

A CASE STUDY ON TEACHING ENGLISH WITH DIFFERENTIATED INSTRUCTIONS AT A JUNIOR HIGH SCHOOL IN TAIWAN

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Abstract

The article aims to explore a case of teaching with differentiated instructions approach at a Junior High School, Eastern County, Taiwan. The author used case study as the interpretivism paradigm in the methodology of exploring the contexts. The participants were twenty-five 12 graders. They were assigned by the school academic director to participate in the classroom demonstration on differentiated instruction with one of the senior teacher trainers from Taipei City. Pre-observation interview, observation, and post-observation interview were utilized to collect the data. The study indicated that a well-planned lesson for differentiated instruction would be able to help mixed-ability students get most of the lessons. Furthermore, it can also enhance the student's engagement during the lesson in the classroom. Some suggestions for further research are proposed.

Keywords: Differentiated instruction, classroom management, students' engagement.

INTRODUCTION.

Innovation in education has been the concern of all the stakeholders including policy makers, researchers, school administrators, teachers, parents, and the students. Although they hold different roles, the purpose of the innovation is relatively unchanging: to provide better quality of education through policy that affects the teachers' development and the learning

environment which later are expected to enhance the learning experience to become more meaningful.

One of the forms of innovation in education is the effort to develop instructional strategy that is called as differentiated instruction. Differentiated instruction is defined as “a philosophy of teaching that is based on the premise that students learn best when their teachers accommodate the differences in their readiness levels, interests and learning profiles” (Tomlinson, 2005). In such philosophy, the teaching instructions are designed based on the students’ diverse needs. The students’ differences in the classroom are inevitable. They come from different cultures, socio-economic class, family background, etc. Individual differences cannot be taken for granted. They need attention from the teacher if the success of the teaching is desired. Therefore, differentiated instructions that accommodated their readiness levels, interests and learning profiles would come with benefits and hence the study is essential to be carried out.

Contextually, the education in Taiwan is in need of innovating policy, which two years ago the Ministry of Education released the 108 curriculum to meet with the dynamic needs of educational goals in the new era. However, it is also important to note that Taiwan is a diverse country as there are many different ethnicities across the island with different cultures, socio-economic class, family background. Even though the new curriculum has been implemented, the needs of the students with their diverse background cannot be neglected (Wei & Ou, 2019). The curriculum, as many other curriculums, retain the national goals towards educational aims, but it does not really contextualize the instructional strategies in many different settings (Chen et al, 2020). Therefore, the differentiated instruction would become as one of the feasible answers towards the demographical diversity.

In order to guide the report, the researchers formulated the following problem statement: (1) How do differentiated instructions applied in mixed-ability classroom in terms of content, process, and product? (2) How do differentiated instructions help diverse students improve their learning?

LITERATURE REVIEW

There are some rationales that would be the basis of implementing differentiated instructions to the solution of educational reality that the students coming to the classroom are not homogenous. They are diverse in many different contexts. They bring about their cultural capital, social capital, and family capitals that might influence their individual culture. Hence, they have different capability to engage with the lesson to create the atmosphere of meaningful experience that would construct their learning process.

Learning, from constructivism perspectives, can only happens when the students construct their knowledge through experience. According to Vygotsky's theory, students learn within particular socio-cultural context where students construct the learning on their own. What is taught is not necessarily what the students learn. The argumentation is that based on Vygotsky's theory, education is the process, not the product. In this regard, it is essential to consider the process of learning as the experience the students would use for developing their construction of knowledge. Furthermore, it is also necessary to understand the Zone Proximal Development (ZPD) which was introduced by Vygotsky. The ZPD according to Vygotsky's definition is "the distance between the actual development level and the level of potential development" (Subban, 2006). The concept is also well-known as $i+1$ which means that the teacher or instructor has to acknowledge or identify what the students have known and what they need to learn so that they can be ready to learn something that they have not known. By doing so, the students will get most of the lesson without having to stay moderate. All the students will be in their position to acquire new knowledge according to their schemata.

