# The Effect of Tik-Tok to Enhance Beginners' Student Speaking Ability in Learning Mandarin

Djoni<sup>1)</sup>, Ani Kariyati<sup>2)</sup>, Theo Mercia<sup>3)</sup>

<sup>1) 2)</sup>Faculity of Language and Arts Universitas Negeri Padang,
<sup>1) 2)</sup>Jl.Prof. Dr. Hamka, Air Tawar Padang, Sumatera Barat
\*Corresponding Author, email: kuliahdjoni@gmail.com

Received: October 15, 20YY Revised: November 2, 2024 Accepted: November 6, 2024

#### Abstract

Many scholars have applied social media to enhance students' ability in language learning. However, little research is concerned on utilizing TikTok to teach Mandarin language, particularly speaking skills. This study aims to examine the use of TikTok as a Mandarin language learning medium to enhance beginner students' speaking skills. This study used a one-group pretest-posttest design that involved 20 students at the Diploma IV English for Business and Professional Communication department, State Polytechnic of Padang, consisting of 16 females and 4 males. The data were obtained from speaking tests in Mandarin language before and after interventions. The data were analyzed quantitatively using the Wilcoxon test. The result shows that there was a significant improvement in students' speaking skills after they were given intervention using TikTok medium. Thus, this finding is hoped that it can provide new insights for the development of language learning methods for beginner students.

# Keywords: Tiktok, student, learning, Mandarin

# Introduction

In this digital era, technology plays an increasingly important role in education. One of the concepts that is the main focus in education today is technology-based learning theory. This theory emphasizes the use of technology as a tool to facilitate the learning process and increase teaching effectiveness.

As John Dewey said, "If we teach today's students as we taught yesterday's, we rob them of tomorrow." This quote emphasizes the importance of continuing to develop learning methods that are appropriate to current developments, including the use of technology in the educational process. Technology is not only a tool, but also opens up new opportunities in creating a more interactive and interesting learning experience for students. (Gardner, et al, 2016)

By understanding technology-based learning theory, educators can create a learning environment that is more dynamic, responsive, and relevant to the needs of today's digital generation.

Through this article, we will explore the basic concepts in technology-based learning theory and the benefits that can be obtained from its implementation.

Leaning motivation is a key factor that influences the learning process in the educational context. Understanding student learning motivation can provide deep insight into the factors that influence student engagement, achievement, and interest in learning. In this article, we will explain several learning motivation theories that are relevant in the educational context.

#### Learning Motivation Theory

# Expectancy Theory (Expectancy Theory)

According to this theory, learning motivation is influenced by three main factors: expectations, values, and effort. Hope refers to a student's belief that his or her efforts will result in the desired achievement. Value is the level of importance of the results to be achieved for students. Effort is the extent to which students are willing and able to invest in learning effort. In the words of Vroom (Van & Thierry, 1996), "Motivation to learn is the result of the multiplication of students' expectations, the value they place on results, and the effort they put forth."

#### Incentive Theory

The next theory emphasizes the role of incentives in influencing learning motivation. Incentives can take the form of prizes, recognition, or other positive reinforcement given to students in return for desired achievements or behavior. According to this theory, students will tend to be more motivated to learn if they see attractive incentives as a result of their learning efforts (Luciana & Collins,2012).

#### Goal Theory (Goal Theory)

This theory emphasizes the importance of goals in motivating learning. Students who have clear and specific goals tend to be more motivated to achieve those goals. This theory also distinguishes between learning goals that are achievement-oriented (achieving certain results) and goals that are oriented to learning itself (developing skills, understanding and knowledge). (Weinberg & Butt, 2014).

Language learning is an important process in an educational context that involves mastering communication skills in the target language. Understanding language learning theories can provide valuable guidance for educators in designing effective learning experiences and facilitating the development of students' language skills. In this article, we will explain several language learning theories that are relevant in educational contexts (Man , 2004).

