Best Practices of Fostering Undergraduates' Cross-Cultural Competence Involving Training Them in Foreign Languages: Systemic Review

Oleh Nozhovnik
State University of Trade and Economics, UKRAINE

Tetiana Harbuza
State University of Trade and Economics, UKRAINE

Hanna Starosta
State University of Trade and Economics, UKRAINE

Yuliia Radchenko
State University of Trade and Economics, UKRAINE

Oleh Zatserkovnyi
State University of Trade and Economics, UKRAINE

Abstract: The purpose of the study was to identify and categorise the criteria-specified instructional approaches to fostering undergraduates’ cross-cultural skills involving training them in foreign languages and to evaluate their effectiveness and feasibility. It was a systemic review of the effectiveness type. The descriptive content analysis was used as a methodology within the study to analyse the relevant short-listed sources. The triangular assessment method (TAM) was applied by instructors from Ukraine to rate each approach’s/programme/course’s potential effectiveness and/or feasibility for the context of higher education in Ukraine. This review identified potentially effective and feasible approaches/programmes/courses that can be converged to produce more efficient instructional models for fostering undergraduates’ cross-cultural skills. The selected approaches or courses or programmes could be categorised as technology-driven approaches, approaches based on classroom activities or using specific instruction models, psychological effect-driven approaches, and combined or converged approaches. The use of technology-driven approaches seems to be the emerging instructional trend specifically in training students’ cross-cultural skills.

Keywords: Cross-cultural competence, foreign languages training, higher education, instructional approaches, systemic review.


Introduction

Raising awareness and fostering skills of communicating cross-culturally using a foreign language are becoming an important domain and attribute of any major of vocational training of undergraduates in the settings of increasing homogenisation of a global culture (Amara, 2020; Bai et al., 2016). In this regard, using foreign language communication competencies interculturally is given the top priority by the students because these are seen as an indispensable tool for their successful career building (Monu Borkala, 2022; Shykhenko & Nozhovnik, 2020). Intercultural communication competence seems to be a prerequisite for operationalising the undergraduates' expatriate career intentions (Presbitero & Quita, 2017), showing effective performance in negotiations (Xiao et al., 2020), and ensuring both competent leadership internationally (Sutton et al., 2013) and job performance (Jyoti & Kour, 2017). Fostering undergraduates’ cross-cultural competence is a default objective and estimated outcome of L2 teaching foreign languages at higher educational institutions (Amara, 2020; Zhou, 2017). Romanowski and Bandura (2019) opine that L2 teaching methods and approaches are focused on creating simulated, virtual, or natural live learning environments allowing students to gain certain cultural experiences either directly or indirectly through the use of the foreign language. These instructional methods and approaches, referred to as pedagogical tools, vary in features, cross-cultural domains, competencies they cover, and efficiency of them. The outlined variations often confuse practitioners in terms of selecting the most workable and feasible ones. They intend to sort out the latter inspired by this study.
Literature review

The culture learning theory provides different definitions of cross-cultural competence, or intercultural effectiveness, such as constructivist, behaviourist, sociocultural and ethnocentric (ethnorelativistic) ones with each of them focusing on one of the cross-cultural competence domains. Those domains are awareness, knowledge, and skills including teaming skills and foreign language skills. The above influences the instructional methods and approaches the teacher can choose to foster cross-cultural competence.

The constructivist definition of cross-cultural competence suggested by Garneau and Pepin (2015) combines cultural awareness and cultural safety. The social constructivist learning theory interprets cross-cultural competence as a ‘know-how-act’ or strategy manifested culturally safely, congruently, and effectively. That act is supposed to be taught using a teacher-moderated and facilitated problem-solving and inquiry-driven environment attempting to involve students in mock interactions to foster their cognitive, emotional, and behavioural skills for building positive relationships in different cultural settings (McLeod, 2019; Olusegun, 2015).

