We Need Your Help: An Evaluation of Students' Tutorial Experiences in Mathematics and Science

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Publication Info

Article History:

Received: 26.10.2018 Accepted: 04.01.2019 DOI: 10.35210/jhssi.1.1.1

Keywords:

Evaluation, Mathematics, Sciences, SPAMAST, Tutorial experiences.

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Abstract

No one can claim success of any project unless a systematic and well-thought evaluation is conducted. No one either can suggest improvements unless the downside of the project is determined. The main purpose of the qualitative-evaluative study is to determine the successes and failures of the tutorial project of the SPAMAST-Digos Education Department, learn the experiences of the participants, and obtain their suggestions. Using the focus group discussions and in-depth interviews, the research found that students typically found the conduct of the tutorials to be pleasant; most of the tutors used visual-aids; tutors used games; tutors were accommodating and approachable; and generally, the participants believed the tutorials were beneficial for them and that it should be continued. However, the participants suggested that tutors may avoid favoritism, develop more patience, avoid long lectures, write the lecture on the visuals, and give them time to study. Discussions and conclusions were provided.

INTRODUCTION

No one can claim success of any project unless a systematic and well-though evaluation is conducted. No one either can suggest improvements unless the downside of the project is determined. Various literatures have presented different factors of a project's success. Dvir, Lipovetsky, Shenhar, and Tishler (1998) mentioned that one of the common barriers of project success is the lack of specificity of constructs applied; Chan, Ho, and Tam (2001) found that commitment, client's and service providers' competencies were essential for project success; Alias, Zawawi, Yusof, and Aris (2014); Belout and Gauvreau (2004); Mir and Pinnington (2014) also found that it was management support and trouble-shooting variables directly linked with success; likewise Takim and Akintoye (2002), likewise showed that it was the performances of the respondents involved in the project concretely determined success; Ogunlana (2010) argued that the measure of project success can no longer be restricted to the traditional indicators which include time, cost, and quality rather on efficient use of resources and on the effectiveness and satisfaction of the respondents.

On the other hand, class tutorials have been the subjects of significant number of researchers. Positively, most of the findings obtained positive remarks. Jheng (2015) said that tutoring students were able to use the "time-stealing" strategy to steal time from an ongoing class and create a "double-context learning situation" to optimize the efficiency of the use of their in-class time. Zerin and Zafar (2017) mentioned that students attending regular tutorial classes developed their confidence level in order to keep pace with the classroom activities with the other good students. Yung (2015) found tutorials reinforce what students learned while Zapata-Rivera, Zwick, and Vezzu (2016) discovered that tutorials significantly improve students' comprehension; tutorials substantially increased weak students'

knowledge of the topic and contributed to their academic success (Binani, and Chowdary, 2018; Kritzinger, Lemmens, and Potgieter, 2018; Patil and Karadesai, 2016). Lastly, Kong, Hua and Luo (2018) mentioned that tutorials improved not only the learning environment of students but also the teaching effectiveness of the providers.

The Southern Philippines Agribusiness and Marine and Aquatic School of Technology (SPAMAST) Education Department has provided a tutorial programs in Mathematics and Science at Digos City National High School–Matti High School Annex. The tutorials were conducted from 2015 to 2018 by the BSEd Biological Science pre-service teachers. The main purpose of the tutorials was to improve the academic performance of students especially in Science.

This research was conducted to find out not only the impact of the tutorials to the participants but also their experiences in the conduct of the program. Moreover, this evaluative study would determine whether to continue similar community extension activity. This view was in line with University of Arizona (2009) which contended that knowing the program's outcomes and impacts is important for institutional success, promotion and future funding.

Research Questions

The main purpose of the qualitative-evaluative study is to determine the successes and failures of the tutorial project of the SPAMAST-Digos Education Department, learn the experiences of the participants, and obtain their suggestions. Specifically, it sought answer to the following questions:

- 1. How the Science tutorials were conducted to the student-participants?
- 2. How the Science tutorials help improve the academic performance of the student-participants?

- 3. What were the experiences of the student-participants in the conduct of Science tutorials?
- 4. What significant experience(s) do the student-participants can share to other students?
- 5. What suggestions the student-participants can offer to improve the conduct of the Science tutorials?

