The aspect of motivation as per behavioural

Business, Management

The Factors That Contribute To Effective Behaviour ManagementIn many studies one's motivation in learning science has been noted as s key impediment in efficiently managing student behaviour in secondary school. Lack of motivation of students results in a failing to succeed academically, primarily in two important ways. Firstly, a student can be disengaged from the outset because they fail to see the importance of the subject matter; where students might be motivated at first they can become demotivated in course due to disinterest.

This demotivation thereafter results in absenteeism; a lack of cognitive focus in class; unconstructive attitude to learning and a lack of student engagement (Hampden-Thompson & Bennett 2013). Consequently, to better understand the factors which contribute to reductions of motivation for learning science in Secondary schools need to be better considered so that effective interventions and changes in instructional practices can be put in place to shift the attitudes and beliefs of students towards more positive learning attitudes. Behaviourists define motivation as a set of biological and psychological processes that facilitate the triggering of action in its orientation, intensity and persistence. One's own perception of one's self and his environment is intrinsically tied into the construal of motivation. It is this which presses on him a choice of activity, to engage in and persevere in accomplishing a task and thus arrive at intended goals (Brophy, 2013). Unfortunately, this aspect of motivation as per behavioural management is oftentimes overlooked. As a trainee teacher, the factor I am challenged to consider is whether motivated teaching in science improves student's

behaviour and thus lead to a more enhanced understanding of learning, and whether it increases the desire to learn.

At the core of this study is the examination of factors which might play an important role in effective behaviour management in science classroom. In light of this, observations were made about learning how authoritative literature on motivation in secondary science education ties in with the actual classroom practices. These observations were essential to deliberating on how motivational practices and academia overlap. Motivational Orientation Framework for Science StudentsMany scholars such as Niemi et al (2014) and Reeve (2004) have discussed the dynamic of student motivation and its connection to interest in science. An obvious impediment to disinterest is that while students do find science-related issues important in general, many do not have a liking for science courses at secondary school and do not envision for themselves a science-based career in their future (Hampden-Thompson & Bennett, 2013; Long et al, 2010; Gravey, 2014; Han et al, 2015). Students can also hold to negative stereotypical ideas about science-based occupations or do not associate the study and profession with any appealing role models (Mujtaba and Reiss, 2014; Potvin & Hasni, 2014). Perhaps the five most well-known principles of student motivation are those espoused by Seifert (2004):• Higher levels of achievement values • Higher levels of interest and intrinsic motivation • Adaptive attributions and control beliefs• Achievement goals which seek to motivate and direct • Adaptive self-efficacy and competence beliefs There is some overlapping between Seifert’s principles and some discussion of the motivational framework which some researchers have developed. This is

quite expected because Seifert’s work is based on the Information Processing School in which a top-down model structure of psychological constructs in cognitive and educational psychology theories is drawn upon.

Another approach, adopted by other researchers, considers the Student Approaches Learning (SAL) tradition which is conversely based on a bottom-up approach, stemming from interviews with students for example, about their personal motivations and other learning processes. Nowadays there is a growing idea and belief that if teaching is done on the premise that students can be high achievers both academically and socially, this sense of student empowerment will result in better behaviour and performance in school. This approach, however, based on teacher expectation of students, might be read as an oversimplification of a more complex process. It also, conversely, states what is otherwise an obvious teacher-student consideration – that teachers will quite naturally expect good standards from students.

The Factors That Contribute To Effective Behaviour ManagementThe key factors that have been identified as having a considerable bearing on effective behaviour management involve the provision of incentives – rewards, extrinsic rewards, autonomy support and enhancing engagement. These determinants offset the kinds of challenges that demotivate students and consequently result in negative behaviours in science classrooms at KS3 and KS4 levels. Rewards and Sanctions: In light of the aforementioned incentive building methods, it has been evidenced (Maguire, Braun & Ball, 2015) that the use of a reward-based system does have a positive effect on student behavior whilst punishments were shown to be far less affective. The

pupils assessed in one study (Payne, 2015) however revealed cases of three times as many occasions of meting out of punishments as opposed to rewards. A similar trend was reflected in the cases of verbal disapproval as opposed to verbal approvals. Maguire, Braun & Ball (2015) draw on the rewarding of behaviors which have a direct relationship on their environment. In a school setting these include four categories which Payne (2015) identifies: 1.