The behaviourist theory states that cross-cultural competence is a certain experience relying on the person’s sensitivity, awareness, and skills gained by that person through interaction with the environment (Drew, 2022). In this regard, the competence under study is supposed to be fostered using gamified and game-based learning settings (Greenwood, 2020).

The sociocultural theory, when defining cross-cultural competence, draws upon the relation between social and cultural factors and a person’s mental function. The theory substitutes the knowledge of culture with the meanings of its features and manifestations which are negotiated and intersected (Ilie, 2019). Those meanings are supposed to transform a person. Language is said to be the major tool and driver of this transformation. From this perspective, the cultural training process is seen as a social interaction aimed at exploring those cultural meanings along with the construction and transformation of the perception of them (Arshavskaya, 2020).

The ethnocentric (ethnorelativistic) definition of cross-cultural competence stipulates the perception and evaluation of the other culture through the person’s cultural views and beliefs (Odag et al., 2015; Rathje, 2007). The instructional methods are supposed to be dedicated to training students to recognise and accept the differences between the cultures, learn to adapt their behaviour to the other culture’s settings and get accustomed to those behaviour patterns (Vegh & Nguyen Luu, 2019).

The literature review also found that a definition of cross-cultural competence was related to linguistic pluralism which was supposed to be trained via language education (Baroncelli, 2014). The Common European Framework of Reference for Languages (CEFR) defines plurilingualism as the competence that is based on the person’s ability to constantly adjust their linguistic repertoire to the settings related to the perceived and accepted copresence and inter-influence of different languages spoken by both the community and the individual through the use of communication strategies aimed to reach the goal of the communication act (Yüce, 2019). Yüce and Borshchovetska et al. (2022) advocate the point that language training creates the most suitable environment for fostering cross-cultural competence because a foreign language can be used as an instructional and mediation tool to establish rapport and achieve mutuality between persons with different cultural backgrounds and speaking different languages.

Overall, the literature review found that methods of fostering undergraduates’ cross-cultural skills were a fast-growing research field. The significance, teaching methods, and settings used to facilitate students to succeed the most in both awareness and application of them are revealed in diverse literature sources. However, these best practices for L2 training to foster cross-cultural skills in tertiary students need revision and updating. This inspired this review study.

The purpose of the study was to identify and categorise the criteria-specified instructional approaches to fostering undergraduates’ cross-cultural skills and to evaluate their effectiveness and feasibility. The research questions were as follows:

1. What specific instructional approaches to L2 training to foster undergraduates’ cross-cultural skills are currently used as best practices at higher educational institutions?
2. How potentially effective and/or feasible are they from the perspective of the instructors from Ukraine for training cross-cultural and L2 skills?

Methodology

Overall, it was a systemic review of the effectiveness type (Higgins et al., 2019; McKenzie et al., 2021). The descriptive content analysis was used as a methodology within the study to analyse the relevant short-listed sources. The methodology relied on a keyword-based strategy and involved the specified search procedure, predefined eligibility criteria for inclusion and exclusion of the sources, extracting of the raw data, evaluating the quality of the selected sources based on criteria, synthesising the data using the mixed methods (Kelley & Kelley, 2019). The triangular assessment method (TAM) was applied by instructors from Ukraine to rate each approach’s/programme/course’s potential effectiveness and/or feasibility for the context of higher education in Ukraine (Perez-Rodriguez & Rojo-
Alboreca, 2017). The purpose of the keyword-search phase was to find the studies that highlighted and experimentally illustrated the feasible and effective instructional approaches to fostering tertiary students’ cross-cultural skills. The search attempted to select the sources that were available in English and Ukrainian languages. It used combinations of different keywords to achieve a high level of accuracy and extensivity. The Boolean operators and truncation were applied in the search to achieve time efficiency. To avoid assessment bias, the study involved none reviewers with Ph.D. (6 people) and Doctorate (3 people) degrees in Methods of Instruction. To make it clear, both Ph.D. and Doctor of Science are scientific degrees in Ukraine which differ by seniority. Ph.D. degree refers to a lower scientific qualification, while a Doctor of science means a higher level of scientific qualification. They worked undependably using the predesigned assessment-for-relevance criteria. The keyword search was performed in several databases such as CrossRef, SCOPUS, Web of Science, ResearchGate, and Google Scholar. It combined such concepts as foreign language training / teaching AND teaching methods / approaches AND intercultural / cross-cultural / plurilingual / pluricultural AND competence / competencies / skills/abilities AND university settings/tertiary students/higher education/higher educational institutions. The commonly used search strings were as follows:

\[ \text{T} \text{I and/or TW and/or } \text{AB and/or KW and/or ID (TITLE-ABS-KEY for SCOPUS)} = \]

1) (method OR approach* AND cross-cultur* OR intercultur* skill* OR ability AND L2 AND foreign language train*) OR (metod OR pidhid AND inozemni movy AND navychky mizhkulturnoyi komunikatsiyi) (in Ukrainian)

2) (method OR approach* cross-cultur* skill* OR intercultur* skill* OR ability OR plurilingual and pluricultural competence OR competencies AND foreign language train*) OR (metod OR pidhid AND inozemni movy AND navychky mizhkulturnoyi komunikatsiyi OR polilingvalna and polikulturna kompetentnict OR kompetenwiyi) (in Ukrainian)

3) (method OR approach* cross-cultur* skill* OR intercultur* skill* OR ability OR competence OR competencies AND foreign language teach* AND tertiary students OR university students OR students of higher institutions OR university settings OR higher education) OR (metod OR pidhid AND inozemni movy AND navychky mizhkulturnoyi komunikatsiyi OR polilingvalna and polikulturna kompetentnict OR kompetenwiyi AND studenty universytetu OR studenty vyshchoi shkoly) (in Ukrainian)

4) (method OR approach* plurilingual and pluricultural skill* OR intercultur* skill* OR ability OR plurilingual and pluricultural competence OR competencies AND foreign language teach* AND tertiary students OR university students OR students of higher institutions OR university settings OR higher education)

Selection Process and Eligibility Criteria

The selection process lasted from January 2022 to the end of May 2022. Five research team members performed a repeated search based on keywords in the CrossRef, SCOPUS, Web of Science, ResearchGate, and Google Scholar databases. The search was performed using queries in English and Ukrainian. The procedure for this systemic review relied on the PRISMA guidelines (McKenzie et al., 2021). The selection process consisted of four phases. These were as follows: identification, screening, assessing the source eligibility and including (McKenzie et al., 2021). The PRISMA-based procedure of the search for relevant sources is presented in Figure 1.
The identification phase used the 4-point relevance scale with 1 meaning ‘insufficient relevance’; 2 = ‘average relevance’; 3 = ‘sufficient relevance’; 4 = ‘excellent relevance’ to collect bulk data. The screening, eligibility, and inclusion phases of the search used the Critical Appraisal Checklist to narrow the sources list. The sources included in the final review were expected to meet the criteria. Those criteria were as follows: (a) the year of the article publication was supposed to not be earlier than 15 years; (b) the article was expected to describe and/or provide the purpose of the approach or best practice under the study; (c) the source was expected to reveal the type of approach; (d) it was expected to reveal the effect of the approach under study through the statistical analysis; (e) it was possible to identify which domain – technological, psychological, instructional or combined – the specified approach was based on; 6) it reported the data explicitly.

Following the above, the triangular assessment method (TAM) was used for rating each approach's/programme/course's potential effectiveness and/or feasibility for the context of higher education in Ukraine. The rating procedure was based on the criteria specified to cover the domains such as (a) foreign language fluency improvement; (b) cross-cultural intelligence increase; (c) technological advancement benefiting; (d) psychological effect; and (e) other, is depicted in Figure 2. The hierarchy is used for evaluating the potential effectiveness and/or feasibility of the approaches/courses/programmes for fostering undergraduates' cross-cultural skills through L2 training.
Experts rated each approach/course/programme by considering the weight of each criterion and sub-criterion from the perspective of their experience. The experts did not necessarily use all criteria and sub-criteria.