METHOD

Research Design

This study used the qualitative method particularly the evaluative-phenomenological approach. Jackson, Drummond and Camara (2007); San Jose, Bahket and Ali Alsalhi (2017) pointed out that qualitative method's main focus is to recognize the essence of human experiences; it obtains personal and significant experiences of the participants (San Jose and Mortos, 2017); it describes personal confessions, opinions, narratives, and reflections (Brinkman, 2014); it deals with the processes and not on statistical requirement (Mays and Pope, 1995); and it requires another study to confirm whether the participants suggestions were viable or not (San Jose and Mortos, 2017). On the other hand, evaluation research is used to determine the impact of an intervention such as a particular program (Vedung, 2017); to highlight feedbacks into the processes which happened during the conduct of the intervention (Caraher and Cowburn, 2015).

Likewise, general phenomenology is commonly used when investigators wanted to find out participants' individual encounters and insights (Patton, 1990); to listen to personal anecdotes (Clandinin, and Connelly, 1994); to determine the important meaning of the experience (Creswell, 1998; Rossman and Rallis, 2011), to explore the individuals' view of the environment (Eisner, 2017); and investigate the worth of the experiences of individuals (San Jose, Bahket, and Ali Alsalhi, 2017).

The Focus Group Discussion (FGD) was used to gather the pertinent information from study-participants. The tutees were divided into three focus groups. Each group was composed of 7 or 8 members. Moreover, it was made sure that only those who participated in the tutorials were included in the focus group. Gibbs (1997) said that an FGD needs to have a manageable number of participants; Derksen, Hartman, van Dijk, Plouvier, Bensing, and Lagro-Janssen (2017); Powell, Single and Lloyd (1996) averred that an FGD should only compose of chosen individuals who can provide comments, opinions and views, from their personal experiences, about the topic under investigation; Morgan (1997)⁴² pointed out that FGD is a place of inter-actions between the investigators and the participants on a certain topic; and Wong (2008) maintained that FGD includes communicating with each other, exchanging ideas and giving comments on each other's experiences. Certainly, all these were observed in this study. All study participants were given enough chance to time speak and enter-act with the other focus group members and with the investigators. Moreover, the study-participants' obtained personal experiences were transcribed, examined, analyzed, evaluated, and thematized.

Research Instrument

The main instrument used to obtain the essential information was the researcher-made interview guide questions based on the research questions. DBM and San Jose (2015) mentioned that interview guide questions are usually utilized in a focus group to 'cull information' pertinent to the study. In this study, the guide questions were composed of five main questions and probe

questions which generally sought to determine the participants' experiences in the tutorials; specifically, their views on the how the tutorials were conducted, their significant experiences from the tutorials, their opinions on the benefits they obtain, and their suggestions which could improve the future conduct of the tutorials.

Research Participants

The study-participants of this phenomenological-evaluative study were the high school students who participated in the Science tutorials at Matti High School–Annex Campus. Specifically, 22 students were randomly selected to form three Focus Group Discussions (FGDs). Guest, Namey and McKenna (2017) mentioned that three focus groups are enough to identify all the most prevalent themes.

Procedures of the Study

- Asking Permission. A team of Education faculty including the
 Dean visiting Matti High School Annex Camus to pay visit
 and ask permission to conduct the evaluation of the tutorial
 classes. It was also during this time that the in-charge of the
 tutorials from the school chose who will participate in the
 Focus Group Discussion (FGD).
- Formulation of Research Questions. The team of Education teachers formulated the research questions based on the project proposal. The questions were focused on the how the tutorials were conducted, the experiences of the tutees, the benefits they gained and on the suggestions they could offer to improve the future conduct of similar program.
- Conduct of Focus Group Discussion. Before the conduct of the interviews, the team conducted an interview protocols. Also, the tutees were asked to sign the informed consent. Moreover, each student was asked to hide their identities by chosen their pseudonyms. Then, the 22 participants were divided into three FGDs. Each group was interviewed separately. This was done to maintain consistency and partiality of answers of the participants.
- Analysis of Information. The information gathered from the three FGDs were transcribed and subjected to thematic analysis. Following the Nvivo manual format, the data analyst was able to come up with the themes, frequency of responses and core ideas. Those themes were presented in the findings and implicated in the discussions.

RESULTS AND DISCUSSION

This section present the findings of the study based on the gathered information from the Focus Group Discussions (FGD). The frequency of responses of the participants was considered as General if it obtained 50% and above; Typical if it garnered 21% and above but not more than 49%; while Variant if it obtained less than 20% and below. Moreover, to further elaborate the results, the verbatim answers of the study-participants were culled from the transcribed information. These information were given proper tagging for easy audit trail.

