Motivation, Learning, and Performance

It is well-established that motivation is an integral part of both learning and performance/accomplishment – in the workplace, in sports performance, and in education (e.g., Ambrose *et al*, 2010; Colquitt *et al*, 2000; Deci & Ryan, 1985; De Raad & Schouwenburgh, 1996; Kanfer, 1991; Locke & Latham, 2002). Motivation takes individuals to a place of directed action, which typically results in an increased level of performance and/or learning gains. Skills are acquired and put to use, tasks and projects are accomplished, and those supervising the work or learning are rewarded for the improved output.

Ambrose *et al* (2010) characterizes motivation as a key starting point for learning and performance. In their model of how learning works, they place motivation as a driver for goal-directed behavior, which in turn leads to learning and performance gains (see Locke & Latham (2002) for a complementary account). What is key for our purposes is the question of what factors contribute to motivation in the first place. Drawing on others before them, Ambrose *et al* (2010) pull out three core contributing factors: (a) the importance – or *value* – of a goal to the individual, (b) the individual's belief – or *expectancy* – that he can in fact achieve the goal before him, and (c) the individual's belief – or *expectancy* – that upon achievement of a goal she will be rewarded appropriately.

Further, the role of value in motivation can be better understood in terms of the distinction that is often made between *intrinsic* and *extrinsic* motivation. Simply put, we say that a person is *intrinsically motivated* when the source of her motivation comes from the accomplishment of the task or goal itself. For example, an intrinsically motivated student may work on solving a difficult problem just for the satisfaction that comes with success, or the inherent interest he has in the problem at hand. An *extrinsically motivated* individual, on the other hand, may be motivated to solve the same problem, but he does so for a reward or outcome that is external to the task itself – such as a grade or recognition from others.

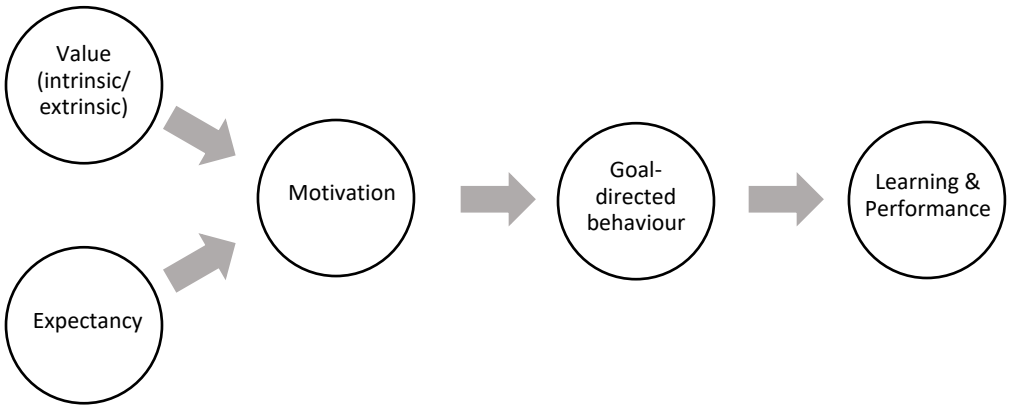

Figure 2: Motivation and Learning as presented by Ambrose et al (2010)

Extrinsic motivation can be further broken down into different types, distinguished by the location of their source as external or internal to the individual. Ryan & Deci (2000) break it down into four distinct categories, as depicted in Table 1:

Type of Extrinsic Motivation	Source of Motivation
External Regulation	External rewards/punishments
Introjected Regulation	Approval from self/others (ego-controlled)
Identification	Conscious valuing of activity, or self-endorsement of goals
Integrated Regulation	Incorporation into an internal hierarchy of goals

Table 1: Types of Extrinsic Motivation

In general we expect student motivation to increase as the source of that motivation is more internal to the individual. So, for example, we can expect a student completing an assignment where they have been given no opportunity to connect with their own interests to show signs of weaker (or less persistent) motivation than a student who has been given the opportunity to engage with creativity and flexibility. The first student may feel annoyed at the arbitrary nature of the tasks forced upon them, while the second is likely to engage in a rich learning experience with a view to building a specific skillset they expect to be valuable in the future.

Building on this, research also shows that when we give students the power of choice, their motivation (and thereby their learning) increases. *Locus of control* – or the extent to which a person believes their fate is under their control – is a factor that has been shown to be related to academic and workplace achievement (Findley & Cooper, 1983; Kalechstein & Nowicki, 1997; Rotter, 1966; Spector, 1982). Furthermore, when a student believes they are autonomous – which tends to be the case when they are afforded the right to make decisions for themselves – their motivation and learning increases. (Deci & Ryan, 1987; Iyengar & Lepper, 1999; Skinner & Belmont, 1993; Zuckerman *et al*, 1978)

PART VI: REFERENCES AND RESOURCES

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