**Instruments**

The critical appraisal checklist (CAC) (see Appendix A), the triangular assessment method (TAM), and EndNote - X8 (Version 18.2.0.11343) software were used as instruments throughout the review process. The CAC structure and question types were adapted from the Quality checklist for qualitative studies and the Quality checklist by Greenhalgh et al., 2005. It was used to select the eligible sources for the final analysis. It relied on a 4-point scale such as ‘yes’, ‘no’, ‘unclear’, and ‘n/a’. The face validity of the checklist items was identified by the six volunteering colleagues with Masters’ and Ph.D. degrees in Linguistics and Education. The calculation of the content validity index (I-CVI) found that it was .86 which was sufficient according to Polit and Beck (2006). Following this, the above six volunteering colleagues rated the relevance of the items on the checklist using the 4-point relevance scale. The values drawn from this rating were used to calculate the Fleiss’ Kappa coefficient. The value coefficient was .711 which meant ‘good agreement’ of the raters concerning the relevance of the items on the checklist. Nine reviewers with Ph.D. (6 people) and Doctorate (3 people) degrees in Methods of Instruction used it. EndNote - X8 (Version 18.2.0.11343) software was used to remove duplicates of the sources in the identification phase of the search. The TAM was used by 9 experts (with Ph.D. (6 people) and Doctorate (3 people) degrees in Methods of Instruction) to address the second research question concerning the potential effectiveness and feasibility of the selected best practices. The TAM was considered valid by default because it was validated by Perez-Rodriguez and Rojo-Alboreca (2017).

**Results**

The study found 13 eligible sources explicitly revealing either an approach or a course or programme of fostering university students’ cross-cultural skills involving foreign language training. Those approaches were as follows: (a) cross-cultural relational pragmatics approach (CCRPA); (b) intercultural competence developmental models (ICDMs);
(c) project-based approach (PA); (d) media tool-based approach (MTA); (e) Skype sessions-based instruction model (SSIM); (f) global virtual teams course (GVTC); (g) intercultural simulation-based approach (ISA); (h) collaborative online international learning (COIL) projects; (i) collaborative learning (CL) (based on Deardorff’s Process Model of Intercultural Development); (j) Cultural Management programme (CMP); (k) Global Synergy programme (GSP); (l) ARGONAUTONLINE simulation-based model (ASM); (m) multigenerational inclusive learning communities (MILC).

Table 1 presents the data obtained from the analysis of the sources included in the final examination and reporting.