# Language Learning Theory

# Cognitive Theory (Cognitive Theory)

Cognitive theory focuses on the role of cognitive processing in language learning. This theory emphasizes the importance of understanding, storing and retrieving information in learning language. According to this theory, language learning involves cognitive processes such as attention, decoding, comprehension, and the use of effective learning strategies. (Keblawi, 2014).

# Social Theory (Social Theory):

Social theory emphasizes the role of social interaction in language learning. According to this theory, language learning occurs through interaction with other people in a social context. Language learners learn through observation, imitation, and participation in communicative activities with native speakers or fellow language learners. These social interactions help learners understand and practice the target language. (Gardner, 1985).

#### Constructivist Theory (Constructivist Theory):

Constructivist theory emphasizes the active role of learners in building language understanding and knowledge. (Hunter, 2015). According to this theory, language learning occurs through the construction of new knowledge based on existing experience, understanding and knowledge. Language learners are actively involved in connecting new information with existing knowledge, solving problems, and making meaning in language contexts. (Gupta, 2017).

By considering previous research and innovative approaches using TikTok as a medium for learning Mandarin, it is hoped that this article can provide new insights for the development of language learning methods for beginner students. (Idowu, et al 2014).

Some researchers have reported the use of sosial media in teaching and learning language. Fadin (2020) Student's Perception Toward The Use Of Tik Tok In Learning English Vocabulary, The subjects in this study were students of class VII H SMP Yogjakarta in the odd semester of the 2020/2021 school year, totaling 36 students. This study reported that the TikTok application can also make it easier for teachers and students to get information and students also feel happy learning because they have new experiences in unconventionally learning English. Likewise, Nur Asmarita, et al (2023) PJBL Model Assisted by Tiktok Media for Building Class VIII Students' Learning Creativity. This study reported that Plan validation results implementation of learning shows a percentage of 90.00%, meanwhile for the learning creativity assessment rubric shows a percentage of 95.94%. The research results also show students' learning creativity implementation of the media-assisted PJBL model TikTok on Substance Pressure material in class VIII MTs Nurul Huda Sukaraja very much high or very creative with the percentage of observation results was 89.11% in Nurul Afidah's research entitled Investigating Students' Perspectives on the use of TikTok as an Instructional Media in Distance Learning During Pandemic Era. This descriptive study was aimed to describe students perspectives on the use of Tik Tok Application of EFL classroom English department students at UNWAHA during pandemic era. The results of the questionnaire, the majority of students admitted that they were bored with learning only using books. When presented with questions between audio and video media, most of them chose video as a medium of learning. Of the 17 students who filled out the questionnaire, 10 answered that they had the TikTok application on their smartphone. They argue that TikTok is a good app if it's used well too, depending on the user. 88% of students agree that TikTok is used as a learning medium in EFL. Those who answered agreed that TikTok can catch the attention of every student in today's era. The videos made must be good and interesting, and contain short and clear learning. When asked about what skills they want to improve and what skills they want to apply using TikTok, on average above 50% of them answered they choose speaking skills. The advantage of TikTok is that it has many interesting features so that students will not be bored in learning.

However, the disadvantage is that the TikTok application requires quite a lot of quota. From the summary of the answers to the questionnaire, it can be concluded that the student's perspective on the use of the TikTok application is quite good and feasible if it is applied in learning, especially in the EFL class.

Previous research groups were based on the language and skills studied and the research results were as follows, Mutiara (2022) used TikTok in teaching speaking in English and the results were the TikTok application helps students improve their pronunciation, not only that using the TikTok application is very interesting for students. They can listen directly to native speakers speaking or practising pronunciations as if they are practising directly with the right person. Students can also actively participate by creating short videos and practising the pronunciation of certain words or phrases. Destia,H & Purna,W (2021) used TikTok in teaching speaking in English and the results were The use of TikTok to improve speaking skills not only helps students to improve their speaking skill but also becomes more interactive. If used properly, this application has many advantages that benefit both teachers and students.

Through TikTok, the learning atmosphere becomes fun, teacher and students can discuss many things, especially things that are familiar to our students.