Explanations are Thoroughly Conducted

The student-participants typically found the conduct of the tutorials to be pleasant. They highlighted that the tutors elaborately and thoroughly discussed the lessons to make sure that tutees were able to grasp the lesson. As a matter of fact, sometimes tutors would repeat the explanations and would ask the tutees whether they could proceed to the next topic. The tutees observed that their tutors became focused and committed to the task of tutoring them.

...the way I see it, they were creative in discussing the topic. If someone cannot grasp the lesson, they will explain it thoroughly. They will not settle until someone understands. They show concern to the students (FGD^2Pg^1L) .

... that teacher who taught us the lesson, he makes sure that the lesson is understood by us. He repeats his explanation until all of us understand (FGD³Pg¹L).

Additionally, tutors entertained tutees' questions. Thus, the classroom became a venue for friendly and welcoming interactions between the tutees and tutors. More than that, students felt that they were valued.

They properly taught us. If we have questions, they let us understand it (FGD²Pg¹L).

They are not satisfied if they don't deliver the lesson properly. They show their concern to the students (FGD²PG¹L).

It was experienced by the tutees that their tutors explicitly explain and discuss the lessons through lectures, which they found to be beneficial. Tutors reasons for using this lecture approach are implicit; however, it is obvious that the tutors apply the lecture-discussion approach similar to that of the cognitive approach, to organize the concept of understanding of the learners (Bartunek and Moch, 1987) and self-knowledge (Peterson, Sampson and Reardon (1991). Tsvetkov (2014) believes that courses with symbols and terminologies such as in Science and Mathematics, cognitive approach is essential.

On the other hand, several authors are in unison in their findings that explaining through traditional lectures is significant (Palmer, Dixon, and Archer, 2015) in content-based courses like Science and Mathematics. Duschl and Osborne (2002); Kolodner (2002) mention that in Science, explaining means providing reasons why something happened; Rieber, Tzeng, and Tribble, (2004) aver that explaining allows explicit understanding of the principles of the subject matter. Yip, Coyle, and Tsang, (2007) point out that emphasis on explaining Science concepts to the learners establishes a good learning atmosphere in class. For Olney, Brawner, Pavlik, and Koedinger (2015) through explanation, learners able to comprehend the Science phenomenon presented; while Wallace and Prather (2018) reveal that lecture-tutorials help learners achieve learning gains beyond what is typically thought.

Utilization of Visual Aids and Pictures

Typically, the tutees observed that most of their tutors used visual aids during the conduct of their lessons. They found these visual materials beneficial in comprehending the lessons being discussed.

They use pictures so that we can see what they are teaching us (FGD¹PG¹L).

In our class, they also use visual aids. We like it because we can see everything especially in the pictures. Isn't it in Science we need to see things in pictures so that we can recognize the names of those things? (FGD³Pg¹L).

Students prefer to have visual aids because they can understand better the lessons. According to Shabiralyani, Hasan, Hamad, and Iqbal (2015), visual aids provide the learners chance to learn the lessons effectively and easily. On the other hand, Morony, McCaffery, Kirkendall, Jansen, and Webster (2017) mention that use of photographs, illustrations, and graphs in presentating the lessons provide a more complete overview of the topics unders discussion. In the same vein, Renkl and Scheiter (2017) point out those students who are expose to visual aids showed stronger gains in comprehension.

Application of Games and Jokes

Aside from visual aids, the tutors also used games in the conduct of their lessons. Through the games, students' were able to cooperate, active, and participative which the tutees found to be fun and enjoyable. Moreover, the tutors also inserted jokes in the conduct of their classes. Jokes may be in a form of analogy or comparison which led to understand better.

They let us play games. By that, we enjoyed the way they taught (FGD¹PG¹L).

We liked him. Sometimes we didn't like some teachers. With him, we could easily understand the lesson especially when he associated it with jokes (FGD³PG²L).