<table>
<thead>
<tr>
<th>#</th>
<th>Author &amp; year</th>
<th>The description and purpose of the approach or best practice under the study</th>
<th>Type of approach</th>
<th>Effect</th>
<th>Sample</th>
<th>Explicitness of data</th>
<th>Experts’ mean scores</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Mugford (2021)</td>
<td>A cross-cultural relational pragmatics approach relies on relational pragmatics. It is related to an asset-based pedagogy whose focus is to create real-life communicative settings.</td>
<td>Classroom activities-based, using a specific instruction model</td>
<td>Proven participants’ success in establishing, developing, and maintaining cross-cultural relationships</td>
<td>Mexican bilingual B.A. students (aged 18 – 25)</td>
<td>+</td>
<td>3.8</td>
</tr>
<tr>
<td>2</td>
<td>Vegh &amp; Nguyen Luu (2019)</td>
<td>Intercultural Competence Developmental Models such as RICA (Reflective Intercultural Competence Assessment), DMIS (Developmental Model of Intercultural Sensitivity). RICA uses the EUFICCS (European Use of Full immersion, Culture, Content, and Service) approach which is intended to foster reflective intercultural competence. DMIS relies on observations which provide quantitative data drawn from observations</td>
<td>Classroom activities-based, using a specific instruction model</td>
<td>The estimated outcome is a “global citizen” with intercultural competencies allowing the person to incorporate cultural differences into their identity.</td>
<td>No data</td>
<td>+/-?</td>
<td>3.1</td>
</tr>
<tr>
<td>3</td>
<td>Kusiak (2019)</td>
<td>The project-based approach which supposes to involve MA students in performing the research project that covers some issues related to intercultural communication competence (ICC). Along with the projects, the students were trained in EFL teaching. The training sessions were delivered in the secondary school settings whose outcome was both raising students’ ICC and undergraduates’ professional skills.</td>
<td>Combines research assignments and classroom activities</td>
<td>Verbal proofs of effectiveness of the approach</td>
<td>11 pre-service teacher students</td>
<td>+/-?</td>
<td>3.0</td>
</tr>
<tr>
<td>4</td>
<td>Borshchovetska et al. (2022)</td>
<td>The student teams shared or exchanged information about Ukrainian culture using English verbally via ZOOM or Cisco Webex or Google Meet seen as a media tool.</td>
<td>Technology-driven approach</td>
<td>The η² for the instructional project showed a medium effect size of 4.8%, the p-value was less than 0.05</td>
<td>A convenience sample of 48 students majoring in International</td>
<td>+</td>
<td>4.2</td>
</tr>
<tr>
<td></td>
<td>Author(s)</td>
<td>Methodology</td>
<td>Findings</td>
<td>N</td>
<td>Significance</td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---------------------------</td>
<td>------------------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------</td>
<td>--------</td>
<td>--------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Sigurjon</td>
<td>A graduate Cultural Management</td>
<td>A technology-driven approach</td>
<td>Unclear</td>
<td>+/? 3.4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Nguyen &amp; Phan (2019)</td>
<td>Instruction model based on Skype sessions with members of Facebook group</td>
<td>A combination of technology-driven approach and classroom activities</td>
<td>Unclear</td>
<td>+/? 3.3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Zaugg, et al. (2011)</td>
<td>Global Virtual Teams Course relies on Computer-aided Engineering applications</td>
<td>Observational data has proven the course to be an opportunity for students to gain cross-cultural experience</td>
<td>Unclear</td>
<td>+/? 3.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Salzman (2020)</td>
<td>Intercultural simulations replicate real intercultural interactions</td>
<td>An approach combining cultural psychology and instruction</td>
<td>Unclear</td>
<td>+/? 3.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Polyakova &amp; Galstyan-Sargsyan (2021)</td>
<td>The collaborative online international learning projects (COIL) are based on international virtual exchange programmes provided by universities across nations and continents</td>
<td>Technology-driven approach</td>
<td>6 students from Finland and 14 students from Spain</td>
<td>+ 4.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Toyoda (2016)</td>
<td>Collaborative learning (based on Deardorff’s Process Model of Intercultural Development) approach is aimed at solving a problem, completing a task, or creating a product which is reported by the participants as their experience-based video diary</td>
<td>A combination of technology-driven approach and classroom activities</td>
<td>35 students (6 international Asian students, 7 local Asian background students and 7 local students from a monocultural background from Australia)</td>
<td>+ 4.3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Author/Sources</td>
<td>Programme/Approach Description</td>
<td>Dominant Approach</td>
<td>Data Used as Proof of Effectiveness</td>
<td>Effectiveness Rating</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---------------</td>
<td>---------------------------------</td>
<td>------------------</td>
<td>-----------------------------------</td>
<td>---------------------</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Össon, (2021)</td>
<td>The programme is supposed to deliver lectures in management theory and practice through the cross-cultural perspective using YouTube. This approach aims at boosting classroom activities by adding peer learning, self-reflection, and double-loop learning.</td>
<td>Classroom activities dominant approach in combination with classroom activities</td>
<td>Qualitative data are used as proof of effectiveness</td>
<td>Unclear +/- 2.9</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Karseras (2017)</td>
<td>The global synergy programme relies on the EQ-SQ-CQ-GQ intercultural competence framework. It aims to develop emotional, social, cultural, and global domains of intelligence through conceptualisation, gaining experience, and engaging in reflective observation followed by experimentation.</td>
<td>Classroom activities dominant approach involving research work</td>
<td>Qualitative data are used as proof of effectiveness</td>
<td>Unclear +/- 2.9</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wiggins (2012)</td>
<td>A simulation-based model using e-learning intercultural training simulation entitled ARGONAUTONLINE. It is aimed to improve intercultural awareness. This awareness is developed via role-plays based on solving problem-based tasks.</td>
<td>A combination of technology-driven approach and classroom activities</td>
<td>Qualitative data are used as proof of effectiveness</td>
<td>Unclear +/- 3.6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Janusch (2019)</td>
<td>Multigenerational inclusive learning communities are created as an environment for developing intercultural competence using culturally responsive pedagogy.</td>
<td>Instructional approaches are dominant</td>
<td>Verbal data are used as proof of effectiveness</td>
<td>Unclear +/- 2.8</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