Learning also happens differently among students. Gardner's theory proposed that multiple intelligent is one of the ways to identify the students intelligent. It is believed that the students are very diverse in terms of their intelligent. Therefore, addressing the student's diversity in terms of multiple intelligent is

very rational. The traditional learning only views the success of learning is the achievement in traditional context, the tests. The students who fail indicated that they are not intelligent. This is not the case. Considering that the intelligent is not a single measurable unit, the students need to receive different approaches, different techniques, and different kinds of authentic and traditional assessment to ensure that their differences are accommodated and develop students as well as incorporated their different strengths (Subban, 2006).

As the learning process has been identified, the issue of students' engagement can be addressed. The past literatures have enlightened that the students are very diverse in terms of their culture, social, economic, ethnicity and race backgrounds (Tomlinson, 2005; Lavania & Nor, 2020). These differences cannot be taken for granted that the teacher would treat the teaching and learning with single instruction which might be suitable and very engaging for certain group of students and on the other hand it is very dull for some other students. They all are expected to engage academically. Academic engagement is "defined as a student's psychological and behavioral efforts and investment in learning, understanding or mastering skills, and knowledge in academic work" (Fredricks, Blumenfeld, & Paris, 2004). It is critical to address the students' willingness in providing psychological and behavioral efforts and investment in learning so that the learning process can be meaningful for each and every one of the students to follow the knowledge construction as well as involvement in meaningful, fruitful learning experience.

Previous study indicated that although the differentiated has been beneficial and retains all the advantages due to the instruction that is tailored to the student needs, the teachers do have challenges (Lavania & Nor, 2020). The researchers identified that there are external and internal challenges ranging from the institutional supports to teacher self-efficacy towards the implementation of differentiated instructions. This implied that the current study could fill in as the modelling of differentiated instruction in real classroom.

Aside from internal and external factors of the obstacles in implementing differentiated instructions, there are also problems in the teacher readiness as well as the teacher knowledge towards differentiated instructions (Jeager, 2016). Some studies (Chien, 2015; Lunsford, 2017) found that this would hinder the success of the expected outcome from a differentiated instruction. It entails that the current study should contribute on what to consider and how differentiated instructions could improve student learning.

One of the challenges in order to get maximum benefits from the differentiated instructions is that the teacher should possess the knowledge to the student diversity in many levels for examples the student needs according to their ability. It is common that the classrooms are assigned in a randomized so that the students can mingle. Their language proficiency may vary. Hence the teacher knowledge and skills in differentiated instruction is crucial (Lavania & Nor, 2020). In Taiwan, where English holds status as a foreign language, the student background and language proficiency in English is distributed ranging from those who are proficient to those who are in adequate mastery. Chien (2015) suggested tremendous preparation is one of the problems faced by the teachers in taiwan context. Modeling should be one of the solution on how it can be implemented, which is relevant to the social learning theory (Bandura, 2005).

Therefore, this report aimed to explore how differentiated instruction can be implemented in a diverse classroom at a Junior High School in Hualien, Taiwan. It further examines how differentiated instruction can be applied in mixed-ability classroom as well as how it can help students with diverse background with three domains of differentiated instructions: content, process, and product (Baecher, et.al, 2012).

RESEARCH METHOD

Research Design

The study employed qualitative case study approach as the research method that it focused on the small groups or individuals within groups or individuals' experience in specific settings

(Lodico, et.al., 2010). The study took a place in a public Junior High School in Eastern County, Taiwan. Eastern County is considered as one of the remote areas in Taiwan since Taiwan's most developed areas are the northern and western parts of the country. Considering the geographical background, it makes the students' profiles of the school is different from the students from other regions influenced by their socio-economic status which some of them can be from the lower status.

Setting and participants

It is essential to note that the class that involved in the study, is not a regular class. It was a class requested by a professor from a public University for a demonstration of differentiated instructions. A professional teacher trainer was invited to demonstrate the learning process with specific differentiated instructions. The teacher trainer used to be a senior high school teacher and she holds a doctorate degree in education. She had more than 20 years of experience in researching, training, and teaching.

There were twenty-five students involved in the study. These students were randomly assigned by the school for the demonstration purpose. Therefore, the teacher and the students did not know each other making the students' profiles to be undefined. During the observation for the two-hour demonstration, it can be seen that some groups of students were able to communicate effectively in total immersion English classroom environment, meanwhile some other were not. The student. The students were 13 males and 12 females.

