

Enhancing Learning and Development for Upper Secondary Students with Outside Participants

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Abstract

The study aims to address the feeling of school disengagement among upper secondary students who are faced with socioeconomic issues, especially poverty. Instead of relying on a traditional approach of a teacher-student relationship, the study integrates outside participants from business communities to engage with students (in collaboration with teachers). Direct interactions and conversations (from school visits and workshops to enhance science experiments), as well as attention and recognition of students' progress in learning, have been part of the activities of external participants. The survey is developed and completed by 171 current (Grade 12) and former students who have had at least two-year engagement with outside participants in September 2023. The overall findings show that having outside participants involved in the learning and development of upper-secondary students who feel disengaged from school has been positive. Outside participants have positively influenced subjective norms, which is perceived to be an important factor for student's attitudes about learning. On the other hand, outside participants who have continuously provided direct feedback (through interactions and conversations with students) can positively affect students' decisions and intentions to learn. This condition is essential for the actions and behaviour of students in learning and development.

Keywords: learning, feedback, attitude, subjective norm, intention, and behavior

INTRODUCTION

Learning is essential for everyone due to its impact on personal and professional development (Argyris, 1991). Quality of learning relies on the effectiveness of a teacher-student relationship (Engels *et al.*, 2021). Creating trust and a positive learning environment (e.g., improving psychological safety and ensuring physical safety) have been traditionally handled by a teacher. This relationship depends largely on constant communication and engagement with empathy from a teacher (Angus *et al.*, 2009). An effective teacher can entice learning interests, inspire willingness to work during lessons, encourage group discussion, and inject a positive attitude. The ability to fulfil these responsibilities requires a teacher's familiarity with students. This ability is also influenced by a high degree of students' uniformity (e.g., family background, ethnicity, etc).

Learning is a process that a student needs to experience when gaining new skills, expertise, perspectives, and skills. The process of learning is derived from many factors- specific (or personal factors) and learning environment (Abubakar *et al.*, 2024). For instance, attitude, perceived importance of surrounding expectation during learning, and motivation (Anghelache, 2013). Other issues can also influence learning, such as financial well-being (e.g., poverty), family background (e.g., a broken family), geopolitical conflicts (e.g., displacement due to military operations), and uncontrollable circumstances (e.g., natural disaster and pandemic) (Chieng *et al.*, 2023). See Theory of Planned Behavior (Ajzen, 1991).

During the last two to three decades, a classroom and its learning environment have faced many challenges (Perez-Salas *et al.*, 2021). Classroom disengagement is one of the primary challenges today. This disengagement happens due to various attributes, especially socioeconomic status (e.g., poverty) (Washor and Mojkowski, 2014). Poverty can affect the effectiveness of a teacher-student relationship, especially when students are at the upper secondary level. These students realize that, within a few years, they will look for employment opportunities. Teachers are not prepared to handle this complex circumstance. This is due to a presumption that a teacher-student relationship is suitable when students plan to attend a university after graduation. This may not be the case for upper secondary students who plan to go to work (instead of pursuing a degree in higher education).

Case Study

In Thailand, Ministry of Interior schools were created when the country's population was growing rapidly, especially in the 1960s. The Ministry of Education (part of the Central Government) could not keep up with the establishment of new schools. Thereby, the communities in the remote areas were provided with so-called opportunity schools (an extension from a daycare and a kindergarten as part of the responsibility of a local government- Ministry of Interior). During the 1970s (and the subsequent two decades), rapid urbanization (as the country shifted from agricultural to industrial and service economy) resulted in large migration from provincial areas to big cities, especially Bangkok. Bangkok Metropolitan Administration or BMA was responsible for providing basic services such as healthcare and education to the migrated population.

As of 2023, there are 437 BMA schools that are responsible for about 260,000 students. Note that approximately 30% of these schools offer a secondary level of education. There are more than 10,000 teachers, teaching assistants, and staff or employees. BMA's Department of Education oversees school-related affairs (e.g., curriculum development, assessment and evaluation, procurement, teacher training and professional development, etc.). Despite the massive size, BMA students are generally perceived to be underachievers and are known to be disengaged from school. Note that most students are faced with poverty and are from either a broken family or a single-parent family. They are not Bangkok residents since almost all of them were born outside the city and migrated with their parents.

School disengagement indicates decreasing classroom participation, increasing tardiness, late assignment submissions, frequent disruptive behaviors. To make this matter worse, BMA's in-service teacher training traditionally focuses on academic subjects such as STEM (Science, Technology, Engineering, and Mathematics). This focus has negatively affected the effectiveness of a teacher-student relationship, especially due to a lack of empathy and understanding about the nature of students as well as communication and engagement (Vollmeger and Rhienberg, 2005).