However, the use of TikTok in teaching Mandarin speaking skills is still rarely done by Mandarin lecturers. Therefore, this research aims to provide development in learning Mandarin by utilizing the TikTok application. The researcher hopes that every Mandarin language teacher will have a sense of keeping abreast of current developments, especially in the use of social media which is popular with Mandarin language learners according to the times. Multimedia Learning Theory (Richard Mayer). (Mayer, 2005) stated that using a combination of text, audio, images and video can improve the learning and understanding process. TikTok provides multimedia content that can help foreign language learners. Motivation Theory( Robert Gardner)

(Gardner, 2016) emphasized the importance of motivation in language learning. TikTok can increase students' motivation through content that is interesting and relevant to their daily lives. Informal Learning Theory (Jay Cross).(Cross, 2013) argues that informal learning, such as through social media,

can complement formal learning and improve language skills. TikTok provides informal foreign language learning.Task Based Learning Theory (David Nunan).(Nunan, 1991) say emphasizes the importance of relevant and meaningful communicative tasks in language learning. TikTok can provide tasks such as creating short videos in foreign languages. Interest-Based Learning Theory (Suzanne Hidi). (Hidi, 2016), stated that learning based on students' interests and interests can increase engagement and learning effectiveness.

TikTok provides foreign language content that suits learners' interests. Thus, to address this issue, the research question is formulated as follows;

1. Is there any significant difference in beginner students' speaking ability in Mandarin language before and after intervention using TikTok medium?

#### Methods

#### **Research Design**

The research used a pre-experimental study with a pre-test and post-test control group design. This research aimed to examine the effectiveness of Tiktok as a medium to teach the Mandirin language in one experimental class without a control class. This is in line with the opinion of Campbell and Stanley. Campbell and Stanley are figures who contributed a lot to the development of experimental research designs, especially pre-test and post-test control group designs. According to them, this design is one of the eight most powerful experimental designs for testing the effectiveness of a treatment or intervention. With a control group, researchers can compare the results of treatment in the experimental group with groups that did not receive treatment. (Shadish, et al 2002)

So, in this research, the use of a pre-test post-test control group design is in line with Campbell and Stanley's view of an effective experimental research design for testing the effectiveness of a learning method or medium, in this case, the use of TikTok to teach Mandarin. The choice of this design indicates that the research follows the principles of experimental research methodology recommended by Campbell and Stanley.

# **Participants**

This research involved 20 Mandarin beginner students who were taking a Mandarin language course in the second semester at the Diploma IV English for Business and Professional Communication department. They consisted of 16 females and 4 males. They average about 19-20 years old.

#### Techniques in Data Collection and Analysis

This research data was obtained from a speaking test in Mandarin before and after using TikTok with the topic of the names of months in Mandarin, with a video duration of 3-5 minutes and this task was given within 1 week. After that students were given an assessment with the criteria are accuracy of use of pronunciation, interaction, understanding, and fluency.

After that, testing was carried out using the Wilcoson test because the data was not normally distributed. The results of the Wilcoson test are presented in the following table:

# Table 1-Tests of Normality

		Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
		Statistic	df	Sig	Statistic	df	Sig
Pre-test	of	120	20	200	951	20	385
Speaking Ability							
Post-test	of	207	20	024	907	20	056
Speaking Ability							

a. Lilliefors Significance Correction

\*. This is a lower bound of the true significance.

The results of the data normality test showed that the pre-test and post-test data on students' Mandarin speaking skills were not normally distributed because the p-value on the post-test of speaking ability

The Effect of Tik-Tok to Enhance Beginners' Student

4

was <.005, while the p-value on the pre-test of students' speaking skill ability had a normal distribution with p-value> 0.005. This means that because one group of data is not normal, to determine whether there is an increase before and after the intervention, a non-parametric test, namely the Wilxocon test, is used. The results are presented in the following table.

