

Developing Students' Communication Culture In English Lessons Based On Artificial Intelligence Technologies

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Abstract:

This in the article artificial artificial intelligence (AI) technologies English language in their classes application through students communication culture develop issues seeing ChatGPT , AI- based speech analysis systems , virtual communication simulators and adaptive study platforms communicative competence in formation impact 68 people student in the presence of one semester during empirical road with studied . Developed 5- speed manual transmission based on a methodological model held experiment results experience in the group verbal speech skills (+1.2 points on IELTS), writing speech accuracy (+23%), lexical reserve (+41%) and communication significant increase in trust (+43%) at the level increased The article describes SI technologies English language to education integration to do methodical basics , tables , diagrams and practical recommendations cited .

KEYWORDS: *artificial intellect , communication culture , English language education , communicative competence , ChatGPT, ELSA Speak, adaptive education , speech simulator , digital education technologies .*

Introduction

Modern education system intense development and digitization processes foreign languages in teaching new Artificial intellect technologies education to the field enter arrival traditional lesson forms fundamentally changing , teacher and students between mutual relationships new quality to the stage In particular , English language SI- based education from tools use students communication culture in development beautiful opportunities is creating .

Communication culture — the individual's linguistic , speech and socio-cultural norms based on communication with effective communication install , own his/her opinion clear expression and others respect with listen to receive such as skills English language in the context of communication culture formation not only language knowledge , maybe intercultural communication also covers skills takes .

There is research this shows that traditional teaching methods often students communicative competence complete formation for enough not [1]. SI technologies based on interactive environments this of the problem solution as increasingly big importance profession This is of the research goal — SI technologies English language in their classes application through students communication culture development methodical the basics working exit and practical efficiency from determining consists of .

LITERATURE ANALYSIS AND RELEVANCE

Artificial intellect and language education at the intersection research last in a decade sharp growing went Warschauer and Healey (1998) PC using language learning (CALL) initial in models technology communicative competence in formation role [2]. Chapelle (2001) CALL environments for necessary pedagogical principles by designating [3]. Jeon and Lee (2023) large language models teacher and student between « third as " side " to act effectively possible proved [9].

From Uzbekistan scientists too in the direction active work take are going . Saidahmedov and Kholikov (2022) digital technologies local to education current of reaching methodical the basics working [5] Abdullayeva (2023) introduced ChatGPT Uzbek supreme education in institutions of application initial experience learned and it also improves efficiency record reached , but teacher leadership the necessity [6] This research this the gap fill — SI communication culture develop for the purpose complex methodical system within application — aimed at .

THEORETICAL FRAMEWORK: COMMUNICATIVE COMPETENCE MODEL

Canale and Swain (1980) communicative competence four from the component through a model consisting of explained : grammatical , sociolinguistic , discursive and strategic competencies [8]. This in research this model is expanded in the form of — five component as — used :

Linguistic component — grammatical accuracy , vocabulary wealth , pronunciation norms ; Pragmatic component — communication to the purpose appropriate language tools choice , intercultural communication rules ; Discursive component — consistent and logical speech build ; Strategic component — in communication difficulties overcome strategies ; Affective component — communication relatively confidence and initiative .

2-rasm. Kommunikativ kompetensiya komponentlari bo'yicha natijalar (10 balli shkalada)