Tutors incorporate games and inject jokes to their lessons for the students to actively participate, make the class alive, and understand the gist of the topic. Darfial (2015); Salehi (2017) describe games as 'big describer' for teaching and learning because games engage learning among students. Bose and Seeto (2016)⁸ also mention that games in classroom are innovative strategy that can make teaching and learning meaningful because

Table 1: Themes and core ideas on the evaluation of tutorials

Theme	Frequency of response	Core ideas
Explanations are thoroughly	Typical	Discussing the lessons thoroughly and clearly
conducted		Asking the tutees to proceed to the next lessons or not
		Focusing on the lesson
		Posting pictures and visual materials
Utilization of visual aids and pictures	Typical	Encouraging student to participate
		Making the class alive
Application of games and jokes	Variant	Leading students to comprehend
Additional knowledge gained	General	Deepening of understanding
Consideration with tutees		Improvement of learning
	Typical	Welcoming tutors
		Having the chance to ask
	Variant	Gaining self-confidence
		Getting understanding easy
Suggestions and recommendations	Typical	Maintaining the tutorials
		Avoiding favoritism
		Obtaining more patience
	Variant	Shunning too much lecture
		Using more visual aids
		Giving tutees time to study for the quiz

games empower skills. Further, Popil and Dillard-Thompson (2015) games in the classroom are student-centered because they create excitement, enjoyment, and satisfaction; thus, the level of involvement and satisfaction is high. Moreover, the use of jokes retrieve mind frame from long-term memory to interpret information in working memory (Coulson and Kutas, 2001). Thus, jokes resurface the unconscious events of learners. Further, Resnick, Davatzes, Newcombe, and Shipley (2017) averred that the use of analogy is the most efficient and effective technique in teaching scale information. Vethamani and Nair (2016) said it scaffolds and facilitates understanding of a certain concept. This result is affirmed by Houle (2018) who claimed benefits on the use of analogy as a teaching strategy.

Additional Knowledge Gained

Overwhelmingly, all student-participants found the tutorials beneficial for them. They mentioned that the lessons given to them in the tutorials deepened their understanding and improved their learning.

The tutorials deepened my knowledge and understanding in Science and Math (FGD¹PG¹L).

It was a big help because it allowed me to know more about Science (FGD²Pg²L).

The tutorial really improved us a lot unlike before when the tutorials were not yet conducted, we were confused and we didn't understand (FGD³Pg⁴L).

Undeniably, tutorials classes when done properly significantly help any learners especially when the learners' need are addressed-that is gaining relevant information which they could use in their studies. Susilo and Suhardi (2018) agree with this finding. They mention that tutorials are successful if learners' important dimension and satisfaction are met. Moreover, Magsino (2014) found that tutorials enhance higher order thinking skills if tutors use problem based learning. Tutorials, according to Nikolic, Vial, Ros, Stirling and Ritz (2015), generally provide direct instruction to learners on how to deal with their difficulties and to make them independent and confident; Yung (2015) to reinforce what they have learned. However, Ritterbush (2015) mentions that to attain the goals of tutorial classes, planners need to consider the importance of class size and class time. These allow tutees and tutor to have meaningful interactions.

Therefore, to materialize the outcome of any tutorial classes, tutorial planners need to carefully outline their plans. A mapping may be conducted to determine and analyze the needs of the learners and to identify what could be the appropriate strategies may be applied during the conduct of the classes.

Consideration with Tutees

Moreover, the tutees experienced a welcoming and friendly atmosphere with their tutors because they could approach and ask them without hesitations apprehensions.

The tutors were friendly. They could be asked and approached of whatever we were confused of (FGD²Pg²L).

We had a tutor who could be asked anytime about the lesson (FGD³Pg⁴L).

Because of the benefits the tutees realized with the tutorials they experienced, few study-participants slowly developed their academic self-confidence.

It's okay for me. The tutorial is very helpful. The tutorials open your mind and because of the way they teach, your mind will be opened in Science (FGD²Pg³L).

The tutorial helps me a lot because I can sometimes answer my assignment. I don't rely and copy from my classmate (FGD 3 P 5 L).

It seems that it's easy for us... hahaha.. but I like it (FGD³Pg⁵L).

In any class, the learners are the most important individuals. The learners' successes of learning the lessons taught and discussed do not depend solely on the materials used or on the strategies applied but also on the attitude of the teachers. In the study of Cohen, Kulik, and Kulik (1982), they found attitudes of tutors significantly linked with the learning outcomes of the tutees. Likewise, Wicklund (2016) said that positive attitudes of tutors improved the willingness of the tutees to perform tasks given to them. Also, Mack, Leavitt, and Peters (2015) over that these positive attitudes seen on the tutors strengthen team work, belongness, warm among the tutees. Wang (2017) mentions that these pleasant behaviors of tutors build trust and confidence among the learners.

Therefore, tutors may not be only be trained and prepared with the contents of the subject but also capable of upholding positive attitudes like sympathy, empathy, caring, and openness.

