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# ABSTRACT

Great teachers build great institutions. The teachers who have been playing a central role in human learning and effective teaching are believed to be the shapers of society. Usually, the effectiveness of an instructor is measured on the basis of the performance of his pupil. There exist many factors which affect the performance of the class. Classroom management is one of the important factors which matters a lot in the process of student learning. Classroom management can be considered as an art which varies from teacher to teacher i.e. every teacher has a unique style of managing his class but still there exist some general classroom practices. In this article, the emphasis is given on some of the general classroom management practices, following which can enhance the effectiveness of student learning.

Keywords: Classroom management, enhanced student learning, classroom interventions.

# 1 Introduction

"Do not train students to learn by force and harshness, but direct them to it by what amuses their mind, so that you may be better able to discover with accuracy the peculiar bent of the genius of each. -Plato" (Opted from Wayland Porter 2013). A well-managed classroom is a key aspect of effective teaching and student learning (Jones & Jones, 2012; Marzano, Marzano, & Pickering, 2003; Van de Grift, Van der Wal, & Torenbeek, 2011). Marzano (2003a) has quoted the effectiveness of teachers' actions on the achievements of their students as twice of the effects made by other factors, e.g., curriculum policies of the schools, assessment, cooperative behaviour of colleagues, etc. They further emphasis on classroom management as one of the most important factors towards enhanced student learning. Based on an analysis of 86 annual research reviews, 44 chapters of handbooks, 20 reports from the government commissions and 11 articles from journals, Wang et al. (1993) have put forward the importance of the effectiveness of classroom management. Their study acquires a total of 228 variables, affecting the achievements of students. They then combined their results with 134 meta-analyses, concluded that classroom management is the most crucial factor which shows the largest effect on the achievements of the students. Their study also indicates that a poorly managed, the chaotic classroom is not fit for student learning.

Implementing effective classroom management techniques may significantly enhance the effectiveness of classroom teaching and student learning. Establishing a positive classroom environment including a good teacher-student relationship can lead to an effectively managed classroom (Wubbels, Brekelmans, Van Tartwijk, & Admiraal, 1999). The effective teaching can also be referred to the actions taken by the teachers to create such an environment which supports not only on the academic but also on the social and emotional fronts (Evertson and Weinstein 2006). It is better to build an environment which is engaged, peaceful, joyful and respectful for both the students and the teachers. This is also advisable that the preventive procedures of the classroom room should be preferred over the reactive ones (Lewis &Sugai, 1999). Even in today's world, many teachers are frequently employing reactive plans such as punishing disruptive students (Rydell & Henricsson, 2004; Shook, 2012). In fact, the lack of sufficient knowledge or lack of belief in the preventive strategies (Peters, 2012) makes it difficult to estimate the effects of resistive



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strategies on the changing behaviour of the students. Although most of the teachers do not believe in the particular strategies even if they have been tested and implemented in many classrooms (Smart & Brent, 2010). As the teachers are usually advised to show leniency after being strict during the first week of their interaction with the class. In contrast, establishing a good teacher-student relationship since the beginning has been found to be more constructive and effective in regulating student behaviour in class (Bohn, Roehrig, & Pressley, 2004). Good preparation of the course work induces a feeling of preparedness and confidence between the teacher and student (O'Neill and Stephenson 2012). During a research, it was found that the teachers remain confident in implementing half of those strategies, they were familiar with. For the rest, they were less confident and hence they remain unable to manage the misbehaviour of the students (O'Neill and Stephenson 2012). It has also been noticed that the teachers opt for reactive strategies when they failed to manage class through preventive strategies (Rydell & Henricsson, 2004; Woodcock & Reupert, 2012).In order to build good teaching capabilities, some teachers training programs can also be useful for the teachers as these programs may provide a virtual toolbox of classroom management strategies. The teachers may pick a suitable strategy from this toolbox and can implement it (Hoogma, 2012). However, the components of this toolbox are still unclear, i.e., which strategies should be the component of this toolbox is still not sure. One of the reasons beneath this unclarity is the books are being used during the teacher's training programs. These books are based on the studies carried out decades ago. These studies in general based on the anecdotal evidence-based studies instead of empirical ones (e.g., Jones & Jones, 2012; Klamer-Hoogma, 2012; Teitler & Van Brussel, 2012). Nevertheless, a rapid change has been noticed in the daily practice of education. The student-centered learning approaches have been given emphasis over the teacher-centred approaches with an extra emphasis on the metacognitive skills of students e.g., the strategy of self-regulated learning (Dignath et al. 2008), learn by cooperation (Kagan, 2005; Wubbels et al. 2006). In the modern era, the technological learning techniques are also being injected into the classrooms, for example, the modern classrooms are being increasingly dominated by interactive whiteboards, tablets and notebooks (Schussler et al. 2007). An emphasis has been on the combined audio-visual techniques and simulation teaching techniques (Singh and Kumar 2018, Kumar and Tiwari 2019)

