent attended for 11 to 15 times, 11 or 18.33 percent for less than 5 times and 10 or 16.67 percent for 16 and above. The findings implied that they attended seminars, trainings and workshops for average number of times. It is where there is a need to encourage them to attend further classes, seminars and workshops for growth and development. Trainings have proven to result to employee retention and loyalty, boost self-esteem and contributes to productivity and efficiency (Sison, 2016).

**Learners Multiple Intelligence Results.** Multiple intelligence represents different intellectual abilities. Table 6 shows the multiple intelligences of the learners of the different kinds of intellectual abilities.

**Table 6 Multiple intelligences of Learners**

Multiple Intelligences	Frequency	Percentage
Visual	14	28.00
Auditory	12	24.00
Tactile/ Kinesthetic	24	48.00
<b>Total</b>	<b>50</b>	<b>100.00</b>

In terms of multiple intelligences, there were 14 or 28 percent who are visual learners. Individuals with visual/spatial knowledge are extremely mindful of their environment and are great at recalling pictures. These learners who can learn best using images, graphs, maps and drawings. They have a sharp ability to know east from west and frequently appreciate maps. They have a sharp feeling of room, separation and estimations. There are also 12 or 24 percent who are auditory learners. These learners have exceptionally created sound-related

aptitudes and are commonly exquisite speakers. These learners tend to learn music faster and can easily distinguish musical notes and rhythm. These learners prefer learning through hearing and speaking information. They can easily memorize facts using mnemonic devices and has a better grasps of learning the lessons through listening books in tapes with the use of headphones. There are also 24 or 48 percent who are tactile/ kinesthetic learners. They tend to learn ideas through sensation. They can process data physically through hand and body movement, control and articulation. These learners tend to learn better while doing physical activities instead of listening to a lecture or watching videos.

### EXTENT OF THE TEACHER APPLICATION OF THE DIFFERENTIATED INSTRUCTION ACROSS LEARNING AREAS

The second piece of the study manages the degree of the teacher use of the differentiated instruction across learning in terms of think-pair, task cards and learning stations.

#### Think-pair

Table 7 shows the extent of the teacher application of the use of think-pair in the different learning areas.

As reflected in the table, one of the separated technique is think-pair procedure. The explanations that got the most elevated weighted methods were Teacher, depicts the reason for the system and the rules with a weighted mean of 3.90 deciphered as to a Greater Extent. The discoveries inferred that it is applied all the time which is a generally excellent appearing and the need to keep up such indication.

It can be gleaned from the Table that the average mean is 3.86 which was interpreted as **greater extent**. Based on the indicators, the teacher settles on the content to be perused which has a weighted mean of 3.80 as **greater extent**; the teacher builds up the arrangement of inquiries or prompts the objective key ideas.

**Table 7 Think-Pair**

Think – pair	WM	Interpretation
1. Teacher settles on the content to be perused	3.80	Greater Extent
2. Teacher builds up the arrangement of inquiries or prompts the objective key ideas	3.88	Greater Extent
3. Teacher portrays the motivation behind the procedure and the rules	3.90	Greater Extent
4. Teacher starts by posing a particular inquiries about the content	3.88	Greater Extent
5. Understudies share their speculation with their accomplice	3.78	Greater Extent
6. Teacher grows the offer into an entire class talk	3.90	Greater Extent
<b>Average Weighted Mean</b>	<b>3.86</b>	<b>Greater Extent</b>

#### Legend

3.26 – 4.00 Greater Extent

2.51 – 3.25 Moderate Extent

1.76 – 2.50 Lesser Extent

1.00 – 1.75 No Extent

The teacher portrays the motivation behind the procedure and the rules has a weighted mean of 3.90 as **greater extent**; the teacher starts by posing a particular inquiries about the content which has weighted mean of 3.88 as **greater extent**; understudies share their speculation with their accomplice of 3.78 as **greater extent** and that the teacher grows the offer into an entire class talk with an average mean of 3.90 as **greater extent**.