In implementing the observation on differentiated instruction, it is possible to have identify the learner profiles (high achievers, moderate achievers, and low achievers) prior observation. However, due to its special contexts, all of the students' profiles were unidentified. The class being studied was a demonstration by a differentiated instruction specialist from Taipei, the capital city in collaboration with a professor from a public university. It was used as exemplary for the teachers and academia.

During the learning process, they were randomly assigned in five groups consisting five members in each group.

Data collection

Before the teaching observation began, there was a pre-observation interview with the teacher. The pre-observation interview covered a discussion on the lesson planning, the philosophical which based the construction of the lesson planning such as the curriculum used by the school, theory of differentiated instruction, theory of constructivism in education, zone proximal development and potential problems that might occur during the process and how to cope them.

During the observation process, the researchers took a field note. the researchers wrote down the activities, the time of the activities, what the teacher did, the instruction given, and the students activities in each stage. the researchers also recorded some videos regarding the teacher teaching approaches as well as the students group activities. In addition, the researchers also used differentiated instruction classroom observation scale (Cassady, et.al., 2004)

After the class finished, a post-interview was conducted. A discussion session was held to discuss about the rationale of the activities in the classroom, and the problem encountered in the teaching and learning process. In addition, what can be done differently was also discussed to gain more comprehensive possibilities of differentiated instruction in some specific situation that occurred in the classroom during observation stage.

Data analysis

The researcher analyzed all the data from pre-observation interview, observational field note, videos, and post-observation interview sessions and coded according to the themes of learners' profiles, differentiated instructions, interactional patterns, zone proximal development, as well as students' engagements to answer the problem statement.

The interview data were transcribed. The transcription was given to the interviewee to check the validity of the collected data.

The interviewee was allowed to alter the answer so ensure the intentions were delivered well. The data were also cross-checked with the video recording as well as the field notes. Coding process were undergone to identify the narrative data that are related to the important themes related to the research questions and underpinning theories.

FINDINGS AND DISCUSSION

Below are the differentiated domains that are covered in the differentiated instructions, namely content, process, and product:

Content

The content used was the school book in accordance to the national curriculum. The topic was a trip from London to Amsterdam. However, the content has been modified. It consists of reading texts with various length which was designed to provide different needs of the learner. The teacher also provided pre-reading activities of important vocabulary. This content is critical for the students as in order to be able to engage in the longer texts, they need to be scaffolded to reach the goal. The teacher also made sure that they were in the *i+1* context where she can help the students bridge the knowledge of what they have mastered and potentially to master.

The pre-reading activities had two varieties of designs. The first is quick dictation that consists of reading, listening, and visual aids and writing. The second was moderate-speed dictation that consisted of reading, visual aids, and writing. The alternative should always present to provide different level of students' ability and readiness.

The reading texts provided were also prepared with different length. If not in terms of length, the process of reading

techniques would vary depending on the students' diverse ability which will be discussed in the section of process.



Figure 1. Shorter text

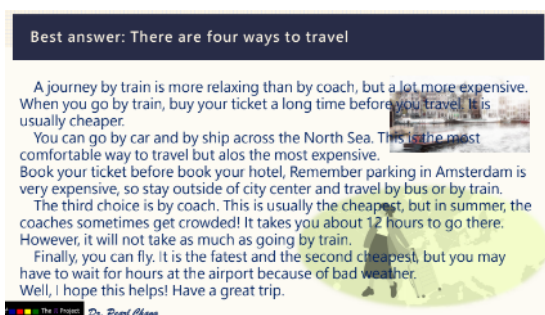


Figure 2. Longer text

Process

To describe the contexts, it was a fine morning at the school. A classroom was set for the observation. The desks were aligned in groups of five with five chairs each group. The camera was set to record the learning process, the chairs for the observers were placed at the corners of the classroom. The school bell rang, the students started entering the room and sat on the prepared seats. A teacher assistant helped with the class computer to prepare a PowerPoint presentation. When all the students had entered the class, the teacher started the class with a greeting and little introduction and quickly greeted some of the students individually. In the interview session with the teacher, she said that it was done

purposively to establish connection with the students since they were new with her.