Suggestions and Recommendations

Despite the favorable advantages of the tutorials claimed by the study-participants, they typical offered suggestions which could improve the conduct of upcoming tutorials. Typically, they believed that the tutorials may be continued so that others could also benefit from it.

For me, I hope that the tutorial program will continue. If evently hope the tutors will continue to teach us especially in Science, which is a challenging subject (FGD²Pg⁴L).

For me, if possible the tutorial needs to be continued because I learn a lot. The tutor gave us answers. If there is no tutorial we will always rely on our subject teachers.

They also mentioned that tutors need to avoid favoritism among their tutees. Tutors may also call those who were timid and shy not only those who were active and participative. Also, tutors need to discriminate tutees' abilities.

I suggest that the tutor should be fair. In some instances, only those who could answer are regularly called (FGD³Pg²L).

For me, tutors should not play favoritism. There are those students who are given much attention by the teacher (FGD²Pg⁵L).

Tutor should fairly deal with his learners. There are those tutors who understatement the abilities of the learners (FGD^2Pg^4L) .

Also, tutors also needed to develop their patience to the tutees. It was observed typically that tutors easily angered which makes them unapproachable.

The types of interactions between teachers and students sometimes serve as an obstacle for a good dealing. For example, a teacher is unapproachable (FGD²Pg⁴L).

Variantly, the study-participants proposed of avoiding long lectures because it makes them bored.

The tutor always discusses which sometimes lead the students to be bored and become uninterested (FGD¹Pg³L).

They also wanted the tutors to use visual aids; however, few prefer that what the tutor says should be found in the visuals.

They believed that they learn more if they can see everything on the visuals, drawings and pictures.

The tutor needs to write everything on a manila paper or elsewhere for us to see. Tutor should not always lecture in front, while we just nod even though we don't understand (FGD²Pg³L).

Lastly, few tutees clamored that tutors may also give them some time study before any assessment is conducted. Moreover, they are frustrated when an announced assessment is postponed because they already exerted effort in reviewing their notes.

I suggest that we should be given time to study because there are some tutors who directly gives us a quiz, then we don't comprehend. It's difficult (FGD³Pg³L).

We study hard for the quiz, then, the teacher did not come. We were so nervous (FGD 3 Pg 4 L).

Ineveryevaluation, suggestions and recommen-dations were offered not to discredit the good things brought by any program or activity, rather those suggestions and recommendations aimed at improving, enhancing and strengthening the program. To avoid favoritism in the classroom, several literatures mention that tutors need to develop love and respect to each student (Demirel, Özmat, and Elgün, 2016; Gidey, 2015; fairness (Forgas, 2016); consistency (Kapa, Luke, Moulthrop, and Gimbert, 2018); trust and loyalty (Osman, Omar, Mahphoth, Hashim (2015); and equality and openness (Whitaker, 2016). It was observed that new teachers or tutors tend to be unaware of favoritism because they are unfamiliar with their students' name or mesmerize by those students who are active and exuberant to recite and participate in classroom activities.

Likewise, patience need to be considered because it is one of the essential characteristics linked with a successful tutor (Castek, Jacobs, Pendell, Pizzolato, Reder, and Withers (2015); it is also the most appreciated attitude of well-trained tutors by the tutees (Blohm, Krautter, Lauter, Huber, Weyrich, Herzog, and Nikendei, 2014). The lack of patience also contributes to poor completion of task and stretching skills (Krestina, 2015).

Lastly, time is an important element tutors need to observe in tutoring. Unlike fast learners, tutees need to think. Coe, Aloisi, Higgins, and Major (2014) mention that increasing the amount of time would allow learners to prepare and spend time to think hard about the lesson. Moreover, Nation (2017) says enough time is important in fluency activities while Bjork (2017) points out that appropriate time is necessary when teaching factual information.

These suggestions from the tutees serve as the baseline information to be considered if another tutorial class will be conducted; thus, improving the implementation of the program. Bauer and Dey (2016) say suggestions for improvement contextualizes the needs of the clients while Cooper (2017) mentions these suggestions make coherence to the curriculum design of the program.

Implication for Practice

With the results of this evaluation, the implementers of the tutorial classes may consider thorough preparations before the implementation of program. Preparation may include training of the tutors not only to be expert of the subject matter but also to be behaviorally pleasant. Moreover, mapping and needs analysis of tutees may be considered with utmost priority. Likewise, class size and class timetable may be determined to identify the appropriate learning strategies. Lastly, being unfamiliar with the learners is not a reason for any tutor to show favoritism. Tutors may find ways how to avoid favoritism by providing students with

name tags; calling them with consistency; giving them fairness by roaming around to different groups and many other things. Also, patience can be observed by making adjustments on the part of the tutors. Tutors need to realize that these learners need pastoral support and should be leveled similar to other learners.