# **Result and Discussion**

After analyzing the data on the results of the pre-test and post-test of speaking skills in Mandarin using TikTok, the results are as follows:

Table 2- Wilcoxon Sign Rank

	Ranks			
		Ν	Mean Rank	Sun of
				Ranks
Post-test of Speaking Ability	Negative Ranks	3 <sup>a</sup>	3.50	10.50
Pre-test of Speaking Ability	Positive Ranks	16 <sup>b</sup>	11.22	179.50
	Tes	1°		
	Total	20		

a. Post-test of Speaking Ability < Pre-test of Speaking Ability

b. Post-test of Speaking Ability > Pre-test of Speaking Ability

b. Post-test of Speaking Ability = Pre-test of Speaking Ability

# **Tabel 3-Test Statistics**

	Post- test of	
	Speaking ability	
	Pre test of speaking Ability	
Ζ	-3,401*	
Asymp Sig (2-tailed)	.001	
.a Based on negative ranks.	·	
.b. Wilcoxon Signed Ranks Test		

Based on the table above, the Wilcoxon test results show that there is a significant difference between the results of the post-test (after using TikTok media) and the pre-test (before using TikTok media) in terms of Mandarin-speaking skills of Padang State Polytechnic Business Administration students.

1. The Z value is -3.401 with a significance level of .001 (2-tailed).

2. These results indicate that there is a significant difference between the post-test and pre-test.

3. A negative Z value indicates that the post-test (results after using Tiktok media) has a lower average rating than the pre-test (results before using Tiktok media). This shows an increase in Mandarin speaking skills after using Tiktok media.

Thus, the results of the Wilcoxon test show that the use of Tiktok media is effective in improving the Mandarin speaking skills of Padang State Polytechnic Business Administration students.

The interpretation of this research is to test the effectiveness of using the TikTok platform in improving Mandarin in beginner students. This research is compared with previous research, the results are the same in terms of increasing speaking ability achievement. So TikTok is a medium that is quite effective in learning languages such as English.

The contributions of this research include:

1. Proving the effectiveness of using TikTok in improving Mandarin speaking skills for beginner students.

2. Shows that technology-based learning media, such as TikTok, can increase student motivation and involvement in language learning.

3.Provides empirical evidence on the role of informal learning via social media in supporting formal language learning.

4. Integrating the use of TikTok media with relevant principles of language learning theory. These theories are:

1. Multimedia Learning Theory (Multimedia Learning Theory-Richard E. Mayer , 2005))

Mayer believes that the use of media that combines text, audio, images and video can improve the learning and understanding process. TikTok as a multimedia learning medium can support this.

2. Motivation Theory (Motivation Theory-Robert Gardner, 1985)

Gardner emphasized the importance of motivation in language learning. Interesting content on TikTok can increase beginner students' motivation to learn Mandarin.

3. Informal Learning Theory (Informal Learning Theory- Jay Cross, 2013).

Cross argues that informal learning, such as through social media, can complement formal learning and improve language skills. TikTok provides informal Mandarin learning.

4. Task-Based Learning Theory (Task-Based Language Learning-David Nunan, 1991)

Nunan emphasizes the importance of relevant and meaningful communicative tasks in language learning. TikTok can provide tasks such as creating short videos in Mandarin.

The weakness of this research is that it only measures one aspect of speaking skills and only one class is used for the experiment without a control class. Overall, this research provides important insights into the use of social media, especially TikTok, in Chinese language learning for beginning students.

# Conclusion

This research has utilized the TikTok media and the results of this research can be concluded that TikTok is a media that can make beginner Mandarin language learners improve their results in obtaining

...

Mandarin grades and be serious about learning Mandarin. The suggestion of this research is that there should be a control class and test different language skills.