As can be noticed in Table 1, all selected approaches or courses, or programmes can be categorised as technology-driven approaches (using media tools or social media as instruction tools or instruction environment), approaches based on classroom activities or using specific instruction models, psychological effect-driven approaches and combined or converged approaches. The results presented in the 'Type of approach' column of Table 1 suggest that approaches based on classroom activities or using specific instruction models are given preference, overall and the use of technology-driven approaches seem to be the emerging instructional trend specifically in training students' cross-cultural skills. The data from the 'Effect' column implies that the majority of the sources provide scientific grounding and qualitative proofs (verbal proofs) of the specified approach or programme or course of effectiveness in fostering cross-cultural skills in university students while training them in a foreign language. This can be explained by the fact that cross-cultural variables consist of several latent ones. Sampling techniques and explicitness of data reporting also seem to lack sufficient information.

The consolidated output drawn from the rating procedure of the approaches/programmes/courses based on the triangular assessment method (TAM) is provided in Figure 3. It is appropriate to clarify that the TAM relies on the assumption stating that the numeric value expresses the rater's confidence in their decision. The closer it tends to zero, the more confident the rater is in their decision. As can be seen in Figure 3, this rating procedure identified three approaches/projects deemed relevant for the higher education settings in Ukraine. The GVTC was rated by the experts as the approach with the highest potential effectiveness and/or feasibility for the context of higher education in Ukraine. The COIL projects were rated as the second most effective and/or feasible. The MTA was rated third. Interestingly, both above approaches are technology-driven and cross-border. The raters’ values for MILC meant that this was regarded as of lowest potential and feasibility for transferability and duplicability in Ukraine. The raters’ judgements on the cultural management programme were the most dispersed implying that this programme should be either updated or reshaped to meet the educational settings in Ukraine.
Verbally commenting on the feasibility and effectiveness of the global virtual teams course, collaborative online international learning projects, and media tool-based approach the experts opined that those approaches/programmes are flexible and create the learning environment. They can be used by the instructors as an all-in-one solution to fostering undergraduates’ cross-cultural skills while training them in foreign languages. Those approaches and programmes enhance the pedagogical strategies as well. Some quotes from the experts were as follows:

[…] the global virtual teams course enhances both students’ learning opportunities and instructors’ teaching tools …

[…] collaborative online international learning projects seem to change the overall paradigm of higher education together with being an astonishing approach to internationalising higher education, fostering students’ inter-cultural skills, foreign language fluency, and other transferrable skills …

[…] media tool-based approach can be positively perceived by the students ‘cause the use of the media is habitual for the young people…]

The effectiveness and feasibility of the other specified approaches/programmes/courses were judged by the experts as theoretically grounded but necessitating the need for more profound experimental proof.