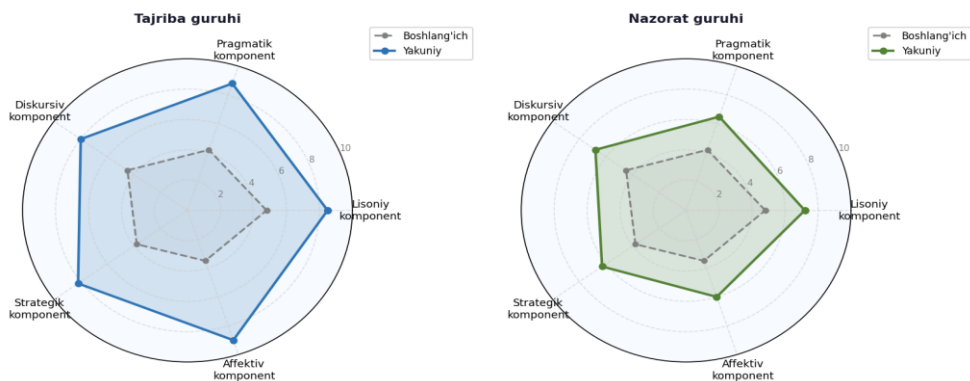


Figure 2. Communicative competence components according to groups results (10 points) on the scale , n=68

As can be seen from Figure 2 as it stands , experience group all five component control over to the group relatively high growth dynamics Especially , affective component (dialog trust) increase by 9.0 points arrived , most high the result record achieved — this is the SI technology psychological obstacles overcoming role confirms .

AI TECHNOLOGIES IN ENGLISH LANGUAGE TEACHING

Current on the day English language in education applied SI technologies one how many main to the group to be Table 1 below shows the main tools , their functions and education in the process place complete expressed :

Table 1. English language in education applied SI technologies classification

SI tool	Home function	Competence type	Usage frequency
ChatGPT / Claude	Free communication , text analysis	Pragmatic , Discursive	In class and at home
ELSA Speak	Pronunciation analysis , phonetic assessment	Linguistic (phonetic)	From the lesson outside
Duolingo / Babbel	Adaptive lexical exercises	Linguistic	Independent study
VirtualSpeech	VR environment speech simulation	Pragmatic , Strategic	Practical exercise
Grammarly	Written speech analysis and correction	Linguistic , Discursive	Home tasks
Speechify	Speech speed and intonation	Linguistic (prosodic)	In class

3-rasm. SI texnologiyalarining samaradorlik ko'rsatkichlari (n=68, talabalar so'rovnomasi asosida)

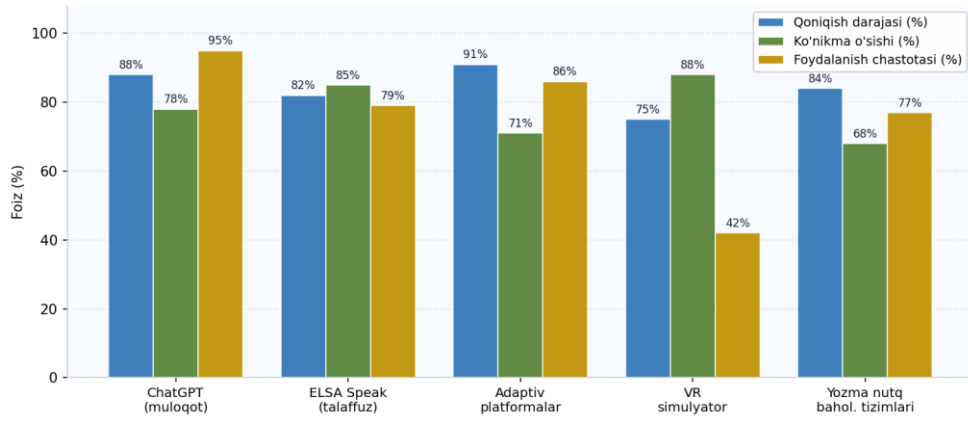


Figure 3. SI technologies efficiency indicators (students questionnaire , n=68)

Presented in Figure 3 questionnaire to the results according to , VR simulator skill growth according to the most achieved a high score of 88% , but use frequency was comparatively low (42%) , which of the device limited existence with ChatGPT is explained . all indicators according to the most balanced the results record reached .