# References

- Asmarita, N., Firdaus, T. ., & Effendi, E. (2023). Model PjBL Berbantuan Media Tiktok untuk Membangun Kreativitas Belajar Peserta Didik Kelas VIII. U-Teach:<u>https://doi.org/10.30599/uteach.v4i2.169</u>
- Aunurrafiq., Sari, R. N., & Basri, Y. M. (2015). The moderating effect of goal setting on performance measurement system managerial performance relationship. *Procedia Economics and Finance*, 31, 876-884.
- Azar, H. F., Reza, P., & Fatemeh, V. (2014). The role of goal-setting theory on Iranian EFL learners' motivation and self-efficacy. *International Journal of Research Studies Language Learning*, 3(2), 69-84.
- Bhatia VK. Genre analysis, ESP and professional practice. English for Specific Purposes. 2008; 27:161-174.
- Brown, T., & Latham, G. P. (2000). The effects of goal setting and self-instruction training on the performance of unionized employees. *Relations Industrielles / Industrial Relations*, 55(1), 80-95.
- Bueno, J., Weinberg, R.S., Fernandez, C., & Capdevila, L. (2008). Emotional and motivational mechanisms mediating the influence of goal setting on endurance athletes' performance. *Psychology of Sport and Exercise*, 9(6), 786-799.
- Burton, D., Yukelson, D., Weinberg, R., & Weigand, D. (1998). The goal effectiveness paradox in sport: Examining the goal practices of collegiate athletes. *The Sport Psychologist*, *12*(4), 404-418.
- Chen, X., & Latham, G. P. (2014). The effect of priming learning vs. performance goals on a complex task. *Organizational Behavior and Human Decision Processes*. 125(2), 88-97.
- Collins, A., & Kapur, M. (2014). Cognitive apprenticeship. In Sawyer, R.K. (Ed.), *The Learning Sciences* (2nd ed., pp. 109-126). New York: Cambridge University Press.
- Coombs, P.H., with Prosser, R.C., & Ahmed, M. (1973). *New paths to learning for children and youth*. New York: International Council for Educational Development.
- Cross, J. (2007). Informal learning: Rediscovering the natural pathways that inspire Innovation and Performance. San Francisco, CA: Pfeiffer.
- Cross, J. (2013). The principles of learning. Retrieved November 13, 2017, from http://www.internettime.com/2013/07/the-principles-of-learning/
- Czerkawski, B. (2016). Blending formal and informal learning networks for online learning. *The International Review of Research in Open and Distributed Learning*, 17(3).
- Destia, H & Purna W,(2021)Having Good Speaking English through Tik Tok Application. https://doi.org/10.54012/jcell.v1i3.35
- Dewey, J. (1997). Democracy and education. New York: Simon and Schuster. (Original work published 1916)
- De Grip, A. (2015). The importance of informal learning at work. *IZA World of Labor*. doi: 10.15185/izawol.162
- Du JB. The attainment of two high requirements of legal English curriculum. Journal of Guangdong University of Foreign Languages. 2006; 2: 76-80.

- Dornyei. Z. (1994). Motivation and motivating factors in the foreign language classroom. *The Modern English journal*, 78(3),273-284. Retireved from <a href="http://www.jstor.org/stable/330107">http://www.jstor.org/stable/330107</a>
- Dornyei,Z. (1998). Motivation in second and foreign language learning:language teaching, 31(3), pp 117-135 doi:10. 1017/S026144480001315
- Dorneyi, Z. (2005). The psychology of the language learner: Individual differences in second language acquisition. New Jersey, London: Lawrence Erlbaum Associates Publishers
- Dorneyi, Z. (2013). Attitudes, orientation and motivation in language learning: advances in theory, Research and application. doi:10. 1111/1467-9922. 53222
- Driscoll, M.P., (2005). *Psychology of learning for instruction* (3rd ed.). Boston, MA: Allyn & Bacon.
- Ercan, O. (2014). The effect of multimedia learning on students' academic achievement and attitudes towards science courses. *Journal of Baltic of Science Education*, 13(5), 608-622
- Fahdin. (2020). Student's Perception Toward The Use Of Tik Tok In Learning English Vocabulary. International Conference Labma Scientific Fair 2020, Yogyakarta
- Gardner, K.A., Diesen, D.L., Hogg, D., & Huerta, S. (2016). The impact of goal setting and goal orientation on performance during a clerkship surgical skills training program. *The American Journal of Surgery*, 211(2), 321-325.
- Gardner, R. C. (1985). Social psychology and second language learning: The role of attitudes and motivation. doi: 10. 1016/0346-251X (87)90081-9
- Greeno, J.G., & Engeström, Y. (2014). Learning in activity. In Sawyer, R.K. (Ed.), *The learning sciences* (2nd ed., pp. 109-126). New York, NY: Cambridge University Press.
- Guo Q. On the rationale of legal English curriculum Design. Journal of Shandong Foreign Language Teaching. 2004; 1:69-70.
- Guo, Q., & Zhu, H. (2019). The effect of WeChat-based flipped classroom on Chinese as a foreign language learning. International Journal of Emerging Technologies in Learning, 14(1).
- Gupta, N., & Tyagi, H. K. (2017). Constructivist based pedagogy for academic improvement at elementary level. Retrieved from <u>https://www.researchgate.net/publication/321018062\_constructivist\_based\_peda</u> gogy\_for\_academic\_improvement\_at\_elementary\_level
- Hidi, S. (2016). Revisiting the role of rewards in motivation and learning: Implications of neuroscientific research. Educational Psychology Review, 28(1), 61–93. doi: 10.1007/s10648-015-9307-5.
- Hunter, W. (2015). Teaching for engagement: part 1: Constructivist principles, case-basedteaching,andactivelearning.Retrieved

