# An Assigned Seating Arrangement Based on Students' Performance: A Critical Review 

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#### Abstract

Classroom learning is one of the best times for students to be engaged in learning. As face-to-face sessions allow students to ask questions directly to the facilitator, a conducive learning environment helps to promote students' learning. This work in progress attempts to examine the seating arrangement of students in the classroom and its potential to improve students' learning. It is argued that seating arrangements based on students' academic record in the previous semester will help to enhance their participation and learning in the classrooms. As a work in progress, data presented in this paper derived from reviews of relevant documents and preliminary observations in classroom sessions. Informal semi structured interviews were also conducted with five students who were involved in the sessions. It can be concluded that students have positive views about the assigned seating arrangements. As the process of collecting data is still ongoing within the next two semesters, the researcher aims to present a solid pedagogical approach to teaching students of the defence university.


Keywords: seating arrangement, pedagogy, classroom learning, National Defence University of Malaysia

## 1. Introduction

Classroom learning has been one of the oldest methods of delivery in education. In Malaysia, classroom learning started since pre Independence days with religious schools and it continues to the modern educational system today. In the past, didactic teaching was prevalent in Malaysia. This suggests that teachers had more authority in class and this style of classroom learning did not give students much power to be independent and critical learners. Notwithstanding this, as the country matures into one of the leading economies in the region, the need to have a more conducive and challenging learning environment arises. This paper argues that one of the criteria for a challenging learning environment is the seating arrangement of the students. According to Cullen, Harris and Hill (2012) seating arrangements dictate "power and control as well as patterns of communication." Given this argument, this paper will further challenge that a fixed seating arrangement for the whole semester may allow students to develop their confidence and influence their attitudes towards learning.
The main objective of this work in progress is to argue for the potential of arranging students' seats based on their academic performance. In achieving this objective, this paper is divided into four main sections including this introduction. The introduction also examines the National Defence University of Malaysia (NDUM) and the research methodology adopted in this study. The second section analyses the existing literature on the relations between students' seating arrangements and students' perceptions towards learning. The third section presents the findings of observations in classrooms. These observations are supported by data from informal interviews with students who were observed in the classrooms. The final section concludes the paper with suggestions for the next part of this work in progress.

### 1.1 The National Defence University of Malaysia

Formerly known as the Military Academy of Malaysia (MAM), the upgrade to the NDUM indicates the critical business of educating future military officers for the Malaysian Armed Forces (MAF). Before the upgrade to a university status, the MAM had run the academic and military programmes concurrently for 11 years and had produced about 2,150 military officers who are now serving the MAF. The MAM was a smart collaboration between the Ministry of Defence Malaysia and Universiti Teknologi Malaysia, a public university established for its engineering education. The NDUM, being the youngest public university in Malaysia, enjoys an amalgamation of best practices from its siblings of higher learning institutions in Malaysia. Aimed at producing leaders of characters, the NDUM inspires to educate its graduates for the $21^{\text {st }}$ century challenges. Nonetheless, one thing that is missing from the practices at other higher learning institutions is the debates on the importance of seating arrangements in classroom learning. For some universities, students' absence in the physical classroom is acceptable. For others, they substitute students' attendance with virtual classrooms and online learning where students can learn anywhere and at any time. This scenario, however, does not exist in the
defence university.
The NDUM is a residential university; all students live on campus. As part of the leaders of characters' training, discipline is highly enforced. That is why attendance is made compulsory to all students regardless of their academic programmes and years of studies. Therefore, the researcher opines that it is significant to investigate the relations between students' seating arrangements and their attitudes towards learning and ultimately academic excellence. Seating arrangements in this paper imply the physical positions of each student during face-to-face sessions and these positions are fixed from the first day of class until the end of the semester for any one course. To investigate the significance of the seating arrangement, the next sub section will elaborate further.