Material rewards (e. g., prizes, trophies, badges). 2. Symbolic rewards (e. g.

, title, status, houseplants). 3. ‘ Assessment’ (e. g., marks, grades, stars). 4. Teacher reactions (e.

g., praise encouragement, approval and recognition). The intrinsic value of a reward based system is that it also allows a coalescing of the aims of a teacher and the expected target setting of a student. Students not only draw on the incentive of rewards but also feel challenged to compete with others who become recipients of rewards. The studies of Maguire, Braun & Ball (2015) reveal a consistent appreciation among second day school students of the effective nature of rewards instead of punishments.

This is shown to often stand in contrast with the perceptions of teachers. Extrinsic reward: There are a host of motivational factors that will have a bearing on a student’s attitude and performance. Some of these are external pressures and they vary depending on their short-term or long-term functions. A student will be driven to do well academically as a short term goal and some will consider more lasting aspirations such as contributing to

a body of science-based academic literature. As Potvin and Hasni (2004) reveal therefore, student progress outcomes stem from extrinsic incentives which are essential in that a high performing student will be more likely to be accepted for further studies in a graduate school or similar.

These outcomes result from extrinsic reward since it of course follows that such academic performance becomes a necessary stage of progress into more grounded academic research. What lies at the core of extrinsic rewards is the need for approval, the fulfilment of introjected needs. It is quite common that students will aim to achieve high to please their parents or guardians, an introjected need for approval. This could culminate in the seeking to achieve high grades in secondary school (Niemi et al.

, 2014) and the specifics of grades might be generalised later in their careers to impress work colleagues. This positive incentive can exist together with avoidance-based fears of rejection if they did not acquire the approval of others (Niemi et al., 2014). An example of a conceptualisation which seeks to reveal the collective influence of self-determination categories (SDT) is that of extrinsic reward proposed by Han et al. (2015).

Though substantial research supports the aforementioned intrinsic motivation model (Hampden-Thompson & Bennett 2013), there are deficiencies in empirical evidence concerning moderately controlled forms conceived by self-determination theories. These for example concern identification and interrogation models (Long et al. 2010; Mujtaba & Reiss, 2014). In the study of Han et al. 2015 of a group of secondary students it was discovered that an identified control produced a more suggestive

negative connection with motivation than a fundamental and intrinsic motivation. Autonomy Support and Enhancing EngagementWhat is quite foremost in supporting and enhancing students' engagement in class is the provision of an instructional environment which seeks to inculcate a sense of care from teachers and peers (Han et al.

2015). The environment would be required to incorporate practices such as both group learning and independent reasoning (Hampden-Thompson & Bennett 2013). These practices, with instructional support, can be instrumental in facilitating students' thinking though their work (Han et al. 2015) and this in turn can aid in bettering student outlook towards their science education and consequently behaviours can improve.

With the rise of computer technology in the last decades, the place of science education in the frame of computer technology has provided students with a range of new learning opportunities (Brophy 2013). Computers have now become an integral and essential part of learning and this extends too to science education. The new spheres of teacher-student engagement in computer technology and the new opportunities for student curiosity have served to reinforce correct and approvable behaviours. Such curiosity and augmented interest in science education stems from the opportunities provided to deal with what may be deemedmore realistic science approaches such as in data collection and simulations (Han et al. 2015).

ConclusionTeachers recognize that motivation is essential for learning and therefore want to have motivated students while managing behavior. Over

the years, science educators have used a variety of approaches to encourage students with problems similar to a range of students learning science. Factors such as rewards and sanctions; autonomy support and enhancing engagement as well as extrinsic rewards aid teachers in behavior management through motivation. Teachers should indeed use such approaches regarding regular science classroom settings. Although behaviorism by no means provides a complete framework for motivation, its management through motivation is useful in promoting science studies.