# The Impact of Collaborative Learning Factors on Enhancing Colleges Students' involvement in Extra-Curricular Activities: The role of Perceived Benefits, Learning Goals, and Educator Support in China

Feng Feng and Samah Hatem Almaki

Abstract-This study explores the impact of collaborative learning factors on college students' involvement in extracurricular activities in Anhui Province, China. Through a quantitative correlational design, data were collected from 1402 students across four colleges. The research investigates the interplay between perceived benefits, learning goals, and educator support in shaping students' engagement in nonacademic pursuits. Findings reveal that perceived benefits, including skill development and personal growth, significantly influence students' motivation to participate in extra-curricular activities. Additionally, the alignment of these activities with students' academic and personal learning goals plays a pivotal role in determining their level of involvement. Moreover, educator support, such as mentorship and encouragement, emerged as a critical factor in promoting students' participation in extra-curricular pursuits. Despite challenges such as time management issues and social pressures, addressing these barriers is essential to creating an enabling environment that fosters active engagement. This research contributes to a deeper understanding of the collaborative learning factors influencing college students' involvement in extra-curricular activities, providing insights for educational institutions to develop targeted interventions and strategies.

Keywords—collaborative learning, extra-curricular activities, perceived benefits, learning goals, educator support

## I. INTRODUCTION

Vocational colleges in Anhui Province, China play a crucial role in the region's educational landscape, offering specialized training and skills development to students pursuing practical and hands-on careers. Anhui Province, located in eastern China, has recognized the importance of vocational education in preparing individuals for specific trades and industries, contributing to both regional economic growth and individual career advancement.

These vocational colleges provide a diverse range of programs, covering fields such as engineering, technology, agriculture, healthcare, and business. Students enrolled in these institutions receive practical training, equipping them with the skills needed to enter the workforce directly upon graduation. The curriculum often integrates both theoretical knowledge and practical application, ensuring that students develop a comprehensive understanding of their chosen field.

Feng Feng, City university Malaysia, Malaysia (Email address: 291429948@qq.com.).

Samah Hatem Almaki, City university Malaysia, Malaysia (Email address: almakisamah7473@gmail.com).

Anhui's vocational colleges also foster partnerships with local industries and businesses, facilitating internships, apprenticeships, and job placement opportunities for students. This collaborative approach ensures that the education provided aligns with the demands of the regional job market, enhancing graduates' employability.

Furthermore, vocational colleges in Anhui Province contribute to addressing the broader goal of China's economic development by producing a skilled workforce capable of meeting the demands of a rapidly evolving job market. The emphasis on practical skills and industry-relevant knowledge reflects a commitment to meeting the needs of various sectors, ultimately boosting the province's economic competitiveness.

In recent years, Anhui Province has seen growth in the number of vocational colleges and the diversity of programs they offer, reflecting the increasing recognition of the value of vocational education. As these institutions continue to evolve, they are likely to play a pivotal role in shaping the future workforce of Anhui Province, contributing to both individual success stories and the overall development of the region.

But the relatively low social status of vocational education is currently an important topic in global debates, as its objectives and processes are aimed at addressing social, economic and personal concerns (Relly, 2022). The low standing of vocational education may have profound consequences on how government, industry, employers, teachers, parents, and students perceive vocational education (Billett et al, 2022). This issue is globally recognised in both developed and developing countries (UNESCO-UNEVOC, 2018), and is also a notable issue in China (Hao & Pilz, 2021). In recent years, China has placed an unprecedented emphasis on improving the attractiveness and standing of vocational education and has taken several measures to achieve this goal (Ministry of Human Resources and Social Security of the People's Republic of China, 2022). Challenges of the globalization demands vocational education graduates should be able to communicate, collaborate, critical thinking, and creative and innovative well. Competence of vocational education graduates was largely determined by quality and types the learning models provided (K. Arwizet, 2019).

In recent years, China's higher education landscape has witnessed a surge in the emphasis placed on extracurricular activities as integral components of student development. However, a notable gap exists in our understanding of the underlying collaborative learning factors that contribute to engage college students' active participation in these activities (Ewell,2001).