### 1.2 Research Methodology

This paper reports on the first stage of a work in progress on students' seating arrangement in classroom learning at the NDUM. The methodology involved in this paper is twofold. The first one is analysing printed documents on the existing literature on classroom learning and its criteria. The second one involves five informal semi structured interviews, or rather conversations with students who were involved in an assigned seating arrangement for their language class. The instructor for the language class is the researcher herself. It is critical to emphasise at this point that the researcher started to arrange her students' seating since 2010 based on the argument that students who are weak should be given extra attention and thus placing them in the front rows will allow them easy access to the instructor. This contradicts Chism (2006) who suggested that a room with rows of tables and chairs facing the instructor demonstrates the pedagogy of teacher centred learning. There is a lot of rooms for student centred learning for this kind of seating arrangement as will be illustrated in the third section. Meanwhile good students seated at the back rows are not forgotten. At this juncture, various techniques of teaching will come handy in order to tackle and retain the good students' interests during classroom learning.

## 2. Classroom Learning

Literature on seating arrangements of students at tertiary level is little especially on topics such as issues and challenges of teaching and learning at a military learning environment, particularly ones that use Malaysia as the backdrop. In general, according to Wannarka and Ruhl (2008), educators must allow the nature of the tasks to be performed dictates the seating arrangements of the students. They argued that students display a higher level of appropriate behaviour when they are required to work individually and seated in rows. In another study, Ingram (2008) suggested that students will be more successful seating next to those who possess positive attitudes towards learning. This means that students who are inclined to study will automatically 'invite' the friends next to them to also study and focus during classroom sessions.
In completing this work, the researcher finds that guidelines for classroom management is aplenty. One of those is the work of Dunbar (2004). Dunbar stressed on the importance of seating arrangement for three key reasons. Firstly he argued that students should be seated where their attention is directed towards the instructor. The researcher concurs with this except that she would prefer to place weaker students near the instructor for the very simple reason of easy monitoring. Next, Dunbar proposed that students should be able to see the boards, the writing on the boards and the instructor. To this, the researcher also agrees with such arrangements. The layout of most classrooms at the defence university is that the tables and chairs are arranged en masse. The researcher and the rest of the educators then must make full use of the classes available for classroom learning. To promote student centred learning, educators need to diversify their teaching repertoire and become more creative. Thirdly, Dunbar put forth that classroom arrangements should allow for various activities to be conducted. The researcher opines that although the seating arrangement is fixed for the whole semester, students are free to move into groupings assigned by the instructor whenever necessary. Similarly, when pair works are given to students, at least half of the class will move to sit next to their partners in order to complete the task.
In several other studies on students' seating arrangements, it was found that students who are seated in rows are engaged more to complete their tasks than when they are seated in groups. Two studies conducted by Wheldell et al. (1981) and Hastings and Schweiso (1995) confirmed that seating arrangements can impact students’ attitudes towards learning. In actual fact, the seating arrangement can be one of the teaching strategies employed in classroom learning. According to Holyman (2012), three most prevailing seating arrangements are; buddying where students who are weak are seated next to those who are good performers; learning style where students can sit on different desks based on their learning styles; and by outcome which suggests that students with similar abilities can be grouped together and materials given are based on the ability of the students. While these arrangements have their pros and cons, the researcher argues that the buddying system is used in her class for certain activities that allow the better students to share experiences and knowledge with the weaker ones. Further, the by outcome system too is often practised by the researcher for activities that require students to be grouped according to their ability. Since the argument of this paper is that an assigned seating arrangement could
lead to positive attitudes towards learning, allowing students to sit based on their learning styles does not suit the purpose of this paper.
Stressing the importance of the roles of students in classrooms, Ramsden (1992) commented that in order to improve teaching at higher learning institutions, educators must study and comprehend how students learn. This suggests that students too must be aware of their own learning styles. Assigning students to a specific place allows the students to display their own learning styles to the friends next to them. Nonetheless, it must be noted that in Malaysian context, the top-down approach to teaching or didactic teaching is prevalent (Juhary, 2010; Smerdon, Burkam \& Lee, 1999). This approach will not produce creative and innovative generations of Malaysians. The challenge then is how this seating arrangement can ensure that students benefits from the interactions with their peers around them.
Before embarking on any reforms for Malaysian higher learning institutions, the one question that must be answered is whether the students are ready to shift their ways of learning. It is argued that students' performance will improve if they are seated next to the right peers (Pace \& Price, 2005). Further, Moore and Glynn (1984) found that the locations of students in the classrooms normally determine the number of interactions they have with the teachers and this will eventually improve their learning. This could greatly benefit the students seated in the front rows who happen to be requiring extra attention in the researcher's classes.
An example from the United States Military Academy, West Point, New York (West Point), the oldest military academy in the world, is apt to be considered at the NDUM. West Point employs assigned seating arrangements since Major Thayer became its Superintendent in 1817 (Crackel, 2002; Ambrose, 1999). Figure 1 illustrates how the Thayer System works today. The physical arrangement of the rooms at West Point reflects approaches to learning according to Thayer. The chairs are placed in an orderly fashion in a three-sided square arrangement. Cadets take their places from left to right in a descending order of academic merit that shifts constantly according to the performance of cadets. As part of the Thayer System, cadets are challenged to achieve excellence and they are motivated to perform better because everybody wants to be seated on the left of the instructor. The exemplary performance of West Point cadets should be replicated at the NDUM, and because military cadets are susceptible towards discipline, the students at the NDUM too could benefit from this kind of seating arrangement.