If we look into the definition of Evertson and Weinstein (2006) about classroom management strategies which are "The actions taken by the teachers in order to establish an environment which not only supports the students to learn not only on the academic front but also on the social and economic ones". They put emphasis on the five actions which may be helpful in developing a healthy classroom environment: (1) For a teacher, it is good to develop a supportive relationship with the students and to establish a supportive and cooperative relationship among his/her students as well (2) While making the lecture notes a teacher should focus on the instructional design. The instructions should be designed in such a way that his/her students can absorb them easily. Instructional design is also an important aspect of enhancing student learning and helpful in managing the classroom environment. (3) The group discussions among the students can also enhance their learning as well can help in developing a good classroom environment. Hence, a teacher should follow the method of group management and encourage his/her students for completing their academic tasks in groups. This point received support from Marzano et al. (2003) (4) A teacher should make efforts to develop the social skills of the students. The teacher should also improve the self-regulation of his/her students i.e., he or she must help the students for managing their thinking process, their behaviour and emotions. This will undoubtedly improve the environment of the classroom and the learning process. (5) Whenever students face challenges or difficulties in their academic tasks and in their behaviour as well, the teacher should make an appropriate plan of intervention for the students. Doing this will help the students to come back to the right track. However, point (5) plays a key role in making a good classroom environment and further enhance the process of learning and students behaviour.

# 2 Strategies for Classroom Management

The word "classroom management" refers to the process of developing an environment which is appropriate for the student learning and their social as well as self-regulation. As discussed above, the classroom management strategies are the tools which can be used by teachers for maintaining a good environment in the classroom. Now the question is in case if the management strategies failed to control the class, the teachers can use the reactive strategies? In order to get the answer to this question, we must establish a difference between preventive and reactive management strategies. Because there is a huge difference in the strategies for controlling the behaviour of the students and some time to respond to their behavioural problems (Lane et al. 2011). If we categorize the strategies, a good student-teacher behaviour, group discussion engagement, motivation towards studies, appropriate positive intervention plans and another positive strategy which has good interfacing between the teacher and the student are supposed to be preventive strategies. However, strategies for maintaining the discipline of the class such as threatening, warning and punishments etc. are said to be the reactive strategies. However, it is presumed that implementing preventive strategies is better than reactive ones. But in case if the preventive strategies failed to maintain the class behaviour or to respond to any undesired behaviour, the reactive strategies are needed (Marzano et al., 2003). The preventive, as well as the reactive strategies, may subject to the entire class, or to an entire group, individual. In case for the entire class, some rules (preventive or reactive) can be discussed and can be asked to be followed by every member. In the case of a particular group, the rules (preventive or reactive) can be declared. For an individual, the instructor may give warning, may ask the individual to leave the class temporarily in response to undesired behaviour or may ask the individual to sit alone and work. There are students in the class who have some behavioural disorders or some other issues. For such students the preventive as well, reactive strategies will be much more particular and narrower but this article will focus on the case of application of the strategies on the whole class.

If we talk about the classroom management strategies based on the definition of Evertson and Weinstein's (2006), it is difficult to systematically categorize the interventions which can cover the whole classroom under all conditions. There exist some interventions which use both the predictive as well as resistive classroom management strategies, simultaneously. Some intervention given below can be used for managing the classroom.