The learning continued with three big themes with some small chunked activities: establishing the knowledge (identifying what the students have known and what they have not), introducing the new knowledge, and assessing. In establishing the knowledge, the teacher taught the vocabulary through quick dictation activity. This activity was useful to help the teacher identify the students' schemata. Referring to Vygotsky' $i+1$, this critical session is to find out the "i" before proceed further with "+1" (Xi & Lantolf, 2021, Hedegaard 2012). It was used to know the current state that the teacher will be able to find out the appropriate scaffolding. Indeed, it was successfully done and positively affected the process in many other activities that the base has been identified.

As the identification process has been done, it turned out that the groups were not homogenous. They are mixed in terms of ability. They are spread among all five groups. Hence, the fact that they are randomly distributed has allowed the teacher to implement differentiated instructions. As discussed in previous section, that the content has been prepared for different level of students and different needs, the instructions can be used to cope the problems. If in traditional approach the teacher might go in moderation, the differentiated instructions allow the teacher to maximize the engagement of any type of the students. For the lower ability, they are treated with the simpler instruction that would enhance their participation to bring about the threshold level. For intermediate level, they can improve better, and for the more proficient ones, they can be challenged with more complex tasks. In this perspective, social justice among the students can be achieved that they can get equity for gaining the most of the lessons.



Figure 3. Learning Process

The benefits that the students gained can be seen not only from individual respects, but it can also be inspected from the student's cooperation. Since they have different need and readiness for the content being taught, the students were instructed to engage in cooperative learning approach. They were involved in structural approach that the students were diverse and random with the characteristics of equal participation. Each and everyone of them can equally participate in the various classroom activities without having to worry about discrimination of their ability. It was also observed in group five that once one of the members identified as lower ability was asked to go to the front and she was worried. The other team member cheered her up and helped her. Furthermore, positive communication was established among the group members.

The interactional patterns were also observed. The process of differentiated instructions had allowed the teacher and the students to interact with different interactional patterns. Some of the interactional patterns were teacher lectures, teacher-led lecture

with periodic student's discussion, group discussions, problem modeling by the teacher, questioning, demonstration, manipulative (making concrete abstract ideas), seat-work individual, seat-work groups, teacher interacting with individual, teacher interacting with groups, technology use-teacher, and assessment.

Product

The products in learning usually refers to artifacts, however, the contexts in this study is a bit different. Although the lesson can develop further that the students would be asked to produce some products such as posters on how to travel from London to Amsterdam the most convenient, the lesson session was too short since it was intended for short observation-demonstration.

Nevertheless, the students' product could still be produced and accessible through the authentic assessment of portfolio which were collected at the end of the class. The students were asked to collect the assessment to the teacher. In terms of differentiating the products, it was done throughout the whole process. The teacher provided immediate feedbacks during the classroom activities that resulted the components of the portfolios as authentic assessment (Subban, 2006).

Since the portfolio of each student might differ, the teacher cannot use the same criteria of all to assess the scoring of each student (Hapsari et al, 2020). It was confirmed in the post-observation interview. The teacher emphasized that the grading is not easy since the product of assignment may vary. Therefore, there is a need for the scoring guide for different level of students.

Differentiated instructions works best to overcome the problems that teachers face daily in their teaching activities. The increase of the students' population or the socio-economic dynamic that occurs in the society had constantly influence the learners' background, cultures, economic, ethnicity, gender, and race profiles. This inevitable fact should be taken into account by a teacher to prepare a teaching approach that can be suitable for diverse students. Various profiles of the learners would affect the

way they understand their world, their academic ability, as well as their interaction with teacher and peers. In such settings, the instructions that are suited to each learner profile would bring the advantage for all, promoting equity, optimization of quality and effectiveness in teaching (Valiandes, 2015).

The observation results have shown that differentiated instructions can be applied in three domains: *content, process, and product*. Each of the domain needs careful planning so that the needs of different ability students can make their learning most meaningful. Baecher, et.al (2012) state that there are some principles that should be considered in language teaching differentiated instruction: identifications towards student strength and weaknesses, establishment of common objective from the formal curriculum and differentiate the objective, manageability of the teacher and students, staging or scaffolding, appropriateness, flexibility, availability of choices, and good classroom management especially in time management because if the students finish their task in big gaps, it would distract the classroom management.

