
GAMIFICATION AS A TOOL TO REDUCE OCCUPATIONAL STRESS AMONG HIGHER EDUCATION TEACHERS IN UZBEKISTAN

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Abstract. This purpose of this work is to describe the ways and results of occupational stress among teachers. Furthermore, this study aims to prove that gamification as a tool to reduce occupational stress among higher education teachers in Uzbekistan. In the part, quantitative and qualitative research methodologies will be applied to find out the level of teacher stress measuring by the Likert scale 1...5 numbers and the survey questionnaire will be designed and given by social websites (networking system) such as facebook, instagram and telegram an face-to-face form. The experiments with Focus group and experiment group will be carried out among 150 teachers and 150 students of three universities in Tashkent such as WIUT, TIAME and KIUT in May, 2023. Furthermore, it also presents the proper solutions which are actual in current days such as gamification. The project leaders and members will go to experiment areas and carry out the experiment with teacher initiated games and student initiated games. The funding for experiment will be given by USA embassy in Tashkent. The results of this experiment is expected to be published in a high rank journal and the list of games with explanations will be published as a book or manual for other teachers and future students.

Keywords: *teacher stress, gamification, occupational stress, emotional intelligence.*

Introduction and Motivation. Stress is considered a global problem of 21st century. Almost everybody who works with people in the offices experience the symptoms of stress. There are such professions such as teachers, doctors and office workers come across with stress and stressful situations at their work places. Teaching is one of the most greatly respectful but challenging professions in the world because most teachers complain that they have some acute health issues such as headaches, backpains, depression, fatigue, stomachaches. Selye (1956) defined stress as the wear and tear on the body. It damages teacher's self-esteem, self-efficacy, resilience and lead to physical and psychological illnesses. Initially, stress hormones stimulate the immune system, but after the stressful situations it

suppresses the immune system, leaving the body open to a wide variety of psychological and physical illnesses and their symptoms.

According to Work Cover State of Queensland “Occupational stress pertains to the physical, mental, and emotional reactions of teachers who perceive that their work demands exceed their abilities and/or their resources (e.g. time, access to help/support) to do the work” (2019. p.10). Definitely, teachers have lots of work at their institutions such as planning the lesson, designing the lesson materials and handouts, delivering the lesson, giving feedback during and after the lesson, assessing homework, communicating with students who have difficult characters (mischievous students) and many other problems.

Quick and Demetria (2016) stated that occupational stress is a known health risk for a range of psychological, behavioral, and medical disorders and diseases. They also described stress as directly linked to the top leading causes of death in the world, such as cardiovascular disease being the prominent cause for both men and women. If teachers are asked about their health, they will complain they have so many terrible illnesses because of their work responsibilities, they have to deal with bureaucracy - doing paper work, students’ late self-study submissions. Moreover, some teachers work under pressure while writing academic articles for publication in Web of Science or Scopus-based higher impact factor journals in order to increase their work place’s (institution’s) local and world rank among other universities and other additional duties which lead to them suffer from occupational stress at Higher education institutions in Uzbekistan.

According to Fiorilli et al. (2019) there are solutions such as developing emotional intelligence which may help them reorganize their priorities so that they can reduce chronic stress as well as incorporate a few new healing strategies to help combat acute stress. One of the solutions to reduce episodic stress is to switch the class into flipped classys, increase student engagement in the student-centered-classes. According to Kholmatov’s study (2022) implementing teacher initiated humour as a means of stress relieving for teachers during the class may dramatically reduce teacher stress during the class and assessment week. Sangkyun

Kim et al. (2018) say implementing teacher initiated learning games (educational games) or student initiated games are also very productive to make the class more interactive and diminish teacher stress.

Karl M.Kapp (2012) also state that educational games are very helpful to increase teacher self-efficacy and keep balance between work and personal life. Have control over their emotions not to have much fatigue at work. It is necessary to provide educators with training on how to maintain a balance between work demands and duties, and personal and social-life time, on how to set realistic targets in order to fulfill them, on how to communicate and sustain supportive relations in the workplace. The government and university authority should support teachers financially and mentally to reduce their stress by helping them with article publications and career development. They can minimize their workload for teachers who do research and give some financial support until they defend their PhD work.