Extra-curriculum involvement can present challenges for students. Some students may struggle to balance their extra-curriculum activities with their academic involvements, leading to feelings of being overwhelmed and difficulties managing their time effectively. College students may encounter various problems when participating in extra-curricular activities. The challenges of extra-curriculum activities for students include limited positions, selection criteria, lack of support, personal issues, poor time management, risk of lowered academic performance, and lack of physical and financial resources (Fredricks, 2011). These are things they need to overcome and solve in order to grow and develop better. Time management is a common problem. Students need to balance their time between academic and extra-curricular activities, ensuring that both receive adequate attention. They may need to create a schedule or use other time management tools to help them manage their time better (Burgess, 2013). Choosing the right activity is also a challenge. Students may be faced with a variety of activities and clubs to choose from and need to carefully consider their interests and abilities and choose the activities that suit them. At the same time, they also need to consider the purpose and meaning of the activity to ensure that they can gain valuable experience and skills (Fredricks and Eccles, 2008). Event organization is also a common problem. Students may need to plan and organize activities, including determining the theme of the activity, arranging venues and resources, coordinating participants, and so on. This requires them to have good organizational skills and coordination skills to ensure the smooth running of activities.

# II. PROBLEM STATEMENTS

The problems of college students' participation in extracurricular activities mainly include the following aspects:

- 1. Lack of attraction of activities: Some extracurricular activities are outdated, lack of innovation, or do not meet the interests and needs of college students. Resulting in a lack of attraction. This may lead to low willingness and low participation of students.
- 2. Time conflict and academic pressure: College students usually face heavy academic pressure, and extracurricular activities often require a certain amount of time Between. Therefore, time conflict has become a major problem for college students to participate in extracurricular activities. How to ensure the study at the same time, reasonable arrangement of time to participate in extracurricular activities, is the challenge that college students need to face.
- 3. Activity organization and management problems: There are deficiencies in the organization and management of some extra-curricular activities, such as unclear and ineffective activity processes Publicity and promotion, etc. These problems may lead to poor participation experience of students and affect their participation enthusiasm and satisfaction.

- 4. Lack of effective guidance and support: For some college students who are new or unfamiliar with a particular field, there is a lack of effective guidance and support Holding can be a challenge in participating in extracurricular activities. They may need more help and guidance to fit in and participate in activities, but often don't get enough support.
- 5. Social pressure and competition issues: College students may face social pressure and competition from their peers in certain extracurricular activities. This can cause some students to feel nervous, insecure or lack confidence, which can affect their willingness to participate and performance.

This study seeks to address this gap by examining the interplay between perceived benefits, learning goals, and educator support and their impact on fostering students' involvement in extra-curricular pursuits. One crucial aspect influencing students' engagement in extracurricular activities is their perception of the benefits derived from such participation. (Bers, 2005). This includes factors such as skill development, personal growth, networking opportunities, and the enhancement of overall well-being (Bers, 2005). Understanding how college students perceive and weigh these benefits will provide insights into the motivational aspects that drive or impede their involvement in extra-curricular activities (Brown, 2015). Moreover, the alignment of extracurricular activities with students' academic and personal learning goals plays a pivotal role in determining their participation levels. (Beyer,1995) Exploring the correlation between these learning goals and extracurricular engagement can shed light on whether students view these activities as complementary to their formal education or as potential distractions. This insight can guide educators and administrators in tailoring extracurricular offerings that align with students' academic aspirations. (Brown, 2015)

Furthermore, Educators play a crucial role in shaping students' overall college experience, including their involvement in extra-curricular activities. This study will examine the extent to which educator support, including mentorship, encouragement, and recognition, influences students' decisions to participate in non-academic pursuits. (Darmuki & Hidavati, 2019). Identifying the impact of educator support can inform educational institutions about the importance of creating a supportive environment that encourages a balance between academic and extracurricular commitments. Understanding the collaborative learning factors that impact college students' involvement in extra-curricular activities is imperative for educational institutions seeking to foster well-rounded individuals. The findings of this research will contribute to the development of targeted interventions and strategies that can enhance students' participation in extra-curricular pursuits, thereby promoting holistic development and enriching the overall college experience in China.

Despite the historical presence of extra-curricular activities in education since the 1930s, their implementation and learner participation received limited emphasis in educational models. Holland and Andre's study revealed a strong correlation between participation

in extra-curricular activities and elevated self-esteem, with engagement in social activities linked to improved academic performance, a sense of life control, and reduced involvement in undesirable pursuits. Fredricks and Eccles (2006) further supported these findings, highlighting positive effects on academic, psychological, and behavioural outcomes, indicating that extra-curricular activities complement academic learning. Existing theoretical frameworks may not fully capture the nuanced dynamics that influence students' decisions to engage in extra-curricular pursuits following collaborative learning experiences.