...

from <u>https://www.researchgate.net/publication/301950392\_Teaching\_for\_Engagement</u>\_Part\_1\_Co

- Idowu, A., Chibuzoh, I., & Louisa, M. (2014). Effects of goal-setting skills on students' academic performance in English language in Enugu Nigeria. *Journal of New Approaches in Educational Research (NAER Journal)*, 3(2), 93-99.
- Keblawi. Farris. (n. d. ). A review of language learning motivation theories. Retrieved in November 2014 from www. qsm. ac. il/mrakez/asdarat/jamiea/12/eng-2faris%20keblawi. Pdf
- Latham, G. P. (2003). Goal setting: A five-step approach to behavior change. *Organizational Dynamics*, *32*(3), 309-318.
- Latham, G. P., & Locke, E. A. (2007). New developments in and directions for goal-setting research. *European Psychologist*, 12(4), 290-300.
- Larsson J. Problem-based learning: a possible approach to language education? [Internet]. [Place unknown]: Polonia Institute, Jagiellonian University; 2001. [cited 2013 January 27]. Available from http://en.wikipedia.org/wiki/Task-based \_language\_learning.
- Locke, E. A. (1968). Toward a theory of task motivation and incentives. *Organizational Behavior and Human Performance*,3(2), 157-189.
- Locke, E. A., & Latham, G. P. (1979). Goal setting: A motivational technique that works. *Organizational Dynamics*, 8(2), 68-80.
- Locke, E. A., & Latham, G. P. (1985). <u>The application of goal setting to sports</u>. *Journal of Sport Psychology*, 7(1985), 205-222.
- Locke, E. A., & Latham, G. P. (1990). A theory of goal setting and task performance. Englewood Cliffs.
- Locke, E. A., & Latham, G. P. (2002). Building a practically useful theory of goal setting and task motivation: A 35-year odyssey. *American Psychologist*, *57*(9), 705-717.
- Locke, E. A., & Latham, G. P. (2006). New directions in goal-setting theory. *Current Directions* in *Psychological Science*, 15(5), 265-268.
- Locke, E. A., & Latham, G. P. (2019). The development of goal setting theory: A half century retrospective. *Motivation Science*, 5(2), 93-105.
- Locke, E. A., Shaw, K. N., Saari, L. M., & Latham, G. P. (1981). Goal setting and task performance: 1969–1980. *Psychological Bulletin, 90*(1), 125-152.
- Lohman, M.C. (2006). Factors influencing teachers' engagement in informal learning activities. *Journal of Workplace Learning*, 18(3), 141-156.
- Luciana M, Collins PF. <u>Incentive motivation, cognitive control, and the adolescent brain: Is It</u> <u>time for a paradigm shift</u>? Child Dev Perspect. 2012;6(4):392-399. doi:10.1111/j.1750-8606.2012.00252.x
- Man Y. Legal English teaching and training of international law talents. Journal of Beijing International Studies University. 2004; 2: 31-36.
- Mayer, R.E. (2005). Cognitive theory of multimedia learning. In R.E. Mayer (Ed.), *The* cambridge handbook of multimedia learning (pp. 31-48). New York: Cambridge University Press.
- Mayer, R. E. (2002). Multimedia learning. Psychology of Learning and Motivation, 41, 85-139.
- Mayer, R. E. (1997). Multimedia learning: Are we asking the right questions? *Educational Psychologist*, 32(1), 1-19.
- McTigue, E. (2009). Does multimedia learning theory extend to middle school students? *Contemporary Educational Psychology*, *34*(2), 143-153.