If there are supportive and helpful relations in the workplace and practicing coping and empowering techniques may help teachers significantly in reducing anxiety and in dealing with occupational stress. If teachers do not have stress issues they will have job satisfaction and develop their self-esteem. The students who they work with will also have good prosperity and grades with excellent achievements. There are many interactive games to use while teaching English language. Below we can see the most widely used interactive games which are very stress relieving and increase student engagement.

- 1 Who am I? Or What am I?
- 2 Information Gap
- 3 Running dictation or clapping dictation
- 4 Bingo
- 5 Jeopardy
- 6 Folding stories
- 7 Four Truths and a lie
- 8 Treasure island
- 9 Broken telephone line
- 10 Finding the places
- 11 Talk show

12 Quiz show

2. Research question and objectives (around 100 words)

While doing this research I would like to find the answers to these questions:

- whether teacher occupational stress will influence their self-efficacy and resilience among teachers at higher education establishments in Uzbekistan;

Whether teachers in Uzbekistan know about emotional intelligence and gamification;

- whether having emotional intelligence will cope with their occupational stress;

- whether implementing teacher initiated games will overcome occupational stress more or less;

- whether implementing student initiated games will overcome occupational stress more or less;

Research objectives are:

- to find out the level of teacher stress in three university teachers by carrying out the survey and questionnaire with some questions;

- to help teachers to develop emotional intelligence: self-efficacy and resilience;

- to establish a team #helpTeachers to help teachers in Uzbekistan to overcome their occupational stress by developing emotional intelligence;

- to make a team of experts (psychologists and other teachers who have experts maybe from foreign countries, if we have enough funding to ask them come to our university) who can give advice to teachers to cope with their stress and other occupational problems;

- to develop the team #helpTeachers in social websites such as facebook, instagram and others;

- to develop a website and mobile application where teachers can find more useful information how to reduce their occupational stress and develop their games independently;

- to organize #helpTeacher mini briefings, meetings, and others;

- to develop games which are modified by teachers and students;

-to collect all games and publish a book or at least manual for future teachers;

3. Methodology: (around 500 - 800 words)

- research philosophy is postivism,
- the role of theory (deductive);
- types of research is mono / multi-method quantitative;
- research strategies are survey with questions by Liker's numbers 1...5, and experiment with gamification initiated by teachers in FGD and games initiated by students)
- Hypothesis 1. Teacher occupational stress has a great impact on teacher resilience
- Hypothesis 2. Having emotional intelligence can cope with occupational stress.
- Hypothesis 3. Teacher initiated games can increase student engagement during the lesson and reduce teacher stress, increase student motivation.
- Hypothesis 4. Student initiated games can increase student engagement and reduce teacher stress and increase student motivation.
- Step 1. To carry out a survey and find the level of teacher stress and self-efficacy. Survey questions will be designed by Likert scale 1...5 numbers and give some questions about the reasons of stress, what they do to reduce it etc
- Step 2. To analyze the survey results and have a discussion with team members
- Step 3. Carry out experiment to increase student engagement while implementing gamification during the EFL classes. There will be two groups; focus group and experiment group. They should develop gamification during the classes. Teacher modified games send student modified games
- Step 4. For a month to go and observe the groups.

- Step 5. We need some funding to reward the students and teachers who will have taken active participation during the project
- Step 6. To publish the results of the project as an article in high ranking scientific journals and of course to publish a book with EFL interactive games which will be designed by teachers and students

5. Data collection details (around 300 words)

- In this research both Primary and secondary data will be implemented
- Data collection instruments: Likert scale 1...5 to find out teacher stress and survey questions to find out the reasons of teacher stress.
- Focus group discussion questions to know the results of the process ‘Gamification’ before, while and after
- Draft of research instruments, i.e. questionnaire questions is given in Appendixes 1, 2, 3,4

6. Stakeholder analysis (around 300 words)

• The primary stakeholders of my research are Higher education teachers and students will benefit my findings and teacher stress will be reduced and students engagement will be influenced, i.e. students will independently design games and implement it during the lesson. The outcomes of the work will increase teacher self-efficacy and well-being. They will have emotional intelligence which is important to keep balance between getting overwhelmed and controlling the process in order to be resilient;

- academic audience (i.e. Journal readers), policymakers, households/consumers, grant funding agencies etc. I have applied for USA small grants, and hope to have the grant to carry out my research. If I carry out my experiment and help teachers to control and reduce their stress, not only teachers but also students will have productive lessons. Furthermore, university administration will have a good profit from well-organized and fruitful classes. If teachers do not have stress, they will not have health issues; headaches, fatigue, depression, and they will not have to take a sick leave a lot. It can save a lot. It can save their money for medicine or recreation.