The business community (BC) represents an external entity that has been integrated into supporting how upper-secondary students learn and develop. The reason for this integration is that most students from BMA secondary schools cannot afford to continue their education further and need to seek employment. As a result, many academic subjects may not be relevant due to a lack of relatedness with students' future. At the same time, the effectiveness of a teacher-student relationship has been problematic, which occurs when there is a lack of student motivation to learn. BC provides constructive feedback that is tangible (not symbolic) through

interactions and conversations with BC delegates continuously and aims to influence behavior and mindset of students in a positive manner. BC has engaged with two BMA schools as a pilot project since 2016.

BC's direct feedback includes two primary activities- school visits and workshops. Working with teachers helps pave the way for BC to engage in the learning and development of students. One of the most significant changes relates to science experiments. BC earlier suggested the use of products as part of teaching and learning instead of a report and a formalized assessment. Integrating product development (e.g., fertilizers, soap, detergents, etc.) from science experiments has allowed BC to be involved as an external feedback provider. BC, in collaboration with teachers, has made many campus visits and has directly interacted with students about their products. This represents open communication on possible product improvement (Omer and Abdularhim, 2017).

Usually, during these visits, BC delegates ask the students about related subjects such as packaging, labeling, costing, pricing, customer experience, emotional intelligence, etc. Since these topics are not taught, BC delegates organize a workshop to help transfer business experiences and skills to address these questions, which stemmed from the visits. The workshops have also allowed active interactions and discussion with students. These two activities reflect recognition and attention from outside participants. BC's role in providing recognition and attention also creates expectations on students in terms of how they behave during lessons and classroom-related activities, how they illustrate their intention to learn, and what actions and decisions they make to enhance their learning and development (e.g., skills and knowledge) (Peifer *et al.*, 2020).

Research Question

Given the ineffectiveness of a teacher-student relationship to deal with classroom disengagement for upper secondary students, how does the use of external entity affect learning and development of disengaged students?

Objective

The research focuses on the roles and contributions of external participants on learning and development of students. This research aims to explore the roles of direct feedback from outside participants.

Method

The survey was developed and distributed in September 2023 (See Appendix A). The statistical analysis involves LISREL (linear structural relations) program with other relevant applications. The following model is developed to achieve the research's objective.

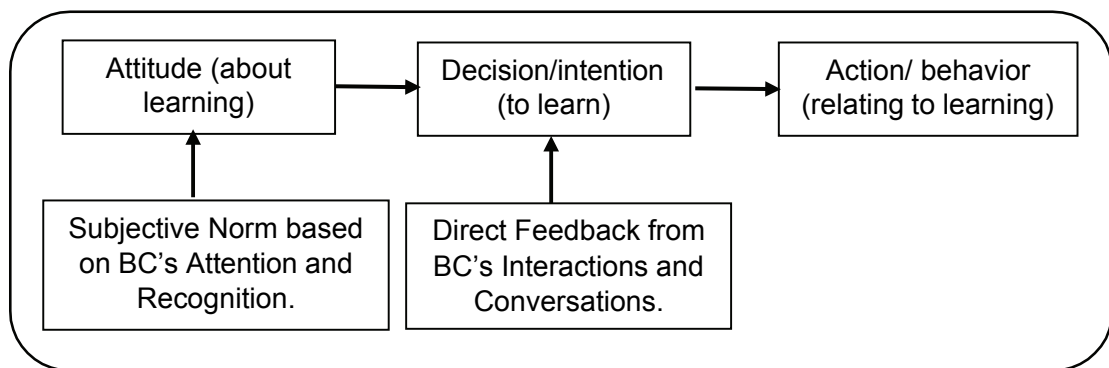


Figure 1: Research Model and the Roles of BC (in Learning and Development)

Note:

- Action/ behavior to be denoted as B (representing students' actions and behavior to strengthen their learning and development).
- Decision/intention to be denoted as D (representing students' decision and intention to learn and participate in classroom activities).
- Attitude to be denoted as A (representing students' attitude about learning and their feeling about the benefits of learning).
- Direct feedback to be denoted as DF (representing the direct interactions and conversations between BC as outside participants and students).
- Subject Norm to be denoted as N (representing the perceived influence from peers and outside participants on decision, intention, action, and behavior of students).

Results

A total of 171 current (Year 12) and former students participated in the survey. The targeted group of students is those who have had at least 2-year interactions with BC. Out of 171 students, 76 are male (or 44.44%), while the remaining 95 persons (or 55.56%) are female. The overall findings show that having outside participants involved in the learning and development of upper-secondary students who feel disengaged from school has been positive. Outside participants (BC delegates) have positively influenced subjective norms, which is perceived to be an important

factor for student’s attitudes about learning. On the other hand, outside participants (BC delegates) who have continuously provided direct feedback (through interactions and conversations with students) can positively affect students’ decisions and intentions to learn. This condition is essential for action and behavior of students in learning and development- more engaged students. See Figure 2 and Table 1.