- Mirghani HM, Ezimokhai M, Shaban S, Berkel HJ. Superficial and deep learning approaches among medical students in an interdisciplinary integrated curriculum. Education for Health. 2014; 27(1):10-14.
- Moeller, A. J., Theiler, J. M., & Wu, C. (2012). Goal setting and student achievement: A longitudinal study. *The Modern Language Journal*, *96*(2), 153-169.
- Mutiara,S,D,P (2022), THE EFFECTIVENESS OF USING TIKTOK TO IMPROVE EFL LEARNERS' SPEAKING ABILITY,July 20223(2):101-110, DOI:10.12928/mms.v3i2.6096, LicenseCC BY-SA 4.0
- Nebel, S., Schneider, S., Schledjewski, J., & Rey, G. D. (2017). Goalsetting in educational video games: Comparing goal-setting theory and the goalfree effect. *Simulation & Gaming*, 48(1), 98–130.
- Nunan D. Designing tasks for the communicative classroom. London: Cambridge University Press; 1989.
- Nunan D. Communicative tasks and the language curriculum. TESOL Quarterly. 1991; 25(2):279-295.
- O'Neil H. F., & Drillings, M. (Eds.). (1994). *Motivation: Theory and research*. Lawrence Erlbaum Associates.
- Ordóñez, L. D., Schweitzer, M. E., Galinsky, A. D., & Bazerman, M. H. (2009). Goals gone wild: The systematic side effects of overprescribing goal setting. Academy of Management Perspectives, 23(1), 6-16.
- Page, V., & Graham, S. (1999). Effects of goal setting and strategy use on the writing performance and self-efficacy of students with writing and learning problems. *Journal* of Educational Psychology, 91(2), 230-240.
- Plews JL, Zhao KX. Tinkering with tasks knows no bounds: ESL teachers' adaptations of taskbased language teaching. TESL Canada Journal. 2010; 28(1): 41-59.
- Robert K. Merton, <u>This Week's Citation Classic: Merton R K. Social Theory and Social</u> Structure. New York: Free Press, 1949, <u>Current Contents</u>, (21): 12-12 1980
- Shadish, W. R., Cook, T. D., & Campbell, D. T. (2002). *Experimental and quasi-experimental designs for generalized causal inference*. Houghton, Mifflin and Company.
- Shah, R. K. (2019). *Effective constructivist teaching learning in the classroom*. Retrieved from <u>https://files.eric.ed.gov/fulltext/ED598340.pdf</u>

...

- Van Eerde, W., & Thierry, H. (1996). Vroom's expectancy models and work-related criteria: A meta-analysis. *Journal of Applied Psychology*, 81(5), 575–586. https://doi.org/10.1037/0021-9010.81.5.575
- Weinberg, R., & Butt, J. (2014). Goal-setting and sport performance. In Athanasios G., Papaioannou, & Hackfort, D. (Eds.), Sport and Exercise Psychology (pp.343-355). Routledge.
- Yue, C., Kim, J., Ogawa, R., Stark, E., & Kim, S. (2013). Applying the cognitive theory of multimedia learning: An analysis of medical animations. *Medical Education*, 47, 375-387.