REFERENCES

- Alias Z, Zawawi EMA, Yusof K, Aris NM. (2014). Determining critical success factors of project management practice: A conceptual framework. *Procedia-Social and Behavioral Sciences*, 153:61-69.
- Bartunek JM, Moch MK (1987). First-order, second-order, and third-order change and organization development interventions: A cognitive approach. *The Journal of Applied Behavioral Science*, 23(4):483-500.
- Bauer C, Dey AK (2016). Considering context in the design of intelligent systems: Current practices and suggestions for improvement. *Journal of Systems and Software*, 112:26-47.
- Belout A, Gauvreau C. (2004). Factors influencing project success: the impact of human resource management. *International journal of project management*, 22(1), 1-11.
- Binani, S., & Chowdary, R. (2018). Enhancement of Learning Levels in Engineering Chemistry through Effective Use of Tutorials. *Journal of Engineering Education Transformations*, 32(1), 31-36.
- Bjork R. (2017). Creating Desirable Difficulties to Enhance Learning. Best of the Best: Progress.
- Blohm M, Krautter M, Lauter J, Huber J, Weyrich P, Herzog W, Nikendei C. (2014). Voluntary undergraduate technical skills training course to prepare students for clerkship assignment: tutees' and tutors' perspectives. *BMC medical education*, 14(1):71.
- Brinkmann, S. (2014). Interview Springer New York, 1008-1010.
- Caraher M, Cowburn G (2015). Guest Commentary: Fat and other taxes, lessons for the implementation of preventive policies. Preventive medicine, 77:204-206.
- Castek J, Jacobs G, Pendell KD, Pizzolato D, Reder S, Withers E (2015) Tutors: Personal qualities of tutors.
- Chan AP, Ho DC, Tam CM (2001). Design and build project success factors: multivariate analysis. *Journal of construction engineering and management*, 127(2):93-100.
- Clandinin DJ, Connelly FM (1994). Personal experience methods. In NK Denzin & YS Lincoln (Eds.), Handbook of qualitative research (pp. 413-427). Thousand Oaks, CA, *US: Sage Publications*, Inc.
- Coe R, Aloisi C, Higgins S, Major LE (2014) What makes great teaching. *Review of the Underpinning Research.* Durham University: UK.
- Cohen PA, Kulik JA, Kulik CLC (1982). Educational outcomes of tutoring: A meta-analysis of findings. *American educational research journal*, 19(2):237-248.
- Cooper T (2017). Curriculum Renewal: Barriers to Successful Curriculum Change and Suggestions for Improvement. *Journal of Education and Training Studies*, 5(11):115-128.
- Coulson S, Kutas M (2001). Getting it: human event-related brain response to jokes in good and poor comprehenders. *Neuroscience letters*, 316(2):71-74.
- Creswell JW (1998) Qualitative inquiry and research design: Choosing among five traditions.
- Darfilal, I. (2015). The effectiveness of using language games in teaching vocabulary the case of third year middle school learners (Doctoral dissertation).
- DBM AFAA, San Jose AE (2015). Building skills for employability through training: Gains and challenges.
- Demirel M, Özmat D, Elgün IÖ (2016). Primary School Teachers' Perceptions about Character Education. *Educational Research and Reviews*, 11(17):1622-1633.
- Derksen F, Hartman TCO, van Dijk A, Plouvier A, Bensing J, Lagro-Janssen A (2017). Consequences of the presence and absence of empathy during consultations in primary care: A focus group study with patients. *Patient education and counseling*, 100(5):987-993.