#### III. RESEARCH OBJECTIVES

Below are the objectives which has been set for this study:

RO1: To examine the current level of collaborative learning in extra-curricular involvement among students in Anhui Province Colleges in China.

RO2: To identify the effect of collaborative learning factors (teamwork skills, communication, adaptability) on students' engagement in extra-curricular activities in Anhui Province Colleges in China.

RO3: To examine the mediating effect of students' perceived benefits, students' learning goals, and educator support and facilitation toward collaborative learning on extra-curricular involvement in Anhui Province Colleges in China.

# IV. THEORETICAL FRAMEWORK

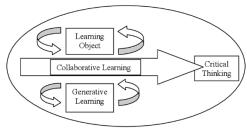


Figure 1 Theoretical framework

#### Social Cognitive Theory

Social cognitive theory (Bandura, 1977), used in psychology, education, and communication, holds that portions of an individual's knowledge acquisition can be directly related to observing others within the context of social interactions, experiences and outside media influences. Social cognitive theory describes the influence of individual experiences, the actions of others and environmental factors on individual health behaviours. The theory suggests that humans learn behaviours by observing others and choosing which behaviours to imitate. Behaviours that are rewarded are more likely to be repeated, whereas behaviours that are punished are less likely to be repeated. The key concepts of Social cognitive theory can be grouped into five major categories, namely psychological determinants of behaviour (outcome expectations, self-efficacy, and collective efficacy),

observational learning, environmental determinants of behaviour (incentive motivation, facilitation)), self-regulation and lastly moral values of behaviour. Social cognitive theory values the role of psychological factors (interests, abilities, values), social factors (socioeconomic status, gender, race) and economic factors (employment opportunities, training opportunities and so on (Long et al. 2002). The key strength of social cognitive theory for practice lies in targeting two constructs, self-efficacy and outcome expectations. Facilitating change in these constructs in interventions has been shown to be effective in changing a large array of behavioural outcomes.

Three main cognitive theories made up social cognitive theory. These three are Piaget's developmental theory. Lev Vygotsky's social cultural cognitive theory, and the information processing theory.

Social cognition involves the active interpretation of events. As a result, different people may draw different conclusions about the same events. Thus, it can be concluded here that social cognition is the way in which people process, remember, and use information in social contexts to explain and predict their own behaviour and that of others. Social cognitive theory is a general theory that stresses learning from the social environment. From its early focus on observational learning through modelling, social cognitive theory has expanded in scope to address such processes as motivation an self-regulation.

Bandura's social cognitive theory postulates reciprocal interactions among personal, behavioural and social or environmental factors. A key point is that persons seek to develop a sense of agency for being able to exert a large degree of control over important events in their lives. Among the influential variables affecting one's sense of agency are self-efficacy, outcome expectations, goals, and self-evaluations of progress.

Learning objects are a collection of content items, practice items and assessment items that are combined based on a single learning objective. The learning object is normally a digital, open educational resource that is created to assist in a learning event. Learning object is any entity, digital or non-digital, that can be used, re-used or during technology-supported learning. referenced Examples of learning objects include multimedia content, instructional content, instructional software and software tools that are referenced during technology-supported learning. Learning and re-usability reside at its core. Each learning object will have a learning design. On the other hand, generative learning is a theory that involves the active integration of new ideas with the learners' existing schemata. The main idea of generative learning is that, in order to learn with understanding a learner has to construct meaning actively (Osborne and Wittrock, 1983, p493). According to Wittrock, learners construct meaning by actively building relationships between stimuli and their stored information such as knowledge and their experiences. This construction of 'semantic and distinctive idiosyncratic associations between stimuli and stored information is called generation. Generative learning is therefore the process of constructing meaning through generating relationships and associations between stimuli and existing knowledge, beliefs and experiences.

## Generative Learning Theory

Generative Learning Theory (GLT) suggests that learning occurs when learners are both physically and cognitively active in organizing and integrating new information into their existing knowledge structures. The process of generating relationships among new and existing knowledge leads to meaning-making that leads to deeper understanding of content. Thus, incorporating GLT principles into learning resources should prompt learners to engage more deeply with instructional content.