- 1. The intervention focused on the Behaviour of teachers: This kind of interventions are designed for improving the behaviour of the teachers. These interventions are useful to improve the environment of the classroom by changing the behaviour of teachers. These interventions contain: to introduce the rules in the class and their implementation, to introduce procedures etc. These interventions also contain some discipline interventions which further may contain some reactive classroom management strategies. This intervention supports the definition of Evertson and Weinstein's (2006).
- 2. Interventions focused on the relationships of Teacher and Student: The motivation beneath the design of this intervention is to improve the relationship between the teacher and student. In this category, a caring and supportive relationship can be developed between the teachers and student. As this intervention is focused on the "*Teacher-student relationship*", it includes only the preventive classroom management strategies. This intervention fulfils one of the requirements of Evertson and Weinstein (2006)'s definition.
- 3. The intervention focused on the behaviour of the Students: This intervention is based on both preventive and reactive classroom management strategies. The motivation for this intervention is to improve the behaviour of all the students among them. Some basic methods of group contingency and self-controlling, warnings can be used for this purpose. Both preventive and reactive interventions are included in this category. This type is a representation of the students' self-regulation referred to by Evertson and Weinstein (2006), as well as Marzano et al. (2003), who refers to students' responsibility for their own behaviour.
- 4. Students' social-emotional development-focused interventions. The focus of the intervention is on improving students' social-emotional development, such as enhancing their feelings of empathy

for other children. Both preventive and reactive interventions are included in this category. This type is a representation of the students' social skills referred to by Evertson and Weinstein (2006).

The method of bringing several reports together for making a more precise estimate of classroom management is called meta-analysis (Ferrer, 1998), which can be useful for deriving useful information from different individual studies. According to Hunter and Schmidt (1990), the motivation of meta-analysis is to answer or to deal with the new questions which have not been faced in the meta-analysis's component studies. In case when individual studies on the same object, have discrepancies in their results, the metaanalysis is useful to deal with the controversial nature of studies by improving the statistical power. In fact, the main components of the meta-analysis are the individual studies, hence, a carefully designed metaanalysis of good studies can lead us to good/ constructive conclusions but in contrast, a meta-analysis based on poorly designed studies may be full of errors and misleading. Although, the procedure of meta-analysis review is beyond the scope of the present article. We are providing a basic overview of meta-analyses has been done in classroom management. A meta-analysis, on effective classroom management, carried out by Marzano et al (2003) has been widely used in the work of classroom management and implemented in the teachers training programs. Their meta-analysis is carried out by considering the number of disruptions in the classroom and the achievement and engagement of the students as the outcome variable and outcome measures, respectively. The study carried out by Oliver et al. (2011) is focused on the problem behaviour of the students as one of an important component of classroom management. Hence, this study covers a much narrow scope as compared to Marzano et al. (2003). On the other hand, the study carried out by Durlak et al. (2011) investigated the effects of socio-emotional learning on the outcomes of the students. A meta-analysis study of Stage and Quiroz carried out in 1997, emphasise that the actions were taken by teachers against the unacceptable behaviour and towards acceptable behaviour of the students should be balanced. There exist other studies focused on some other important factors of the classroom management, e.g., emphasis on classroom management at the beginning of the new session, making the best possible arrangement of classroom for effective learning, designing and implementing new rules and procedures (Emmer et al. 2003, Evertson et al. 2003). A meta-analysis, based on more than 100 studies, carried out by (Marzano, 2003b), shows the importance of teacher-student relationships on the classroom management and concluded, better the teacher-student relationship, better the classroom management. Their study shows that an average teacher who has a good relationship with students does approximately 31% better classroom management than one who does not have. They further mentioned that the relationship between a teacher and students does not depend on the personality of the teacher and emphasized on suitable levels of dominance, cooperation, awareness of needs of students as some characteristics beneath a good teacherstudent relationship. They also proposed some simple actions for teachers, which can be implemented for establishing a good teacher-student relationship and further contribute to classroom management. Their actions, in detail, are as follows:

### 2.1 Attaining the Suitable Dominance Level

How to define the level of dominance? In a negative sense, dominance is referred to as a forceful action for command on others. In the context of classroom management, Wubbels et al. 1999 and Wubbels & Levy 1993, identified the word "suitable dominance" as an ability of a teacher by virtue of which he or she provides a clear purpose as well as strong guidance about academics and behaviour of students. A teachers can show this kind of *dominance* by confidently declaring his expectations about the behaviour of students as well as the learning goals (Marzano, 2003a). In order to fulfil this task, a teacher can establish some rules for the class by giving an appropriate response to the behaviour of the student. However, some works (Emmer et al. 1981, Evertson & Emmer 1982, Emmer 1984) have shown that the establishment of rules and procedures is crucial for classroom management. These rules can generally be defined in the context of the behaviour of the whole class. These rules and procedures may include rules for group work/discussions, rules for seat work, rules for not disturbing the class (e.g., not to chit-chat among

themselves during lectures etc.), rules for using the material and equipment (e.g., how and when any study material or any laboratory apparatus should be used, what should be the precautions while using apparatus). In an ideal condition, these rules should be established mutually by the teacher and students (Glasser, 1969, 1990). Marzano (2003a), further mentioned that based on the established rules and procedures of the class, the teacher should acknowledge the behaviour of the students, i.e., he should support and appreciate the acceptable behaviour of the students and in contrast, he must provide negative consequences for their undesirable behaviour.

Based on their instructive research, Stage and Quiroz (1997), proposed some strategies for teachers to establish a good relationship with the students. They said that a teacher can opt a verity of physical and verbal reactions for responding to the un-appropriate behaviour of the students. He/she can set some contingencies to be applied over a whole group's expected behaviour. However, by appreciating/rewarding the desired behaviour of students, a teacher can also motivate the rest of the students.

# 2.2 Establishing the Goals for Learning

For the fulfilment of this task, a teacher can provide advance information, contents and learning expectations, a statement of purpose about an upcoming unit. Let's take an example of master's students who are supposed to learn principles of Magnetohydrodynamics. These students are already aware of fluid dynamics, thermodynamics and electrodynamics, a teacher can follow the following example for defining a statement of purpose for an upcoming unit of magnetohydrodynamics: Following are some instructions of the teacher to the students-

- (a) You have now studied the components of Magnetohydrodynamics, i.e., fluid dynamics, electrodynamics and thermodynamics.
- (b) Purpose: In the upcoming unit, the main task is to derive a magnetohydrodynamic dispersion equation for the solar coronal plasma including viscosity as a damping mechanism.
- (c) Equations to be Emphasized: You have to read Maxwell equations under electrodynamics; equation of continuity, equation of motion under fluid dynamics; and gas law, equation of energy in thermodynamics.
- (d) The procedure, possible hurdles and their retraction: For deriving the dispersion equation, you must solve the equation of motion, continuity, energy, and gas law together. You may face hurdles while linearizing these equations but for that, you may refer Bittencourt 2004 (any appropriate reference). You may contact me during office hours in my office for any assistance, guidance, discussion and suggestion.
- (e) Suggested Readings: For going through the complete procedure, you may follow Priest (2014), Ashwanden (2004) and Bittencourt (2004)
- (f) Submission dates: The derivation of the above-mentioned equation must be submitted on or before October 13 (let's take any date)
- (g) Rules and procedures: Those who failed to submit the assignment on or before the deadline will not be allowed for attending the next two classes.

The above statement of purpose will give a brief idea of the problem about what to do, how much to do, from where to do and what if they fail. And the above statement of purpose will give an idea to the students that the teacher is capable of providing guidance and direction in academic content.

*How to attain appropriate dominance*, for the teacher, sometimes it's crucial to show assertive behaviour. Assertive behaviour is different from the aggressive behaviour and passive behaviour. According to Emmer et al. (2003), assertive behaviour can be shown by opting an assertive body language with erected posture. While showing the assertive behaviour, a teacher should stand on enough distance and face the affronting students. While speaking, a teacher can intentionally enhance the pitch of the tone of his/her voice from the normal classroom voice. During this act, the teacher should hide emotions in such a way that they must

not be noticeable in his/her voice. A teacher must continue obstinately until the students start behaving in an appropriate manner. Students may deny the teacher or may try to divert him by making some arguments and accusing of incompetence and incapability towards academic contents but without being diverted, a teacher must listen only justified and lawful explanations.