- $\label{eq:Duschlinder} \mbox{Duschl RA, Osborne J (2002) Supporting and promoting argumentation} \\ \mbox{discourse in science education.}$
- Dvir D, Lipovetsky S, Shenhar A, & Tishler A (1998). In search of project classification: a non-universal approach to project success factors. *Research policy*, 27(9):915-935.
- Eisner EW (2017) The enlightened eye: Qualitative inquiry and the enhancement of educational practice. *Teachers College Press*.
- Forgas JP (2016). Affective Influences on Moral Decisions. The Social Psychology of Morality, 152–170.
- Gibbs A (1997). Focus groups: Social research update. Retrieved June, 8. 2007.
- Gidey MU (2015). Co-Educational Tutorial Classes and Their Significance on Gendered Test Scores of Wollo University Students: A Before-After Analyses. *Educational Research and Reviews*, 10(15):2178-2190.
- Guest G, Namey, E, McKenna K (2017). How many focus groups are enough? Building an evidence base for nonprobability sample sizes. *Field methods*, 29(1), 3-22.
- Houle S (2018). Talk shows and t-tests: Applying an analogy from latenight television to biostatistics in an introductory drug information course. *Currents in Pharmacy Teaching and Learning*, 10(11):1474-1477.
- Jackson RL, Drummond DK, Camara S (2007). What Is Qualitative Research? *Qualitative Research Reports in Communication*, 8(1):21-28.
- Jheng YJ (2015). The influence of private tutoring on middle-class students' use of in-class time in formal schools in Taiwan. *International Journal of Educational Development*, 40, 1–8.
- Kapa RR, Luke J, Moulthrop D, Gimbert B (2018). Teacher victimization in authoritative school environments. *Journal of school health*, 88(4), 272-280.
- Kolodner JL (2002). Facilitating the learning of design practices: Lessons learned from an inquiry into science education. *Journal of Industrial Teacher Education*, 39(3):9-40.
- Kong S Hua A, Luo H (2018). Study on the tutorial efforts to scratch learning. In 2018 IEEE *International Conference on Consumer Electronics-Taiwan* (ICCE-TW) (pp. 1-2). IEEE.
- Krestina D (2015). The development of program of entrepreneurship (POE) accelerator to improve entrepreneurial self-efficacy. In Welcome to the 3rd *International Conference on Entrepreneurship* (p. 185).
- Kritzinger A, Lemmens J, Potgieter M. Improving the quality of learning in a blended learning environment for first-year biology. In 4th *International Conference on Higher Education Advances* (HEAD'18) (pp. 159-166). Editorial Universitat Politècnica de València.
- Mack CB, Leavitt NM, Peters CJ (2015). Outcomes achieved by student peer tutors in the center for academic success.
- Magsino, RM. Enhancing higher order thinking skills in a marine biology class through problem-based learning. Asia Pasific Journal of Multidisciplinary Research.
- Mays N, Pope C (1995). Rigor and qualitative research. BMJ:British Medical Journal. 311(6997):109.
- Mir FA, Pinnington AH (2014). Exploring the value of project management: linking project management performance and project success. International Journal of Project Management 32(2):202-217.
- Morgan, DL. (1997) Focus groups as qualitative research. London: Sage.
- Morony S, McCaffery KJ, Kirkendall S, Jansen J, Webster AC (2017). Health literacy demand of printed lifestyle patient information materials aimed at people with chronic kidney disease: are materials easy to understand and act on and do they use meaningful visual aids?. *Journal of Health Communication* 22(2):163-170.
- Nation P (2017). Fluency and learning. *The English Teacher*, 7.
- Nikolic S, Vial PJ, Ros M, Stirling D, Ritz C (2015). Improving the laboratory learning experience: a process to train and manage teaching assistants. *IEEE Transactions on Education*, 58(2):130-139.