Wittrock's generative learning model has four components: motivational processes, learning processes, knowledge creation processes, and generation processes (Wittrock, 1974/2010; Wittrock 1992). These four processes result in the active and dynamic generation of meaning that "leads to the reorganization and reconceptualization and to elaborations and relations that increase understanding" (Wittrock, 1992, p. 532). In this way Generative Learning Theory differs from information processing as it extends beyond a change in the information for storage to learner generated new meaning as mediated by the four types of processes. The neural system of the brain "receives, selectively attends to, and integrates multi-sensory information in a self-directed manner (Wittrock, 1992, p. 535).

The four processes are described in a linear fashion similar to sensory input, short-term memory, and long-term memory described in other learning theories. However, the processes are tightly intertwined. For example, the knowledge creation processes and the generation processes are tandem processes in which the learner calls on past knowledge and experiences (memory) while developing connections to new information. These connections, prompted by the physical and mental activities of the learner with new content, and are internally labelled as they become an integrated part of memory.

## **Motivational processes**

Wittrock based the four process components on his understanding of Luria's functional units of the brain (Wittrock, 1974,2010). Motivational processes and learning processes are associated with Luria's arousal and attention unit of the brain (Lee, Lim, & Grabowski, 2008). This functional unit serves to make the learner aware of stimuli in the environment and decide what to acknowledge and what to ignore (Languis & Miller, 1992). Learner's motivational processes, such as interest and sense of control over learning, stimulate the learner to respond to new information. As an example, in the lesson on Swahili terms for animals, learners were presented with the image of an elephant. The learner made a choice to attend or not attend to the image (visual input) and the question posed (auditory input) and that choice was integral to the learning of the new content. Learning processes. A learner's motivational processes and learning processes are nearly simultaneous. Motivational processes activate learning processes that draw learner's attention to the new information once it is acknowledged. Learning processes then direct the learner's attention to the new

information. For example, after the image of the elephant and the question grabbed the learner's attention, the learner mentally began to focus on the content presented. If a neighbouring student made a comment, the learner's attention may have been diverted to the content of the comment. In this way, attention may vary during the learning process as the learner 'tunes in' or 'tunes out' the multitude of stimuli within the environment. Learning processes are those individual behaviours and preferences that regulate attention to new content or information.

#### Knowledge creation processes.

Based on existing knowledge, beliefs, and values, the learner who is attending to the stimulus begins to build a new model incorporating the new information. These knowledge creation processes are based on Luria's second functional brain unit known as sensory input and integration (Languis & Miller, 1992). The new information is now being received, analyzed, and stored. Sequences and patterns are developed that reflect the learner's previous knowledge and experience (Wittrock, 1992). The learner's knowledge creation processes qualify relationships between the new content and prior knowledge. Connections and relationships are created during the knowledge creation process. In the case of learning the Swahili terms for elephant, tiger, and zebra, learners may have brought to mind a trip to the zoo; the cartoon image of Shere Khan from Kipling's Jungle Book; the recognition that chui-milia and punda milia are both striped, or the similarity of the words temple and tembo. Wittrock proposed that knowledge creation processes, including meta-cognition, develop relationships between and among ideas determining the quality of the meaning made by the learner. Generation processes. Wittrock referred to the process of coding or integrating the information as the generation process. Generative learning processes are mapped to Luria's third functional unit of the brain called the executive planning and organizing unit (Languis & Miller, 1992). In this process the learner mentally labels the links between connections and relationships as information is organized and integrated for later recall and retrieval. The learners listening to the word chui-milia may make a connection to the familiar English word "chew" meaning to use one's teeth to break food into smaller pieces. The connection to chewing and teeth may then be drawn to the carnivore and predator, chui-milia or tiger. This connection is then used when the learner is asked to provide the Swahili term for tiger. Based on these four processes, a learning resource that "stimulates attention and intention, promotes active mental processing at all stages and levels of learning, and provides the learner with appropriate help in the generation process" can be supportive of meaning-making - learning (Lee, Lim, & Grabowski, 2008, p. 112). Scholars have studied and continue to study generative learning processes individually.

## V. METHODOLOGY

The reason why the researcher decided on this is because correlational design allows the analyst to observe natural relationships between variables. The results in data being more reflective of real-world situations. In particular, the researcher would like to look for patterns or trends in the data to see if there is a relationship between these two entities. The two entities being studied here are collaborative learning and extra-curriculum involvement by the students. The researcher would like to see how the two variables are related. In another word, the researcher would like to see how the two variables are associated with each other in the real world. Correlational design falls under quantitative methodology whereby the data collected are quantitative data (Daniel Starch, 1883 - 1979).