Appendix 1: Likert scale 1...5 numbers to know the teacher stress level

Stress level	Score
No stress	1
Mild stress	2
Moderate stress	3
Much stress	4
Extreme stress	5

Appendix 2. Questions in Focus group discussion

1. *What games do you like to have during the English classes?*
2. *What problems do you come across while having games in English classes?*
3. *Do you design games yourself or you borrow it from resources such as books or the internet?*
4. *How do you manage mixed groups while implementing games in teaching particular topic?*
5. *How do you assess your students when you conduct a lesson with games?*
6. *What games are really productive in teaching writing skills?*
7. *What instructions do you give to your students when they should make (design) games on their own?*
8. *How do assess students design games? What assessment criteria is productive and transparency?*

Appendix 3. The list of questions to find out teacher stress reasons

- 1 What do you do when you get stressed?
- 2 What makes you get stressed?
- 3 Do you think that female teachers are more likely to suffer from psychosocial pressures than male teachers, why?
- 4 How do you keep your self-efficacy and resilience?
- 5 How often do you use teaching interactive games during your lessons?
- 6 What changes do you notice when you use games during the classes?
- 7 Are there any advantages of using games in the classes?
- 8 Are there any disadvantages of using games in the classes?

Appendix 4. The list of games which are employed in the research

- 1 Who am I? Or What am I?
- 2 Information Gap
- 3 Running dictation or clapping dictation
- 4 Bingo
- 5 Jeopardy
- 6 Folding stories
- 7 Four Truths and a lie
- 8 Treasure island
- 9 Broken telephone line
- 10 Finding the places
- 11 Talk show
- 12 Quiz show

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“Foreign language learning and teaching: new approaches and innovations”
 (Xorijiy tillarni o‘zlashtirish va o‘qitish: yangi yondashuvlar va innovatsiyalar)
mavzusidagi xalqaro ilmiy-amaliy konferensiya
MATERIALLARI TO‘PLAMI
2023 yil 19-iyun

MUNDARIJA

I. XORIJIY TIL TA'LIMI VA INNOVATSION O'QITISH USLUBLARI		
1.	Alimsaidova Sayyora	3
2.	Atashikova Nilufar	7
3.	Bakhronova Mahliyo	12
4.	Bibaeva Khilola	17
5.	Chijova A.O	21
6.	Dauletova Dinara	27
7.	Farxodova Maxliyobonu	31
8.	Hamidov Tohir	35
9.	Ismatova Shakhnoza	38
10.	Karimov Feruzjon	41
11.	Khudayberganova Nafisa	48
12.	Pulatova Zulfiya	54
13.	Rakhmonova Shalola	61
14.	Ro'zmetova Muxabbat	73
15.	Rsaliev Arman	78
16.	Saidova Gulyora	80
17.	Shakhakimova Mavjuda	83
18.	Turakulova Bakhtiniso	87
19.	Usmanova Shoxsanam	92
20.	Vakhobova Feruza	96
21.	Xodjimuratova Malika	101
22.	Muxammedjanova Nigora	106
23.	Sabirova Gulnoza	111
24.	Muhammedjanova Nigora, Shomurodov Azamat,	116
25.	Zakirova Gulnora	121

II MASOFAVIY TA'LIM: YANGI TRENDLAR VA IMKONIYATLAR		
26.	Alimsaidova Sayyora	128
27.	Isamuxamedova Nodira	133
28.	Raufova Movluda	138
29.	Samatova B.R.	143
30.	Shermatova Dilfuza	146
31.	Taktasheva Dinara	156
32.	Turdibekova Dilnoza	162
33.	Tolibayeva Umida	166
III TIL, MADANIYAT VA ULARNING TALQINI		
34.	Abdalimov Suhrob	175
35.	Djumambetova Gulziba	181
36.	Kalimbetov Sh.M.	184
37.	Karimov Ulugbek	188
38.	Nasriddinov Dilshod	195
39.	Irgasheva Sh.S.	200
40.	Ollamova Maloxat	205
41.	Solijonov Mukhammadjon	209
42.	Vaxobova Feruza	213
43.	Niyazov Ravshan	219
44.	Xodjakulova Nargiza	224