Integrating differentiated instructions in teaching process

Alka Kapur

Abstract
The action research carried out was an enriching journey for me, my staff and the students as well. I chose this topic as it could prove to broaden the horizons of the learning brigade. I feel that it is very important to cater to the needs of all the tyros which could lead to their holistic development and amelioration of complete school. I really appreciate the efforts of the students along with their parents. Their interests in different subjects increased exponentially. Furthermore, they were able to give answers in various subjects and for a difficult topic as well.

I evaluated the learning outcomes of the action research by finally analysing the progress and compiling the results. It was then compared with the standards set by us. Learning gaps of the students were filled through differentiated instructions. I advised my teachers to give them worksheets which tended the needs of each level of the learners. The technique not only honed their understanding about the topics but also delved into the real-life occurrences. They completed the tasks assigned meticulously. Teachers managed their in-class time through discussions and reviews. This enabled them to work at their own pace and utilise the resource content available judiciously.

Keywords: Differentiated instructions, learning gaps, amelioration, enthralling, holistic, tyros

Introductions
During pandemic, I felt that all the learners didn’t work at a specific pace academically. Furthermore, even the gifted ones lost their interest towards the teaching-learning process. Since the starting of this pandemic, I realized that all the learners are not having equal interest in the studies they are involved in, also after certain point in time, the gifted ones also lose their interest in the classroom. I observed many classes during the online sessions and realized that this issue needs to be addressed and found solutions to. Luckily, I got an opportunity to attend the webinar where the resource person aimed at the technique which delved into the nuances of my matter. The technique substantiated the integrating differentiation in the teaching process.

I progressed on the research by taking feedback of the teachers. Thereafter thought to first designate one class, one subject and one teacher for the assessment. Hence, I decided to give this responsibility to Ms. Sharankhala, Social Science teacher teaching middle school. Thereafter two months’ time, results of the students were analysed and significant improvement was visible. Finally, the teacher was successful in catering to the needs of all the learners. I was overwhelmed to find a sea change in their proficiency.

I was quite optimistic that this experimentation would help us develop better understanding of the topics of different subject in all the grades. Initially one teacher will be asked to work upon this integration. After successful experimentation at this level the same technique was applied in all the classes in general and teachers were trained for the future course of action. I didn’t expect that the students will develop complete understanding of the topics but of course, I am extremely hopeful that students will at least broaden their bent of mind. I, firmly, believe that the system will help the students to develop interest in all the subjects and at all the levels.

I feel that students’ retention and understanding power increases if something is taught to them in the way they understand and to their level. I inflicted upon a very famous proverb “If they can't learn the way we teach, we teach the way they learn”. Of course, today’s generation is tech savvy, so even using different resources on the online mode can fulfil our purpose of imparting differentiated teaching.
Material and Method used
As the research was based completely on the differentiated instruction given to the students for which many classes were taken into considerations. The sample survey had variety of students, material etc. Few of them were:

- Padlet
- Near pod
- Pear Deck
- Each one, Teach one.
- Microsoft teams
- Breakout Rooms

Research part
Metacognition, in simple words is “Thinking about thinking” …. This process played very important role in the research work done by me for the entire school.

Creating the action plan

July first and second week

Action taken
Teacher taught the routine way, classroom of the teacher concerned was observed and a comprehensive feedback was given to her. Teacher tried to work on the loop holes of the same class and worked upon few strategies. Though the teacher started teaching using few tech tools but was not able to cater to the needs of all the learners.

Sub-topics covered
- Early Campaigns
- Montagu-Chelmsford Reform
- Jallianwala Bagh Massacre
- Khilafat Movement
- Non-cooperation Movement

Resources used
As online classes were going on at that time so teacher used teams as the base platform and Padlet as her tech tool.

Result expected
Teacher was teaching in the class keeping expected learning outcomes in her mind but she was not able to achieve all.

July third and fourth week

Rectification in the actions taken (Previous week)
- Teacher reflected upon her own way of teaching and implemented few more teaching strategies in her lesson plan.
- In order to activate the Prior Knowledge of the students and to check upon the progress report, she conducted a test with the same set of students.
- Few more strategies were incorporated in order to improve the result of the students.

Sub-topics covered
- Journey from Non-cooperation to Civil-Disobedience.
- Mobilization of the Peasants.
- Revolutionary movement: the second phase

Resources used
Little more variations were done in the way the teacher was teaching in her previous classroom. She added on few more tech tools to teach them in an interesting way but was not happy with the performance of the students.