- Ogunlana SO (2010). Beyond the 'iron triangle': Stakeholder perception of key performance indicators (KPIs) for large-scale public sector development projects. *International Journal of Project Management*, 28(3):228-236.
- Olney AM, Brawner K, Pavlik P, Koedinger KR (2015). Emerging trends in automated authoring. Design recommendations for adaptive intelligent tutoring systems: *Learner modeling*, 3:227-242.
- Osman I, Omar R, Mahphoth MH, Hashim MJM (2015). Islamic perspective of human talent identification and organizational justice: Evidence from government-linked companies in Malaysia. *In Islamic perspectives relating to business, arts, culture and communication* (pp. 325-338). Springer, Singapore.
- Palmer D, Dixon J, Archer J (2015). Changes in science teaching self-efficacy among primary teacher education students. *Australian Journal of Teacher Education*, 40(12):12.
- Patil MJ, Karadesai S (2016). To determine the effectiveness of case based tutorials as compared to traditional tutorials in microbiology. *National Journal of Integrated Research in Medicine*, 7(2), 5-8.
- Patton MQ (1990). Qualitative evaluation and research methods. *SAGE Publications*, Inc.
- Peterson GW, Sampson JP, Reardon RC (1991). Career development and services: A cognitive approach. *Thomson Brooks/Cole Publishing Co.*
- Popil I, Dillard-Thompson D (2015). A game-based strategy for the staff development of home health care nurses. *The Journal of Continuing Education in Nursing*, 46(5):205-207.
- Powell RA, Single HM, Lloyd KR (1996). 'Focus groups in mental health research: enhancing the validity of user and provider questionnaires', *International Journal of Social Psychology* 42(3): 193-206.
- Renkl A, Scheiter K (2017). Studying visual displays: How to instructionally support learning. *Educational Psychology Review*, 29(3):599-621.
- Resnick I, Davatzes A, Newcombe NS, Shipley, TF (2017) Using analogy to learn about phenomena at scales outside human perception. Cognitive research: Principles and Implications, 2(1):21.
- Rieber LP, Tzeng SC, Tribble K (2004). Discovery learning, representation, and explanation within a computer-based simulation: Finding the right mix. *Learning and Instruction*, 14(3),:307-323.
- Ritterbush J (2015). Exceeding the limits: Teaching and assessing information literacy within blackboard. *Kansas Library Association College and University Libraries Section Proceedings*, 5(1), 1.
- Rossman GB, Rallis SF (2011) Learning in the field: *An introduction to qualitative research*. Sage.
- Salehi H (2017). Effects of using instructional video games on teaching English vocabulary to Iranian pre-intermediate EFL learners. *International Journal of Learning and Change*, 9(2), 111-130.
- San Jose AE, Bahket R, Ali Alsalhi H (2017). Teach us the way we want: Teaching approach for special needs students. European *Journal of Special Education*, 2017;(2):6.
- San Jose AE, Mortos AR (2017) Am I my brother's keeper?: Buddy approach in improving students' attendance. *International Journal of English Research* 3(3) May 2017. pp 46-51.
- San Jose AE, Mortos AR (2017). Learning Arabic in the workplace: Anecdotes of language lecturers. *International Journal of English Research* 3(2) pp. 16-20.
- Shabiralyani G, Hasan KS, Hamad N, Iqbal N (2015). Impact of visual aids in enhancing the learning process case research: District Dera Ghazi Khan. *Journal of Education and Practice*, 6(19), 226-233.
- Susilo A, Suhardi DA (2018). The importance of a satisfaction analysis in a face-to-face Tutorial: A Case Study at Universitas Terbuka. *In Educational Technology to Improve Quality and Access on a Global Scale* (pp. 57-69). Springer, Cham.
- Takim R, Akintoye A (2002). Performance indicators for successful construction project performance. *In 18th Annual ARCOM Conference*, 2:545-555.

- Tsvetkov VY (2014) Cognitive information models. *Life Science Journal*, 11(4):468-471.
- University of Arizona (2009) Program planning and evaluation. Retrieved November 02, 2018 from http://extension.arizona.edu/evaluation/
- Vedung E (2017). Public policy and program evaluation. Routledge. Vethamani, ME, Nair, P (2016) Using analogy as a scaffolding tool for facilitating the comprehension of literary texts. Malaysian *Journal of ELT Research*, 3(1):18.
- Wallace CS, Prather EE (2018). Lecture-tutorials in introductory astronomy. arXiv preprint arXiv:1806.00452.
- Wang Q (2017). Tutors' column:" will you trust me". WLN: A Journal of Writing Center Scholarship, 41(9-10), 26-30.
- Whitaker S (2016) Ethics and professional conduct. In Pass the PMP® Exam (pp. 475-494). Apress, Berkeley, CA.

- Wicklund R (2016) The impact of tutoring younger students on third graders' reading skills and perceptions of themselves as readers (Doctoral dissertation, University of Wisconsin-River Falls).
- Wong LP (2008). Focus group discussion: a tool for health and medical research. *Singapore Med J*, 49(3):256-260.
- Yung KWH (2015). Learning English in the shadows: Understanding Chinese learners' experiences of private tutoring. TESOL Quarterly, 49(4):707-732.
- Zapata-Rivera D, Zwick R, Vezzu M (2016). Exploring the effectiveness of a measurement error tutorial in helping teachers understand score report results. Educational Assessment, 21(3):215-229.
- Zerin S, Zafar N (2017). Tutoring extra hour: Does it help students to improve language skill? An investigation on BRAC institute of languages' (BIL) tutorial session. GSTF Journal of Law and Social Sciences (JLSS), 3(1).