Think-Pair-Share (TPS) is a community - oriented learning methodology in which understudies cooperate to take care of an issue or answer an inquiry concerning an allotted perusing. This method expects understudies to (1) contemplate a point or answer to an inquiry; and (2) share thoughts with colleagues (www.adlit.orgm, 2019).

One example of Think-Pair-Share activity in English is sharing a thought provoking question to the class and they need to discuss it to their seatmate or classmate before giving their response to the question given. Think-Pair-Share activity can also be used in Science experimentation. An example for this is that the learners are asked to group mixtures as homogeneous or heterogeneous. The learners are paired into two and allowed to share their ideas so that they can accomplish the task at hand.

The Think-Pair-Share system is an adaptable and straightforward method for improving understudies' understanding perception. It offers their time to consider a response and actuates earlier information. TPS improves understudies' oral relational abilities as they examine their thoughts with each other. This technique helps them to become dynamic members in learning and can incorporate composition as a method for sorting out contemplations produced from exchanges.

### Task cards

Another differentiated strategy is task cards. Task cards have become popular as to its impact. Table 8 shows the extent of the teacher application of the use task cards in the different learning areas.

As reflected in the table, the explanations that got the most elevated weighted methods were Task cards, have cut expressions in it with a weighted mean of 3.90 deciphered as Greater Extent and it incorporate brief guidance with a gauged mean of 3.90. It acquired weighted methods translated as Greater Extent. The discoveries suggested that it is applied all the time which is a generally excellent appearance and the need to keep up such sign.

Then again, the explanation that acquired the most reduced weighted mean was “It is a little card that has a movement or question on it” with a weighted mean of 3.43 deciphered as Greater Extent. The discoveries demonstrate that it is applied all the time which is an awesome appearing and the need to keep up such sign.

**Table 8 Task cards**

Task cards	WM	Interpretation
1. It is a little card that has an action or question on it	3.43	Greater Extent
2. Task cards have cut expressions in it.	3.90	Greater Extent
3. Task cards incorporate brief guidance	3.90	Greater Extent
4. Varieties of task: one that poses an inquiry and requires a reaction from understudies and one that recommend a movement for understudies to finish	3.78	Greater Extent
5. Every understudy can finish a card that suits her very own adapting needs	3.72	Greater Extent
<b>Average Weighted Mean</b>	<b>3.75</b>	<b>Greater Extent</b>

### Legend

3.26 – 4.00 Greater Extent

2.51 – 3.25 Moderate Extent

1.76 – 2.50 Lesser Extent

1.00 – 1.75 No Extent

Adding the majority of the mean appraisals, it got a normal weighted mean of 3.75 deciphered as Greater Extent. The discoveries inferred that it is applied all the time which is an excellent appearing and the need to keep up such indication.

Task cards will be cards that have various undertakings or assignments recorded on them. In contrast to worksheets, task cards have just one task for each card. This can make them simpler to finish which gives understudies a sentiment of achievements. It can likewise go about as help for them to perceive what number of undertakings they can effectively achieve in the time they are allocated (Orr, 2019).

Task cards enable understudies to be autonomous learners and they can utilize them in an assortment of routes in the classroom. At the essential level task cards are a lot of cards that have errands or questions composed on them. They are one of the many instructing devices that they find exceptionally powerful with regards to support and appraisal.

### Learning stations

Compelling teachers are continually searching for approaches to enable their understudies to more readily process content, just as look for changed roads that will enable them to show their comprehension. Table 9 demonstrates the degree of the teacher’s use of the utilization in learning circumstances in the diverse learning regions.

As reflected in the table, the explanation that got the most noteworthy weighted mean was “Free the teacher to assist the understudies with progressively troublesome ideas” with a weighted mean of 3.83 deciphered as Greater Extent.