Result expected
Better understanding of the Sub-topics by the students of the grade and section but few learning outcomes were not achieved which was really disappointing on her part.

August first and second week

Actions taken
- Teacher was told about the basic concept of differentiation and was asked to find out different ways to introduce in her classroom.
- Teacher started researching on the same and could find few techniques to cater to the needs of all the learners.
- Worksheets including 1-mark questions like multiple choice questions were given to the students of Grade-8 to check their understanding in the subtopics covered during last week. This worksheet was given through the...
way of Microsoft forms.

- Result of the students was recorded and compiled in the form of Excel sheet.

Resources needed
Teacher used the basic online platform as well as different tech tools such as Near pod, Pear deck etc. Worksheet was given to assess the levels of the students.

Result expected
The prime focus of the teacher was to improve the performance of all the students.

Third and fourth week of August

Actions taken
- Performance of the students was analysed through the excel sheet result of the previous week work.
- Continuation of the subtopics through the method stated above.
- HOD Mr. Jose Mathew was requested to evaluate the performance of the students and thereafter asked to analyse the result.
- His observation was recorded.
- Creating the Lesson plan for the implementation of the differentiated instructions.
- These two weeks were very crucial as finally teacher implemented the techniques such as each one teach one; create the question bank etc.
- Resource needed: Link of Padlet of the teacher, PowerPoint presentation made by the students who were asked to teach in the class.

Result expected
To achieve expected learning outcomes in compliance with the Lesson Plan created. Also, they were wonderfully engaged in the class.

First and second week of September

Actions taken
- Worksheets including 1-mark questions like multiple choice questions will be given to students of Grade-8 to check their understanding in the subtopics covered during last week. This worksheet was given through the way of Microsoft forms.
- These worksheets were prepared according to the different levels of the students.
- Analysis and comparison of the result.
- Test to be conducted covering all subtopics with the same set of students.
- Feedback to be taken from the students.
- Their feedback will be recorded.
- Result of the quiz will be recorded for final conclusion.

Resources needed
Worksheets prepared according to the different levels of the students.

Result expected
Final conclusion to be drawn.

Third and fourth week of September

Actions taken
- The result was compared and analysed by HOD and the teacher concerned. Ultimately, the conclusion was drawn that with the introduction of new pattern of teaching style of integrating differentiation, the performance and the interest of the students have improved manifold and enhanced a lot.
- The teachers teaching different subjects were told about the methodology of implementing this new technique. Online meeting was organized to explain it to the teachers.
- This technique was used by different subjects’ teachers at different levels.

Resources needed
Analysis report to show the case study of the given set of students. Online meeting link.

Result expected
Other teachers were also expected to follow the same protocol as one teacher has done. As the report showed drastic improvement in the performance of the students.

Through this way, teacher has researched that there are three categories of learners

Different types of learners

Tacit learners
- They are not aware of their metacognitive knowledge.
- They do not think about any particular strategies for learning.
- They just what they know and what they don’t.
- They do not make conscious efforts towards learning.
- They do not pose questions.

Aware learners
- They are somewhat aware of their metacognitive knowledge.
- They would participate in class activities, generate ideas and collaborate.
- They do not consciously regulate their thinking.

Strategic learners
- They are well aware of their metacognitive knowledge.
- They know and apply the strategies that help them learn.
- These are the smart kids of the class who get their A or A+.
Reflective learners

- They are not only strategic about their thinking but they also reflect upon their learning while it is happening.
- They question at each step and try to get into the depth of what they are learning.
- They internalise their learning.

Conclusion

The guidance and support that I receive from my mentor Mr. A.P. Sharma was quite productive. I was glad to see the result after making certain changes in the working style of my teachers especially primary and middle school. The drastic change is evident in the performance of the same set of students. The result was evident through the Line Graph shown in the comparative excel sheet.

We implemented new teaching methodology for the subject "Social Science" as a pilot project. After two months, we took feedback from students and parents and analysed its impact. We received an overwhelming response from students and parents alike. Also, there was a significant improvement in the assessment exams that followed. Hence, we decided to implement this methodology across all subjects. To our delight, at the end of this session, we achieved what we hoped for and therefore we can conclude that the "Action Research" did by us was a success. The detailed study showed that the "Integration of Differentiation" in the teaching and learning pattern reflects improvement in the performance of the students. The interview from the parents and students through the given questions showed that students were quite happy and parents were really satisfied with the new teaching way of the teachers.

References

2. Examples of different tools. https://www.youtube.com/watch?time_continue=17&v=VgnDbt_2qQE&feature=emb_logo