FIVE-STEP METHODOLOGICAL MODEL

SI technologies English language to the lessons integration in doing following five step by step methodical approach effective that determined :

4-rasm. SI texnologiyalarini ingliz tili ta'limiga integratsiya qilishning 5 bosqichli metodik modeli

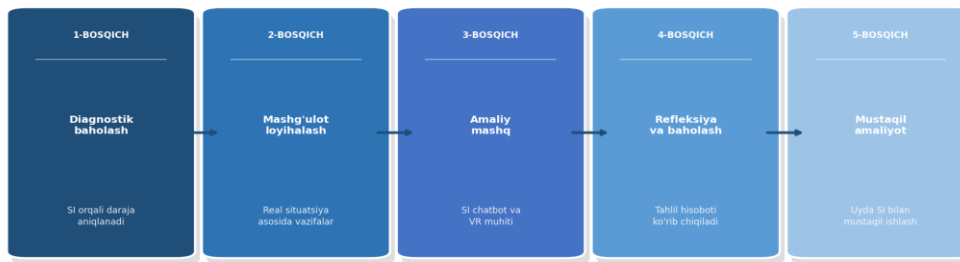


Figure 4. SI technologies English language to education integration 5 steps to make methodical model

First stage — diagnostic evaluation : SI system through every one student's communicative competence level is determined . The second stage — training design : real life communication to situations based tasks using SI is created . Third stage — practical exercise : student SI chatbot and in VR simulators communication skills exercise they do . Fourth stage — reflection and evaluation : SI reports teacher and student by together analysis Fifth stage — independent internship : students from class SI tools outside too with independent They work .

RESEARCH METHODOLOGY AND RESULTS

Research Samarkand state university philology 68 people at the faculty student in the presence of one training during the semester (16 weeks) done increased . Experience group (n=34) traditional teaching with together from SI technologies used . Control group (n=34) only traditional in the method read . Groups elementary level , age and gender according to flattened selected .

Table 2. Experiment (Tg) and control (Ng .) groups the results comparison (p<0.05)

Indicator	Tg . initial	Tg . final	Ng . final	Difference (TN)
IELTS Speaking (score)	4.8	6.0 (+1.2)	5.2 (+0.5)	+0.7 points
Written accuracy (%)	62%	85% (+23%)	70% (+8%)	+15%
Lexicon reserve (%)	48%	89% (+41%)	67% (+19%)	+22%
Communication confidence (%)	39%	82% (+43%)	64% (+26%)	+17%
Pronunciation accuracy (%)	55%	83% (+28%)	67% (+12%)	+16%

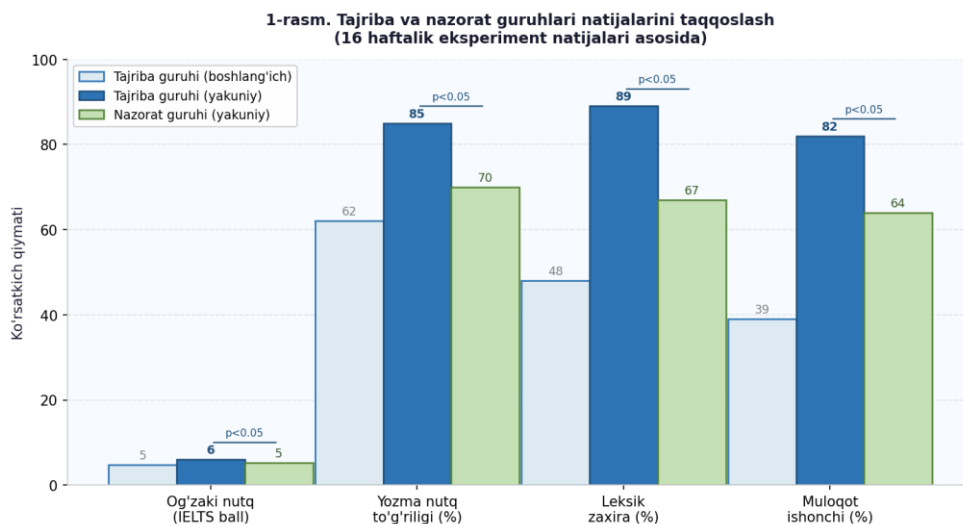


Figure 1. Experiment and control groups the results comparison (16 weeks) experiment, n=68

Data in Figure 1 and Table 2 experience of the group all indicators according to control from the group noticeable at the level column that confirms. Statistical analysis (Student t- test, $p < 0.05$) is of difference random not SI technologies of application directly result that shows.

