

Factors	Variables	Definition	Source
Demographic Data	Gender	Students' gender, i.e., male or female	Researcher's self-constructed item
	Age	Students' age	Researcher's self-constructed item
Motivation	Interest	Interest and inherent pleasure when doing an activity, it assesses intrinsic motivation directly. (Deci & Ryan, 1985)	Intrinsic Motivation Inventory IMI (CSDT, n.d.)
	Direct Performance-salient Incentive	Incentives that link directly to the individual's performance, e.g., immediate reward, grade improvement and avoidance of immediate punishment. (Cerasoli et al., 2014)	Researcher's self-constructed item based on the publication by Cerasoli et al. (2014).
	Indirect Performance-salient Incentive	Incentives that link indirectly to the individual's performance, e.g., teacher's recognition, peer's recognition (Cerasoli et al., 2014).	Researcher's self-constructed item based on the publication by Cerasoli et al. (2014).
Personal Attributes	Perceived Competence	Competence based on students' understanding and perception of themselves (Ryan & Deci, 2001)	Intrinsic Motivation Inventory IMI (CSDT, n.d.)
	Effort	Effort that measures the investment of a person's capacities in what he/she is doing. (Fredricks et al., 2004)	Intrinsic Motivation Inventory IMI (CSDT, n.d.)
	Pressure	Pressure experienced by students during the activities. (Fredricks et al., 2004)	Intrinsic Motivation Inventory IMI (CSDT, n.d.)
	Value	Perceived value or usefulness of the activities (Deci et al, 1994)	Intrinsic Motivation Inventory IMI (CSDT, n.d.)
	Perceived Choice	Effectiveness as perceived by individuals feels when they are performing a task (Ryan & Deci, 2000)	Intrinsic Motivation Inventory IMI (CSDT, n.d.)
	Relatedness (in-class EGG only)	Perception of personal connection with others (Teixeira et al., 2012) and it is used to measure the impact of peers' interaction in the EGG only	Intrinsic Motivation Inventory IMI (CSDT, n.d.)
Academic Achievement	Pre-Test	10 MCQ questions were asked about the topic content before the administration of the intervention	Researcher's self-constructed items based on the topic content
	Post-Test	10 MCQ questions were asked about the topic content after the administration of the intervention. It is the same questions as the Pre-test.	Researcher's self-constructed items based on the topic content