# 2.3 Establishing Teacher-student Cooperation

Cooperation is generally defined as an action in which *two or more than two people work together to the same end* with the awareness and concern of one another's needs and opinions. Although the actions of cooperation and dominance, in general, are opposite to each other and possess the different realm in academia. A teacher who believed to be the main factor of the classroom remains the point of focus for the action of dominance. In contrast, the action of cooperation considers the mutual understanding of both the students and the teachers to come together and to work as a team. Marzano 2003 has further emphasized the interaction of dominance and cooperation and considered this combination as an important aspect of the teacher-student relationship. However, plenty of existing strategies can be employed for attaining a certain level of cooperation. In order to make the interaction of both the dominance and cooperation a teacher should have some strategies. For example, showing assertive behaviour and giving clear learning goals shows teacher's dominance over the class and for reflecting his/her intention of cooperation a teacher can show some flexibility. Where should a teacher be flexible with the students in order to establish a good teacher-student relationship?

# 2.4 Attaining Learning Goals with Mutual Understanding

A teacher can be flexible with his/her students in a way of giving them choices for learning goals or to set goals of learning by mutual understanding. For example, if I am a teacher and teaching a course on solar magnetohydrodynamics. For this course under a section of how-to derive dispersion relations the prerequisites are some algebra, thermodynamics, electrodynamics and fluid dynamics, which I suppose they have studied during their graduation course. Let me make one more assumption that a few of them are not good in electrodynamics, a few are not good in thermodynamics and a few of them have a hard hand with the concepts of fluid dynamics. In this case, I can opt two strategies: (1) As of my duty, following the action of dominance, I can just start teaching them how to derive the dispersion relation using electrodynamics, thermodynamics and fluid dynamics. After that, I can just give them an assignment and ask them to submit it by the next week. Now, on revisiting this strategy, I find that the whole course will become mesh with a chaotic environment. This will certainly affect the environment and further the learning process. I may also face some unexpected /inappropriate behaviour from the students as a response to this dominance. (2) On the other hand, as the second strategy, I may ask the students to raise their hands who are weak in thermodynamics, electrodynamics and fluid dynamics, respectively. I may then propose them to have some revision classes for all three subjects for the fulfilment of requisites. So that all the students can revise or learn the prerequisite contents for deriving the dispersion relation. These classes may be out of the class timetable (e.g., before the college time, after college time or maybe on weekends). This strategy reflects my flexibility towards the students regarding the course contents. This strategy will provide them with an opportunity of revising their prerequisites and further help them to do better in the present assignment. It will certainly increase their confidence in the contents and will let them feel my seriousness about the contents and capabilities of guiding them throughout the course. As the third and final step, I need to make good interfacing of both of the above strategies i.e., I should present a combination of dominance and flexibility. For this, I can show my dominance by assertively declaring that every student has to derive a dispersion equation after completing the contents of this course and I will not tolerate any ignorance towards what I said. Simultaneously I can demonstrate an intention of flexibility by proposing some extra classes on the requisite subjects. I can also offer a few of my office hours for discussions/ guidance and assistance for their assignment. This unified behaviour of dominance and flexibility will not only enhance the effectiveness of classroom management but also the quality of learning.

### 2.5 Awareness Towards the Students with High-needs

In a school, there are many students who are probably suffering from some mental pressure, emotional breakdowns and behavioural disorders. It is advisable that the teacher should frequently (approximately every day) meet the group of such students and should try to rectify their issues (Adelman & Taylor, 2002). In order to deal with such students, the teachers along with the college counsellors may need some special and beyond the classroom interventions (Dunn & Baker, 2002).

### 3 Conclusion

Manage a classroom effectively can be a difficult task for beginner teachers. At the present time, classroom management has become an ingredient of many teacher's training programs but still, only less attention is paid in this direction. This article has particularly focused on the practices of classroom management which can be employed for enhancing the student learning. The motivation of a teacher should not be to teach his or her students. The emphasis should on "How much they are learning". The present article concludes that classroom management is an important part of student learning and plays a vital role in improving the learning environment as well as in enhancing the learning capacity. In order to enhance student learning, an instructor can pick up classroom management as the first step and can employ some useful classroom practices. The instructors are also advised to prefer preventive practices over reactive ones. The high needs students sometimes need special care, treatment and interventions. The general classroom management techniques. The upcoming article will focus on the needs and their rectification of such students.

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