Figure1. The cadets at West Point (Source: Educating Future Army Officers for the Changing World, 2005)
In concluding this section, it is critical to highlight that higher education becomes so critical for the nation because it will ensure the building of a successful country (see Palmer \& Zajonc, 2010; see also Sato, 2007). The graduates will fulfil the roles of future leaders and should they fail to demonstrate their capabilities as 'graduates,' this could partly be contributed to the failure of effective and quality teaching in higher education.

## 3. Seating Arrangements: The Case at the National Defence University of Malaysia

As was mentioned previously, the researcher who is a language instructor started to arrange the students' seating since 2010. However, the intention to document what happens during classroom learning only came in 2011. Each semester, the researcher was given a class to teach due to some other administration responsibilities. As part of a bigger research project, she is currently conducting this research alone until some solid pedagogical evidences can lead to bidding for a research grant.
The students in the class are arranged based on the previous language course' results. At the NDUM, students are required to take four to five English language courses offered during their matriculation as well as undergraduate years. The researcher is normally assigned the second level of the language course to teach. Students taking her class of English for Oral Communication and Basic Speaking Skills would have undergone English for Academic Writing and Foundation English respectively. Therefore, she uses results of these two
former courses to arrange her students.
Those obtaining good results will be placed at the back of the class and weaker ones will be seated in front. The researcher refers to the first two front rows as the 'hot spot zone,' referring to the fact that students seating at this zone will receive more questions during classroom learning to make them aware of the surrounding. Figures 2 and 3 exemplify the seating arrangement of the researcher's previous classes. Basically the students will be photographed and their names will be typed underneath their photos. It has been suggested by Holyman (2012) that this will facilitate classroom management since the instructor knows the students by names and is able to reward or punish them should the need occur.


Figures 2 and 3. The Assigned Seating Arrangement of Students in Two Semesters for Two Different Courses

### 3.1 The Rationales

The rationales for arranging the students in the classroom can be contributed to many factors. Some have already been emphasised in the literature of classroom learning. Nonetheless, for a defence university that is unique and boutique, discipline plays a very important role in moulding the future leaders of characters. For the researcher, this arrangement allows for better contact with the weaker students. Monitoring of the students' performance in the class can be easily done. The most critical reason for this arrangement is that it allows the researcher to remember names and 'faces' of the students within a short period of time. Thus, rapport is easily formed between the researcher and the students which ultimately leads to better facilitation of learning in the classrooms (see Haynes \& Backwell, 2011; see also Root, 1934). Further, as the researcher is aware of the academic standing of the students in language, grouping of students can be better executed. The students at the back rows will normally be paired or grouped with the students in front. This enables peer support during classroom learning. The students also benefit from this arrangement because they are 'challenged' by their positions and egos, knowing that the whole class is aware of each other's standing in English language. Consequently, students seated in front are motivated by their seating, and are eager to demonstrate that they have improved and they are not to be seen as non performing students in the class.

### 3.2 Students'Acceptance and Perceptions

As this work is still collecting its data, the data in this paper become the pilot findings of the research on students' seating arrangement during classroom learning. Five students were asked questions on their perceptions of the seating arrangement, and whether they have benefitted from the arrangement. Out of these five students, two were seated in the front rows (Students A and B), one in the middle (Student C) and the other two at the back of the classroom (Students D and E). These five students were from the English for Oral Communication class during Semester 1, the 2011/2012 Academic Year. These conversations were conducted during the $12^{\text {th }}$ week of the semester. This suggests that students had had the experience of learning in a fixed seating arrangement. The main responses of these students are presented in Table 1 below.