The experts also provided their suggestions concerning the convergence of the specified approaches/programmes/courses to produce more efficient instructional models of fostering undergraduates’ cross-cultural skills that also involve training the students in foreign languages. Those were as follows: (a) ICDMs (20%) + CL (40%) + ASM (40%); (b) GVTC (50%) + CMP (25%) + GSP (25%); (c) MTA (40%) + ISA (40%) + CCRPA (20%).

**Discussion**

The study attempted to identify instructional approaches to fostering undergraduates’ cross-cultural skills involving training the students in foreign languages that were used as best practices at higher educational institutions and how potentially effective and/or feasible they were from the perspective of the instructors from Ukraine for training cross-cultural and L2 skills. As far as we are aware, this has been the first systematic review tackling the problem of identifying instructional approaches to fostering undergraduates’ cross-cultural skills involving training tertiary students in foreign languages. A list of potentially effective and feasible approaches/programmes/courses that can be converged to produce more efficient instructional models of fostering undergraduates’ cross-cultural skills can be considered the key finding of this review.

The study found that 13 selected approaches or courses or programmes can be categorised as technology-driven approaches (using media tools or social media as instruction tools or instruction environment), approaches based on classroom activities or using specific instruction models, psychological effect-driven approaches, and combined or
converged approaches. The study expands the categorisation of approaches to fostering intercultural understanding developed by Walton et al. (2013) for schools and Culture Vulture (2022) for businesses. The findings provided in Table 1 reveal that instructional approaches to fostering undergraduates’ cross-cultural skills that involve training students in foreign languages are based on classroom activities or specific instruction models. Interestingly, technology-driven approaches are gradually given the dominant role in training cross-cultural skills in students. The study also found that the effectiveness of the shortlisted approaches or programmes or courses aimed at fostering cross-cultural skills was mainly illustrated by scientific grounding and qualitative data. This can be explained by the fact that cross-cultural variables consist of many latent ones. The same conclusion was reached by Baumgartner and Weijters (2017) stating that some variables of cross-cultural competence are difficult to measure by surveys as those variables are based on the individual’s psychology and comparability of the results is difficult to achieve. Sampling techniques and explicitness of data reporting also seem to lack sufficient information. The rating procedure of the approaches/programmes/courses based on the triangular assessment method identified three approaches/projects deemed relevant for the higher education settings in Ukraine. The GVTC was rated by the experts as the approach with the highest potential effectiveness and/or feasibility for the context of higher education in Ukraine. The COIL projects were rated as the second most effective and/or feasible. The MTA was rated the third. Interestingly, both above approaches are technology-driven and cross-border. The raters’ values for MILC meant that this was regarded as of lowest potential and feasibility for transferability and duplicability in Ukraine. The raters’ judgements on the cultural management programme were the most dispersed implying that this programme should be either updated or reshaped to meet the educational settings in Ukraine. The raters’ views are consistent with Montgomery and Nielson (2019) who noted that the importance of cross-cultural skills and awareness for a wider range of university majors is gradually increasing and university lecturers are looking for student-friendly ways of training students to contribute to the international environment.

The findings of this review go in line with the previous findings reported in the relevant sources. The study agrees with Jyoti and Kour (2017) who concluded that cross-cultural training facilitates foreign language skills development. It also goes in line with Truzy (2022) who states that both the instruction process and the teacher’s behaviour are prerequisites for students’ success in gaining knowledge and raising cross-cultural confidence. It is consistent with Nguyen and Phan (2019) and Borshchovetska et al. (2022) who proved that technology-driven approaches to training students’ cross-cultural skills involving foreign language training converge the instructional strategies to improve 21st-century skills. Moreover, this study supported the conclusions of Bai et al. (2016) who stated that interdisciplinary courses aimed at studying cross-cultural interprofessional disciplines abroad can be an effective pedagogical strategy for training students’ cross-cultural skills and foreign language skills.