Referring to the definition of population, we can say that it consists of all the units on which the findings of research can be applied. In other words, population is a set of all the units which possess variable characteristic under study and for which findings of research can be generalized. In statistics, a population is an entire group about which some information is required to be ascertained.

In the case of this study, the population is from four colleges in Anhui, China.

TABLE I: POPULATION OF THE STUDY

|   | Name of<br>Colleges                                     | Faculties   | Number of students |
|---|---|---|--------------------|
| 1 | Anqing<br>Vocational and<br>Technical<br>College        | College of Architecture and<br>Engineering, College of<br>Electrical and Mechanical<br>Engineering, College of<br>Information Technology,<br>College of Agriculture, Forestry<br>and Clothing, College of<br>Modern Business, College of<br>Management Services | 12808              |
| 2 | Anqing Medical<br>College                               | School of Nursing, School of<br>Pharmacy, School of Medicine,<br>School of Clinical Science and<br>Technology Laboratories  | 10030              |
| 3 | Anqing<br>Teachers<br>College                           | Department of Elementary Education, Department of Commerce and Electronic Information, Department of Tourism and Public Administration, Department of Art and Design, Department of Preschool Education   | 5842               |
| 4 | Anhui<br>Huangmei<br>Opera Art<br>Vocational<br>College | Department of Performance,<br>Department of Music,<br>Department of Fine Arts,<br>Department of Dance,<br>Department of Variety Arts  | 1280               |

The researcher chose Anhui to carry out the research because the colleges there placed great importance in the involvement of extra-curriculum activities. The Ministry of Education stated in their report in 2020 that involvement in extra-curriculum activities will greatly improve the knowledge and skills of the students.

The confidence level is at 95% with a 5% margin of error. After the calculation and referring to Table 3.3 below, the sample obtained is 374 respondents for Anqing Vocational and Technical College, 371 respondents for Anqing Medical College, 361 respondents for Anqing Teachers College and lastly 296 respondents for Anhui Huangmei Opera Art Vocational College. The total number is 1402 respondents.

A questionnaire will be developed by the researcher for the purpose of collecting quantitative data. Two types of statistical analysis will be employed, namely descriptive as well as inferential statistics to get answers to the research questions and hypotheses.

## VI. CONCLUSION

This study delved into the multifaceted dynamics surrounding collaborative learning factors and their influence on college students' engagement in extracurricular activities in Anhui Province, China. The significance of this research lies in its exploration of the interplay between perceived benefits, learning goals, and educator support in shaping students' involvement in non-academic pursuits, thereby enriching their overall college experience.

Throughout the investigation, it became evident that collaborative learning factors play a pivotal role in shaping students' attitudes and behaviours towards extra-curricular involvement. The findings underscored the importance of perceived benefits derived from participating in these activities, including skill development, personal growth, networking opportunities, and overall well-being. Understanding how students perceive these benefits is crucial in motivating them to actively engage in extracurricular pursuits, as it directly influences their decision-making processes regarding participation.

Moreover, the alignment of extra-curricular activities with students' academic and personal learning goals emerged as a significant determinant of their engagement levels. When students perceive these activities as complementary to their formal education and conducive to their personal growth, they are more likely to actively participate. This highlights the importance of tailoring extra-curricular offerings to align with students' aspirations and interests, thereby enhancing their motivation to participate.

Furthermore, educator support was identified as a critical factor influencing students' decisions to engage in extra-curricular activities. Mentorship, encouragement, and recognition from educators create a supportive environment that encourages students to balance their academic and non-academic commitments effectively. By acknowledging the importance of educator support, educational institutions can foster a culture that values and promotes holistic development among students, thereby enriching their college experience.

The study also shed light on the challenges and barriers that students encounter when participating in extra-curricular activities, such as time management issues, lack of attraction to activities, organizational and management problems, and social pressures. Addressing these challenges requires concerted efforts from

educational institutions, educators, and students themselves to create an enabling environment that facilitates active participation and meaningful engagement in extra-curricular pursuits.

This research contributes to a more comprehensive understanding of the factors influencing college students' involvement in extra-curricular activities following collaborative learning experiences. By recognizing the importance of perceived benefits, learning goals, and educator support, educational institutions can develop targeted interventions and strategies to enhance students' participation in extra-curricular pursuits. Ultimately, fostering a culture of holistic development and enrichment within colleges in Anhui Province, China, will contribute to the overall well-being and success of students in both their academic and personal lives.