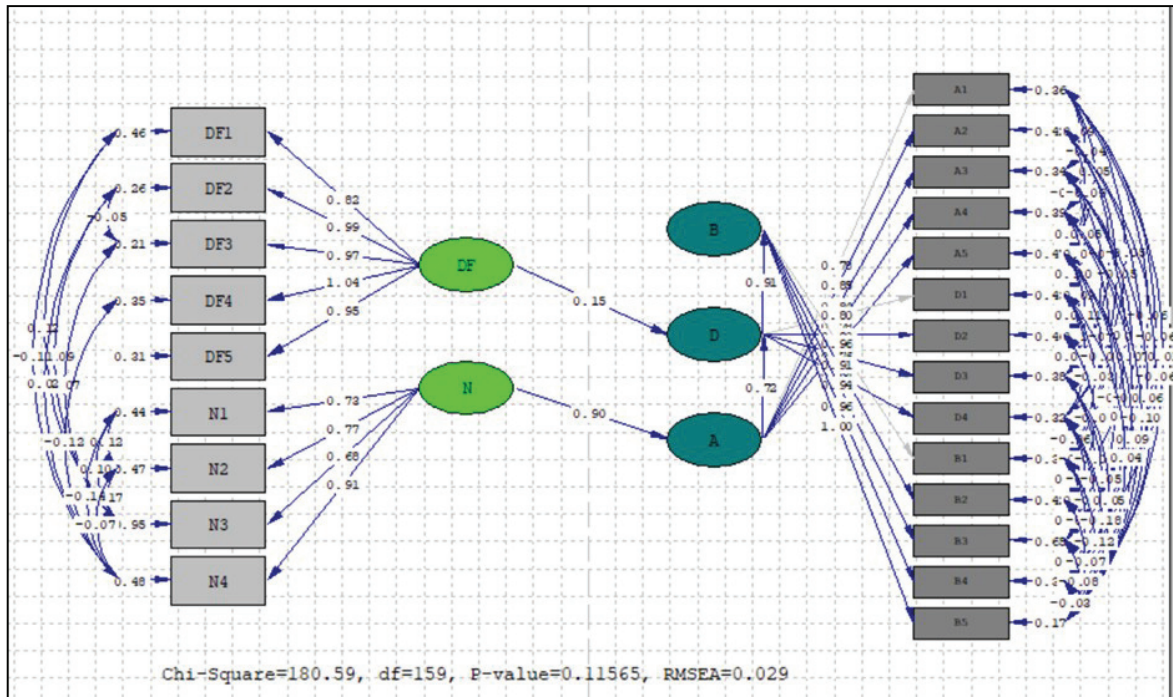


Figure 2: Results from the Confirmational Factor Analysis Table 1:

Index	Criteria Value	Model Value	Result
p-value	> 0.05	0.116	PASS
χ^2/df	< 2.00	1.136	PASS
RMSEA	< 0.05	0.029	PASS
SRMS	< 0.08	0.042	PASS
GFI	≥ 0.90	0.910	PASS
CFI	≥ 0.95	1.000	PASS
NFI	≥ 0.95	0.980	PASS

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Appendix A: Illustration of the Survey

Action/behavior

- B.1: I believe I have worked hard at school.
- B.2: I contribute during group work and assignments at school.
- B.3: I complete my tasks and work on time regularly.
- B.4: I share my knowledge and experiences with others.
- B.5: I engage in learning with others during work and assignments at school.

Decision/intention

- D.1: I want to do better than in the past.
- D.2: I want to work harder.
- D.3: I am aware that learning results in increased knowledge.
- D.4: I feel that I have accumulated more knowledge during the past year.

Subjective Norm

- N.1: I feel that my work is influenced by attention and recognition by my peers.
- N.2: I feel that my work is influenced by attention and recognition by outside participants.
- N.3: Attention and recognition from outside school influence the expectation on myself.
- N.4: I feel that my behavior should meet with increasing expectations on my work.

Attitude

- A.1: I want to learn more at school.
- A.2: I feel confident about myself.
- A.3: I believe my work at school is meaningful for my future.
- A.4: I feel that I can openly discuss work with my peers.
- A.5: I feel that a mistake I made during work is part of learning.

Direct Feedback

- DF.1: Attention/ recognition from outside school is the result of my work.
- DF.2: Attention/recognition from outside school stimulates me to learn more about my work.
- DF.3: Attention/recognition from outside school reinforces me to complete work on time.
- DF.4: Attention/recognition from outside school helps create safer and more open learning environments.
- DF.5: Attention/recognition from outside school encourages me to communicate more with my peers.