**Conclusion**

This review identified potentially effective and feasible approaches/programmes/courses that can be converged to produce more efficient instructional models for fostering undergraduates’ cross-cultural skills. The selected approaches or courses or programmes could be categorised as technology-driven approaches, approaches based on classroom activities or using specific instruction models, psychological effect-driven approaches, and combined or converged approaches. The use of technology-driven approaches seems to be the emerging instructional trend specifically in training students’ cross-cultural skills. The rating procedure of the approaches/programmes/courses based on the triangular assessment method identified three approaches/projects deemed relevant for the higher education settings in Ukraine. The GVTC was rated by the experts as the approach with the highest potential effectiveness and/or feasibility for the context of higher education in Ukraine. The COIL projects were rated as the second most effective and/or feasible. The MTA was rated third. Interestingly, both above approaches are technology-driven and international. The effectiveness and feasibility of the other specified approaches/programmes/courses were judged by the experts as theoretically grounded but necessitating the need for more profound experimental proof.

**Recommendations**

The study revealed that statistical or numeric evidence of the effectiveness of the approaches/programmes/courses for fostering undergraduates’ cross-cultural skills via the use of foreign languages is an important prerequisite for identifying the feasibility of those approaches. On this basis, future research should design and test the more focused models of training design with more distinctly specified dependent variables to capture quantitatively the effectiveness of the converged instructional models for fostering undergraduates’ cross-cultural skills. In this regard, the in-depth research is needed in validating the diagnostical tools to monitor changes in students’ cross-cultural intelligence and their culture-specific foreign language skills and awareness. The instructors are recommended to use technology-driven and converged approaches to increase the effectiveness of training students’ cross-cultural skills. The instructors would benefit from the specific purpose training in the use of technology and combined use of approaches. In the above context, identifying the level or readiness of the instructors for training cross-cultural skills in tertiary students using technology and foreign language as learning and teaching media might be necessary.
Overall, two main limitations can be specified in this study. First, the Ukrainian language reported sources and an insufficient number of the Ukrainian language sources that provided experimental data. Second, the above sources were underrepresented which influenced data synthesis and analysis manageability.

Acknowledgements
We are thankful to experts and volunteering colleagues for their dedication and help in processing data.

Conflicts of Interest
The authors declare having no conflict of interest related to the work in a manuscript and of any other nature.

Authorship Contribution Statement
Nozhovnik: Conceptualization, search and analysis of literature sources, design, drafting the manuscript. Harbuza: Search and analysis of literature sources, writing, editing, supervision, final approval. Starosta: Sources data acquisition, critical revision of the manuscript, liaison with experts, proofreading the manuscript. Radchenko: Search and analysis of literature sources, writing, critical revision, proofreading. Zatserkovnyi: Sources data acquisition, critical revision of the manuscript, proofreading the manuscript.

References


Appendix

Critical Appraisal Checklist (adapted from Greenhalgh et al., 2005).

Reviewer ____________________________ Date ________________

Author(s) ____________________________________________________________

Year _____ Record number ________

<table>
<thead>
<tr>
<th>#</th>
<th>Item</th>
<th>Yes</th>
<th>No</th>
<th>Unclear</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>The literature source addresses one or both research questions under the study.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>The identified instructional approach to L2 training to foster undergraduates' cross-cultural skills is a feasible and innovative course or project or programme.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>The research outcome can be used in the L2/foreign language training and produce educational and/or psychological and/or technological benefits to students.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>The innovative course or project or programme was clearly described.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>The type of approach/innovative course or project or programme is revealed clearly.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>The course or project or programme provides a plan for fostering undergraduates’ cross-cultural skills using a foreign language as a tool.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>The sample is sufficient to consider the results statistically significant.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>The relationship between the use of the approach/innovative course or project or programme and the effect size is revealed.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>The sample provides feedback.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>The research procedure is duplicable or transferrable.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>The study complies with theoretical and instructional advances.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Data collection is sufficiently comprehensive and detailed.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Exclude ☐ Include for scan-reading ☐ Include for final review ☐

Reviewer’s comment ____________________________