The application of differentiated content, process, and product cannot be well employed without considering *readiness, interest, learners' profile*. These three characteristics are essential to optimize differentiated instructions (Tomlinson, 2001). Readiness refers to the students' skills and mastery of previous knowledge about the topic being discussed. Interests refer to whether or not the tasks would enhance the students' inquisitiveness. Learning profiles are how the students prefer to work with the tasks.

The observation results revealed that the teacher had prepared the students readiness through a very crucial moment of pre-teaching the vocabulary. The mastery of basic vocabulary for the learning process, for example, is essential to prepare for the students' readiness in content. The concept of considering readiness could cover all three domains such as the content, process, product. By knowing and implementing differentiation through readiness, the teacher had helped the students to integrate their $i+1$ as in zone proximal development theory (Hedegaard,

2012). They work a little harder to master the concept. Their cognitive ability is challenged however in a measured manner.

There are wide ranges of students' interest. It is impossible to cover all of them but the teacher should consider them when differentiating the instructions. The students' interest can be used as a hook to attract the students' attention to the lessons that the teacher teaches them. The strategies in inquiry of the knowledge for the students to construct can be used to attract the students' interests. When appropriate activities that are not monotonous are applied, it can enhance the students' active engagement. The engagement that are meaningful will affect positively for the students to construct the knowledge and hence gaining the expected output. This suggests that changing teaching practice of the teachers is based on the students' attraction rather than their personal teaching styles (Hallam & Ireson, 2005).

Last, the learner profiles about how the students prefer to work with the tasks can help the teacher keep the student learn effectively and efficiently. They can learn effectively in terms of how they can engage in the learning process flawlessly. They can maintain the participation in a sustainable manner. They can also learn efficiently in terms that they can learn within expected time period that the teacher had set so that there is not time to waste. In this area, there are at least four domains to consider: students' group orientation, learning environment, cognitive style, and intelligent preference (Tomlinson, 2001, Rahman et al, 2019). The data from the observation showed that the group orientation, learning environment and cognitive style are influential for the flow of the learning process.

IMPLICATIONS AND CONCLUSION

As the current study aims at showing how differentiated instructions, by the teacher, can be applied in mixed-ability classroom in terms of content, process, and product and how differentiated instructions help diverse students improve their learning. The findings have suggested that differentiated instruction

can be applied in the classroom in three differentiated domains, namely the content, process, and product. These domains when differentiated based on the students' need can be a solution to a classroom with mixed-ability levels. Having mixed-ability classes is something that teachers cannot avoid recent days due to the increase of students' diversity. The students may come from different culture, socio-economic status, race and ethnicity, and gender. The teachers can think of differentiation in their lesson planning in all aspects to meet with the students' need. In addition, the findings also showed that the students could maintain their participation in their particular ways for each and every student even though they are diverse in proficiency levels.

Differentiating the three domains cannot be done without guide. The guide that the teacher could use are the three characteristics, namely readiness, interest, and learner profiles. These characteristics lead the teacher in considering how to differentiate the content, process, and product.

This article implied that although differentiated instructions require complex process from planning, executing, and evaluating, it can help both teacher and students solving the complexity of their daily learning problems. Teacher can gain benefit of more effective ways to get the expected learning objectives for the students and the students can learn or construct their knowledge in a meaningful learning. Yet, the current study was limited in actual implementation as it was for demonstrative purpose. The more realistic classroom practices and more longitudinal studies would exhibit challenges that have not been identified.

In addition, further research can be taken to investigate the effectiveness of this instruction especially with more control on selecting participants as well as measured knowledge on the teacher knowledge and attitudes could give more comprehensive findings and details on the effect based on particular learners, and the study on how the teacher and students can gain most of the instruction could be elaborated from the perspective of interpretivist paradigm. So that it could be understood how the preparation and

satisfaction could be met from the implementation of differentiated instruction.