The discoveries suggested that it was applied all the time which is a generally excellent appearing and the need to keep up such indication. Then again, the explanation that acquired the most reduced weighted mean was “Each station has as issue for understudies to unravel” has a weighted mean of 3.05 deciphered as Greater Extent. The discoveries suggested that it was applied all the time which is an awesome appearing and the need to keep up such indication.

**Table 9 Learning stations**

Learning stations	WM	Interpretation
1. Each station has as issue for understudies to fathom	3.05	Moderate Extent
2. Exercises are genuinely straight forward	3.78	Greater Extent
3. Significant ideas are expressed unequivocally by the understudies	3.75	Greater Extent
4. Free the teacher to assist understudies with increasingly troublesome ideas	3.83	Greater Extent
5. Enables understudies to see the basic rules that oversee the comprehension of geologic highlights	3.75	Greater Extent
<b>Average Weighed Mean</b>	<b>3.63</b>	<b>Greater Extent</b>

**Legend**

3.26 – 4.00 Greater Extent

2.51 – 3.25 Moderate Extent

1.76 – 2.50 Lesser Extent

1.00 – 1.75 No Extent

Adding the majority of the mean appraisals, it acquired a normal weighted mean of 3.86 translated as Greater Extent. The discoveries inferred that it was applied constantly and is an awesome appearing. There is a need to keep up such sign.

With an end goal to advance dynamic getting the hang of during all phases of the instructive procedure, a strategy that uses learning stations was created for use in an early on topography course. Learning stations are physical areas in the classroom where understudies are approached to take care of an issue and answer a few inquiries utilizing the materials gave. They are permitted to work separately or with upwards of three other individuals. For learning stations to be compelling in improving understudy learning, it is significant that: 1) each station have an issue for the understudy to fathom, 2) exercises be genuinely direct, and 3) significant ideas be expressed unequivocally by the understudies. The benefits of learning stations are that they: 1) decline the measure of material and time required for set-up, 2) make open doors for an assorted understudy populace to have some obligation regarding their learning condition, 3) free the teacher to assist understudies with progressively troublesome ideas, and 4) help understudies see the basic rules that administer our comprehension of geologic highlights. This method, which was utilized essentially to present fundamental ideas toward the start of a unit, is entirely important in enabling understudies to be effectively occupied with their learning and to fabricate ideas dependent on their own encounters (Schweitzer, 2018).

Table 10 demonstrates the outline of the outcomes.

As reflected in the table, the explanation that got the most noteworthy weighted mean was think-pair system with a weighted mean of 3.86 translated as Greater Extent. It was then trailed by Task cards with a weighted mean of 3.76 translated as Greater Extent.

**Table 10 Summary of the Results**

Differentiated Instruction	WM	Interpretation
Think – pair	3.86	Greater Extent
Task cards	3.75	Greater Extent
Learning stations	3.63	Greater Extent
<b>Average Weighed Mean</b>	<b>3.75</b>	<b>Greater Extent</b>

**Legend**

3.26 – 4.00 Greater Extent

2.51 – 3.25 Moderate Extent

1.76 – 2.50 Lesser Extent

1.00 – 1.75 No Extent

The discoveries inferred that it was applied all the time which is a generally excellent appearing and the need to keep up such sign. Also, in conclusion, with the utilization of learning stations with a weighted mean of 3.63 deciphered as Greater Extent. The discoveries suggested that it was applied constantly and is a generally excellent appearing and the need to keep up such indication.

Adding the majority of the mean appraisals, it acquired a normal weighted mean of 3.75 deciphered as Greater Extent. The discoveries inferred that it was applied all the time which is an excellent appearing and the need to keep up such sign.

### SCHOLARLY ACCOMPLISHMENT OF THE LEARNERS

This segment manages the scholarly accomplishment of the learners. Scholastic performance of the learners are significant since it is the premise of thinking of projects towards its improvement. Table 11 demonstrates the scholastic accomplishment of the learners.