## REFERENCES

- Abdullah, M., & Osman, K. (2010). Scientific inventive thinking skills among primary students in Brunei. Procedia-Social and Behavioural Sciences, 7, 294-301.
- Adesope O.O., J.C. Nesbit, N. Sundararajan. (2022). The mapping principle in multimedia learning R.E. Mayer, L. Fiorella (Eds.), The Cambridge handbook of multimedia learning (3rd ed.), Cambridge University Press
- Adult Education Resource and Information Service. (2001). Online learning (ARIS Information Sheet). Melbourne, Victoria, Australia: ARIS, Language Australia. (ERIC Document Reproduction Service No. ED459340)
- Allen, D. and Duch, B. (1998). Thinking Toward Solutions: Problem-Based Activities for General Biology, Fort Worth, Tex.: Saunders.
- Annett, N. (1997 Oct 5). Collaborative learning: definitions, benefits, applications and dangers in the writing center. University of Richmond, Virginia; USA. Retrieved 5 Nov.2011, from: writing2.richmond.edu/training/fall97/nanne/coll aboration.html.
- Arsad, N. M., Osman, K., & Soh, T. M. T. (2011). Instrument development for 21st century skills in Biology. Procedia-Social and Behavioural Sciences, 15, 1470-1474.
- Astin, A. (1993). What matters in university: Four critical years revisited. San Francisco: Jossey Bass.
- Astin, A.W. (1977). Four critical years: Effects of college beliefs, attitudes and knowledge. San Francisco, USA. Jossey Bass Publishing.
- Austin, J. E. (2000). Principles for Partnership. Journal of Leader to Leader. 18 (Fall), pp. 44-50.
- Bandura, A. (1986). Social foundations of thought and action: A social cognitive theory. Englewood Cliffs, NJ: Prentice Hall. Berge, Z. L. (1995).

- Facilitating computer conferencing: Recommendations from the field. Educational Technology, 35(1). 22-30.
- Barber, C., Mueller, C. T., & Ogata, S. (2013). Volunteering as purpose: Examining the long-term predictors of continued community engagement. Educational Psychology: An International Journal of Experimentation Education Psychology, 33(3), 314-333. doi:10.1080/01443410.2013.772775
- Barnett, L. (2008). Perceived benefits to children from participating in different types of recreational activities. Journal of Park and Recreation Administration, 26(3), 1-20.
- Barrows, H. S. and Tamblyn, R. N. (1980). Problem-Based Learning: An Approach to Medical Education, New York, N.Y.: Springer, 1980.
- Bean, J. (1996). Engaging ideas, the professor's guide to integrating writing, critical thinking, and active learning in the classroom, San Francisco; USA. Jossey Bass Publishing.
- Bennett, J. and Bennett, L. (2003). "A review of factors that influence the diffusion of innovation when structuring a faculty training program", The Internet and Higher Education, Vol. 6 No. 1, pp. 53-63, doi: 10.1016/S1096-7516(02)00161-6.
- Bers, T. (2005). Assessing Critical Thinking in Community Colleges. New Direction for Community Colleges, No. 130.
- Beyer, BK. (1995). Critical Thinking. Bloomington: Phi Delta Kappa Educational Foundation.
- Blomfield, C. J., & Barber, B. L. (2009). Brief report: Performing on the stage, the field or both? Australian adolescent extracurricular activity participation and self-concept. Journal of Adolescents, 32(3), 733-739. http://org.doi: 10.1016/j.adolescence.2009.01.003
- Blumenfeld, P., & Anderson, L. (Eds.). (1996). Special issue of the Educational Psychologist: Instructor education and educational psychology. Educational Psychologist, 31, 1-4.
- Bonoma, J., Tedeschi, J., Helm, B. (1974). Some effects of target cooperation and reciprocated promises on conflict resolution. Journal of Sociometry. 37(2), pp. 251-261.
- Britton, J. (1990). Research currents: Second thoughts on learning. In Brubacher, M., Payne, R., & Richett, K. (Eds.), Perspectives on small group learning: Theory and practice (pp. 3-11). Oakville, Ontario: Rubicon.
- Brown, B. (2015). Twenty First Century Skills: A Bermuda College. Twenty First Century Skil, 58-64.