Table 1. Students' Main Responses Towards the Issues on Seating Arrangements

| Main Questions Asked | Student A | Student B | Student C | Student D | Student E |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Do you like your place in the classroom? | It is okay | Not really. It is too near to you | Yes | Yes | I am okay with it |
| What do you think of your place? | I can focus | I am afraid you ask questions | Comfortable because I can see clearly the board | The friend next to me is the best student. I can learn from him | I feel alone sometimes but I can do independent work |
| Do you know why you are seated at your place now? | Yes and I learn more actually. I cannot simply sleep | I do know and I think I must study hard so I can sit at the back | I am the average scorer last semester and I want to improve | Yes and I honour this opportunity especially when I am paired with students sitting in front to complete tasks | Yes and I want to remain at this position |
| What benefits (if any) that you get from this arrangement? | I am alert all the time because you are in front. And I learn from the good students during <br> discussions | I realise that I must work hard. When I sit in front, $I$ notice that I am challenged to work hard | I learn from everybody, the good and the weak ones. Not everybody is perfect and I get both | I can share with other students and I am actually improving myself | I become more confident with my work and I trust myself more |
| Would you like to be assigned seating in your future class? | Definitely | May be if the subject is fun | Yes I hope tutorial class can do this | Yes | Sure because <br> I can project <br> a good image <br> of myself |

The responses of these students were grammatically edited by the researcher but the gist remains. It is thought provoking that students are perceptive towards their seating arrangements. Although all admitted that it was the first time they were arranged based on the previous course' results, they enjoyed classroom learning more because they know exactly who sit next to them every class. Their level of confidence is improved, and they can rely on good students to help them during their learning processes. From these responses, the researcher would like to extract two issues namely the perceptions of students and benefits of the seating arrangement.

Firstly, the students had differing perceptions towards the seating arrangement. The researcher opines that some students will be afraid of sitting in front because they are not confident to answer questions or maybe they are not comfortable because they are so near the instructor. Some other students will take the advantage to ask more questions and to focus in their learning. In addition, some students will take the surrounding environment as a support to study better knowing that the friends seated next to them are able to share knowledge. The researcher argues that this rich learning environment allows students to realise their own potential and drives them to achieve excellence. The assigned seating, although fixed and will not change until the semester ends, acts as one of the strategies to permit students to tap their potential.
Secondly, the benefits of the seating arrangement can come in many forms. From the students' responses, some students are challenged by the seating arrangement to perform better. Some of them feel that they can do good by helping other students. Additionally, some students realise their confidence and become more believing in
themselves. The researcher further argues that students who are assigned to sit at specific places in the classroom will exhibit positive attitudes towards learning because they are aware of the surrounding. Self awareness and self esteem are built during the process of learning and the seating arrangement facilitates students to achieve these.

Coming back to the argument on whether rows of seating arrangement will hinder student centred learning, the researcher does not agree with this assumption. Analysing the small data in this paper, preliminary conclusions show that elements of student centred learning are present in the classrooms. Albeit the assigned seating, students are facilitated to embark on the self discovery process during learning through individual, pair and group works. It must be emphasised that the seating arrangements practised at the NDUM will differ from the others in its implementation. For an instance, unlike West Point's practices, students will not be reshuffled during the semester to signal their progress in the course. At the NDUM, students will remain seated at the assigned position throughout the whole semester (one semester is equivalent to 14 weeks).

## 4. Conclusion

This paper ends with the argument that students' seating arrangement has helped the process of teaching and learning, and that both students and the instructor gain benefit from this practice. As a pedagogical tool, the arrangement allows the instructor to identify students who are weak and ultimately to arrange for activities and select materials that can assist learning.
Much is still needed to be done especially on collecting solid data for establishing an assigned seating arrangement as a pedagogical tool in classroom learning. The next stage of this research and its report will be focusing on the data collected from one classroom which has an assigned seating arrangement. Apart from the observations, all students in the class will be systematically interviewed to gather more data to form better conclusions.

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