**Table 11 Scholastic Accomplishment of the learners**

Scholastic Accomplishment	English		Math		Science	
	f	%	f	%	f	%
85 – 89 (Very Satisfactory)	4	8.00	4	8.00	5	10.00
80 – 84 (Satisfactory)	34	68.00	42	84.00	40	80.00
75 – 79 (Fairly Satisfactory)	12	24.00	4	8.00	5	10.00
Below 75 (Did not meet expectations)	0	0	0	0	0	0
<b>Total</b>	<b>50</b>		<b>50</b>	<b>100.00</b>	<b>50</b>	<b>100.00</b>

**English.** As reflected in the table, the vast majority of the learners got a Satisfactory performance in English with evaluations inside the scope of 80 – 84. The discoveries inferred that it is a decent presentation yet there is a requirement for improvement of their exhibition to advance the welfare of the learners. Measures are coordinated toward its upgrade with accentuation on the separated guidance.

**Math.** Another region wherein the learners are being surveyed as far as their scholarly performance is Math. As reflected in the table, the greater part of the learners acquired performance in Math with grades inside the scope of 80 – 84 translated as Satisfactory as clear by 42 or 84.00 percent. Then again, just a bunch as comprised by four (4) or eight (8) percent for evaluations inside the scope of 85 – 89 and grades inside 75-79. The discoveries inferred this is a palatable performance and measures are guided so as to upgrade the scholarly accomplishment of the learners which are markers of the performance of the teachers.

**Science.** As reflected additionally in the table, a large portion of the learners got a performance with grades inside the scope of 80 – 84 translated as Satisfactory which is a decent presentation however there is a requirement for upgrade. Then again, five (5) or 10 percent for evaluations inside the scope of 85 – 89 and same remains constant with grades of 75-79 with similar responses. The discoveries suggested that there is a requirement for improvement of the scholastic performance in advancing the welfare of these learners.

### CRITICAL RELATIONSHIP BETWEEN ACADEMIC ACHIEVEMENT AND EXTENT OF DIFFERENTIATED INSTRUCTION

This area relates to whether there is connection between scholarly accomplishment and degree of differentiated instruction.

It very well may be gathered from the table on whether there is huge connection between scholastic performance and degree of differentiated instruction, it acquired a figured chi-square of 30.65 which is more prominent than the basic estimation of 21.03 which rejected the theory and suggested noteworthy relationship. The discoveries inferred that differentiated instruction influences the scholastic performance of the learners.

**Table 12 Critical Relationship between Academic Achievement and Extent of Differentiated Instruction**

Variables	df	Computed chi-square	Critical Value	Decision	Interpretation
Academic Performance and Extent of Differentiated Instruction	12	30.65	21.03	Reject	Significant Relationship

With the assortment of differentiated instruction, performance of the understudies would be improved. The effect of the systems in fitting guidance to address individual issues. Regardless of whether teachers separate substance, procedure, items or the learning condition, the utilization of progressing evaluation and adaptable gathering makes this an effective way to deal with guidance. Separating guidance may mean encouraging a similar material to all understudies utilizing instructional techniques, or it might require the educator to convey exercises at different dependent on the capacity of every understudy ([www.educationcu-portland.edu](http://www.educationcu-portland.edu), 2019).

### HINDRANCES AND DIFFICULTIES

This segment relates to the difficulties and hindrances in the utilization of differentiated instruction among the teachers. Table 13 demonstrates the difficulties and hindrances experienced.

**Table 13 Hindrances and Difficulties**

Hindrances and Difficulties	Frequency	Percentage
Lack of the needed trainings	39	78
Lack of funding	35	70
Lack of the needed support	32	64
The need for motivation	38	76

As reflected in the Table, one of the difficulties and obstructions experienced is the absence of the required trainings with responses of 39 or 78 percent. It is significant that these teachers need to experience further trainings so as to sharpen their abilities and skills in instructing and extra learning of the utilization of differentiated instruction.