REFERENCES

- Baecher, L., Artiglieri, M., Patterson, D. K., & Spatzer, A. (2012). Differentiated instruction for English language learners as “variations on a theme” teachers can differentiate instruction to support English language learners. *Middle School Journal*, 43(3), 14-21.
- Bandura, A. (2005). The evolution of social cognitive theory. In K. G. Smith & M. A. Hitt (Eds.), *Great minds in management* (pp. 9–35). Oxford University Press.
- Cassady, J. C., Speirs Neumeister, K. L., Adams, C. M., Cross, T. L., Dixon, F. A., & Pierce, R. L. (2004). The differentiated classroom observation scale. *Roeper Review*, 26(3), 139-146.
- Chen, M. J., Fan, H. H., Guo, C. Y., & Kang, J. L. (2020). How do they transform? The story of two primary schools about curriculum leadership and development in Taiwan curriculum reform. *International Journal of Social Sciences & Educational Studies*, 7(1).
- Chien, Chin-Wen. (2015). Analysis of Taiwanese elementary school English teachers’ perceptions of designs, and knowledge constructed about differentiated instruction in content, *Cogent Education*, 2(1), DOI: 10.1080/2331186X.2015.1111040
- Fredricks, J. A., Blumenfeld, P. C., & Paris, A. H. (2004). School engagement: Potential of the concept, state of the evidence. *Review of Educational Research*, 74(1), 59-109.
- Hallam, S., & Ireson, J. (2005). Secondary school teachers' pedagogic practices when teaching mixed and structured ability classes. *Research Papers in Education*, 20(1), 3-24.
- Hapsari, A., Ammar, M. H., & Ghali, M. I. (2020). Student teachers’ experiences on task-based language teaching: A

- narrative inquiry. *Edulangue*, 3(2), 103-126.
<https://doi.org/10.20414/edulangue.v3i2.1953>
- Hedegaard, M. (2012). The zone of proximal development as basis for instruction. In *An introduction to Vygotsky* (pp. 234-258). Routledge.
- Jager, T. de. (2016). Perspectives of teachers on differentiated teaching in multi-cultural South African secondary schools. *Studies in Educational Evaluation*. 53, 115- 121.
<https://doi.org/10.1016/j.stueduc.2016.08.004>
- Lavanaia, M., & Nor, F. B. M. (2020). Barriers in differentiated instruction: A systematic review of the literature. *Journal of Critical Reviews*, 7(6), 293–297.
<https://doi.org/10.31838/jcr.07.06.51>
- Lodico, M. G., Spaulding, D. T., & Voegtle, K. H. (2010). *Methods in educational research: From theory to practice* (Vol. 28). John Wiley & Sons.
- Lunsford, K. J. (2017). *challenges to implementing differentiated instruction in middle school classrooms with mixed skill levels* (Unpublished Dissertation). Walden University. Retrieved from <https://scholarworks.waldenu.edu/dissertations>
- Subban, P. (2006). Differentiated instruction: A research basis. *International education journal*, 7(7), 935-947.
- Rahman, K., Imansyah, I., & Utama, I. M. P. (2019). Investigating the Effect of Self-Regulated Strategy Development on Tertiary EFL Students' Writing Skills. *Edulangue*, 2(1), 19-35. <https://doi.org/10.20414/edulangue.v2i1.696>
- Tomlinson, C. A. (2001). *How to differentiate instruction in mixed-ability classrooms*. ASCD.
- Tomlinson, C. A. (2005). Grading and differentiation: Paradox or good practice? *Theory into Practice*, 44(3), 262-269.
- Valiandes, S. (2015). Evaluating the impact of differentiated instruction on literacy and reading in mixed ability classrooms: Quality and equity dimensions of education effectiveness. *Studies in Educational Evaluation*, 45, 17-26.
- Wei, B., & Ou, Y. (2019). A comparative analysis of junior high school science curriculum standards in Mainland China,

Taiwan, Hong Kong, and Macao: Based on revised Bloom's taxonomy. *International Journal of Science and Mathematics Education*, 17(8), 1459-1474.

Xi, J., & Lantolf, J. P. (2021). Scaffolding and the zone of proximal development: A problematic relationship. *Journal for the Theory of Social Behaviour*, 51(1), 25-48.