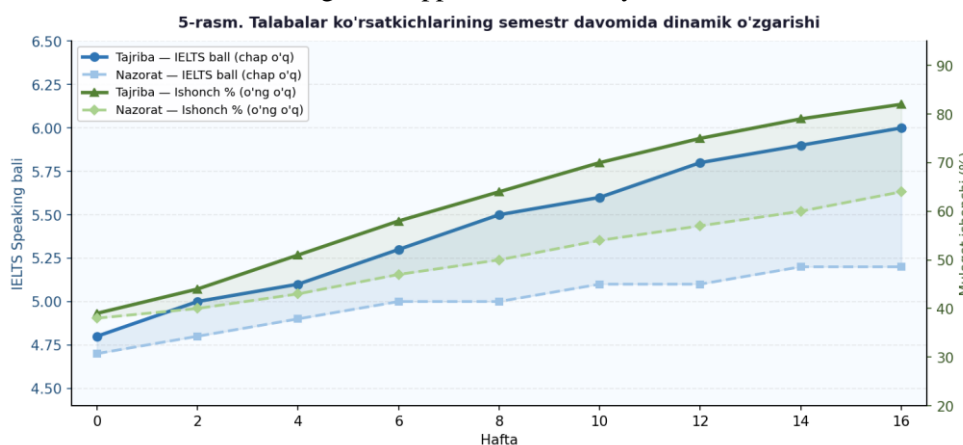


Figure 5. Students indicators semester during dynamic change (weeks) according to

Presented in Figure 5 linear graphic two group between difference time to pass with how expanding progress dynamics obvious Especially in the 6-8 week period experience of the group growth pace sharp increased — this stage practical exercise (stage 3) full current to be to the period right is coming.

PROBLEMS AND PROSPECTS

SI technologies English language to education current in the process of one row problems available. First, the technical infrastructure problem: all supreme education in institutions fast internet and modern devices there is Second, digital literacy problem: one part teachers use SI tools effective application for enough knowledge and to skills has Thirdly, it is not more than to technology rely on risk: students SI is easy as "road" seeing, independent thinking and communication initiative without showing use possible.

Table 3. SI technologies to education current in the making problems and solutions

Problem	Reasons	Recommendation done solution
Technical infrastructure	Internet, devices lack	College / University WiFi, mini-labs
Digital literacy	Teachers readiness	Advanced training courses (SI pedagogy)
Too much more than rely on	Independent thinking decrease	Using SI ethics to teach
Local language problem	Many tool only English	Uzbek to the language customized SI required
Evaluation problem	SI grade objectivity	Teacher and SI grade combination

CONCLUSION

This research has proved that artificial intelligence technologies in English language lessons targeted and systematic integration to do students communication culture to develop noticeable positive impact shows. Experimental information experience in the group students control to the group relatively verbal speaking (+1.2 points), writing communication (+23%), lexical reserve (+41%) and communication significantly increased their trust (+43%) high at the level increased confirmed.

Research in the process working 5-speed automatic methodological model — diagnostic assessment, training design, practical exercise, reflection and independent practice — SI technologies in English language to education integration to do practical basis organization. It is worth noting that importantly, SI technologies teacher instead without pressure, qualified pedagogue under the leadership of communication culture development strong tool become service does.

Future research of SI technologies far term impact, various education in their environments application, as well as Uzbek to the language adapted SI instruments to create own inside to receive necessary.

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