It is also a challenge to address the problem of lack of funding as responded by 35 or 70.00 percent. It is important to support the need of these teachers through ensuring that funding is available for the sustenance of their trainings which are important toward professional growth and development.

It is considered a challenge on the lack of support. It is important that the management needs to provide the needed assistance and support despite their busy schedules to these teachers in the enhancement of their teacher performance.

And, lastly, the need for motivation with responses of 38 or 76 percent. Motivation is very important in encouraging these teachers to have the drive and passion for their career and will always think of ways toward professional growth and advancement.

The findings show that it obtained responses above the cut-in percentage of 50 percent which means that there is a need to address these challenges and barriers to promote the welfare of the teachers and the learners.

While the concept of Differentiated Instruction is recognised as one of the most advantageous methods when teaching classes with mixed abilities (Chien; 2015, Pettig; 2000), there are still teachers face a lot of problems in its implementation. Dixon (2014) make certain that teacher training courses on DI are crucial in preparing teachers for the challenges it brings and how to face it effectively. Teachers' insufficient knowledge of DI proved to be a base factor that led to many problems in the implementation of DI.

#### **4. SUMMARY, FINDINGS, CONCLUSIONS AND RECOMMENDATIONS**

Section 4 gives the outline, gives the discoveries, makes the determinations and offers the suggestions.

##### **SUMMARY**

The exploration evaluated the status of differentiated instruction and its impact to the scholarly performance of the intermediate learners at North District, Mandaue City, Cebu during school year 2018-2019 as reason for an instructional model.

The study is delimited to the accompanying territories of concern: important data as to master teachers' age and sexual orientation, common status, most elevated instructive fulfillment, number of years in administration and appropriate classes, trainings and workshops visited; student's multi knowledge results; the educator use of the separated guidance crosswise over learning zones English, Math, and Science as to might suspect pair, task cards and learning stations; scholastic performance of the learners in English, Math and Science presented to differentiated instruction; and relationship of the differentiated instruction methodologies and scholarly performance of the learners; boundaries and moves identified with

the utilization of differentiated instruction; and instructional arrangement model can be created.

The researcher utilized the quantitative type of research with the utilization of the survey as the fundamental apparatus in the social occasion of significant information. Quantitative technique for research is the strategy for research wherein information can be measured from the responses of the survey which will at that point be displayed, broke down and deciphered.

##### **FINDINGS**

Coming up next were the appropriate aftereffects of the examination:

Greater part of the respondents were 20-40 years old, female, wedded with units in Masteral Degree, 11 – 15 years as far as the number of years in the administration and went to 6 – multiple times number of trainings, classes and workshops and visual with regards to their various knowledge. Regarding the teachers use of the differentiated instruction, coming up next were the outcomes: Think pair is to a Greater Extent; Task cards to a Greater Extent; and Learning stations to a Greater Extent. The scholastic performance of the learners uncovered that: English is Very Satisfactory; Math is Very Satisfactory and

Science is Very Satisfactory. There is noteworthy connection between scholastic performance and the degree of the use of the differentiated instruction coming up next are the difficulties and obstructions in the utilization of the differentiated instruction: absence of preparing, absence of subsidizing, requirement for help and the requirement for inspiration. Instructional arrangement model can be made.

## CONCLUSION

On the basis of the findings, a conclusion is drawn that the application of the use of differentiated instruction is to a Greater Extent in areas of English, Math and Science. The academic performance of the learners is Very Satisfactory in English, Math and Science. There is significant relationship between academic performance and the extent of the application of the differentiated instruction.

## RECOMMENDATIONS

The following recommendations are offered:

1. Implementation of the proposed instructional plan model;
2. More trainings, seminars and workshops conducted on differentiated instruction
3. Resource person invited to speak more about the subject matter
4. Reference materials should be available within the reach of the learners
5. This should be a topic for discussion in the classroom.

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