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UNIVERSITET TALABALARINING MADANIYATLARARO KOMMUNIKATIV KOMPETENSIYASINI BAHOLASHNING INTEGRATIV MODELI VA RAQAMLI DIAGNOSTIKA TEXNOLOGIYALARI

A. A. Fakhriev

Ilmiy tadqiqotchi.

Annotatsiya.

Mazkur maqolada universitet talabalarining madaniyatlararo kommunikativ kompetensiyasi rivojlanganlik darajasini diagnostika qilishning integrativ pedagogik modeli taqdim etilib, ushbu jarayonni qo'llab-quvvatlovchi raqamli texnologiyalar tavsiflanadi. Model maqsadli, metodologik, jarayonli va baholash-natijaviy bloklar tizimi sifatida ishlab chiqilgan bo'lib, kognitiv, emotsional-aksiologik, kommunikativ-faoliyatli, refleksiv va raqamli komponentlarni o'zida birlashtiradi. Diagnostik ma'lumotlar testlar, kuzatish, suhbatlar, keyslar tahlili, rolli o'yinlar, o'zini o'zi baholash, portfolio topshiriqlari, interaktiv simulyatsiyalar hamda madaniyatlararo faoliyatning raqamli izlari orqali to'planadi. Modelning o'ziga xos elementi «Raqamli madaniyatlararo iz» (Digital Intercultural Footprint) konsepsiyasi bo'lib, u ta'lim oluvchining raqamli va xalqaro o'zaro muloqot jarayonidagi kommunikativ faolligi, bag'rikengligi va madaniy moslashuvchanligini aks ettiruvchi dalillar sifatida talqin etiladi. Shuningdek, modelda madaniy bilimlar, madaniy refleksiya, madaniy sezgirlik, raqamli madaniyatlararo faollik va madaniyatlararo moslashuvchanlikni birlashtiruvchi integrativ indeks taklif etiladi. Maqolada modelning ahamiyati diagnostikani keyingi pedagogik rivojlanish bilan bog'lashda namoyon bo'lishi asoslanadi: baholash natijalaridan kuchli va zaif tomonlarni aniqlash, individual rivojlanish trayektoriyalarini ishlab chiqish hamda vaqt davomida yuz beradigan o'zgarishlarni monitoring qilish uchun foydalaniladi.

Kalit so'zlar: madaniyatlararo kommunikativ kompetensiya, diagnostik model, raqamli diagnostika, pedagogik modellashtirish, refleksiya, madaniy sezgirlik, raqamli madaniyatlararo iz.

ИНТЕГРАТИВНАЯ МОДЕЛЬ И ЦИФРОВЫЕ ДИАГНОСТИЧЕСКИЕ ТЕХНОЛОГИИ ОЦЕНКИ МЕЖКУЛЬТУРНОЙ КОММУНИКАТИВНОЙ КОМПЕТЕНЦИИ СТУДЕНТОВ ВУЗОВ

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Аннотация.

В статье представлена интегративная педагогическая модель диагностики уровня развития межкультурной коммуникативной компетенции студентов университетов и описаны цифровые технологии, способствующие реализации данного процесса. Модель разработана как система целевого, методологического, процессуального и оценочно-результативного блоков и объединяет когнитивный, эмоционально-аксиологический, коммуникативно-деятельностный, рефлексивный и цифровой компоненты. Диагностические данные собираются посредством тестирования, наблюдения, интервью, анализа кейсов, ролевых игр, самооценки, портфолио-заданий, интерактивных симуляций и цифровых следов межкультурной деятельности. Отличительным элементом модели является концепция «Цифрового межкультурного следа» (Digital Intercultural Footprint), понимаемого как совокупность свидетельств коммуникативной активности обучающегося, его толерантности и культурной адаптивности в процессе цифрового и международного взаимодействия. Модель также предусматривает интегративный индекс, объединяющий культурные знания, культурную рефлексию, культурную чувствительность, цифровую межкультурную активность и межкультурную адаптивность. В статье обосновывается, что ценность модели заключается в установлении взаимосвязи между диагностикой и последующим педагогическим развитием: результаты

оценивания используются для выявления сильных и слабых сторон, разработки индивидуальных траекторий развития и мониторинга изменений во времени.

Ключевые слова: межкультурная коммуникативная компетенция, диагностическая модель, цифровая диагностика, педагогическое моделирование, рефлексия, культурная чувствительность, цифровой межкультурный след.

AN INTEGRATIVE MODEL AND DIGITAL DIAGNOSTIC TECHNOLOGIES FOR ASSESSING UNIVERSITY STUDENTS' INTERCULTURAL COMMUNICATION COMPETENCE

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Abstract.

The article presents an integrative pedagogical model for diagnosing the level of development of university students' intercultural communication competence and describes digital technologies that can support this process. The model is constructed as a system of target, methodological, process, and assessment-result blocks and integrates cognitive, emotional-axiological, communicative-activity, reflective, and digital components. Diagnostic evidence is collected through tests, observation, interviews, case analysis, role play, self-assessment, portfolio tasks, interactive simulations, and digital traces of intercultural activity. A distinctive element is the concept of a Digital Intercultural Footprint, understood as evidence of a learner's communicative activity, tolerance, and cultural adaptability in digital and international interaction. The model also proposes an integrative index combining cultural knowledge, cultural reflection, cultural sensitivity, digital intercultural activity, and intercultural adaptability. The article argues that the value of the model lies in linking diagnosis with further pedagogical development: assessment results are used to identify strengths and weaknesses, design individual development trajectories, and monitor change over time.

Keywords: intercultural communication competence, diagnostic model, digital diagnostics, pedagogical modelling, reflection, cultural sensitivity, digital intercultural footprint.

Introduction. Pedagogical diagnosis is meaningful when it not only records a learner's current state but also provides information for further development. This principle is particularly important for intercultural communication competence because the construct includes knowledge, values, emotional responses, communicative behaviour and reflection. A single test score cannot represent all of these dimensions with equal validity.

The dissertation on improving technologies for diagnosing students' intercultural communication competence approaches diagnosis as an integrated pedagogical system. The system combines the purpose of assessment, methodological approaches, diagnostic content, tools, organisational conditions and expected outcomes. The diagnostic process is therefore connected with monitoring, feedback and the design of individual development trajectories rather than being limited to final classification.

The need for such a model is strengthened by digital transformation in higher education. Students increasingly communicate, study and collaborate in online environments where intercultural behaviour leaves observable traces: participation in international platforms, responses to culturally diverse viewpoints, use of language in digital interaction and the ability to adapt communication across contexts. These forms of evidence can enrich traditional pedagogical diagnostics when they are interpreted carefully and ethically.

The aim of this article is to describe the structure of an integrative diagnostic model, systematise the digital technologies that support its implementation and explain how diagnostic results can be transformed into pedagogical decisions.

METHODS

The article is based on pedagogical modelling and system analysis. The model was reconstructed from the dissertation's methodological principles, diagnostic technologies and assessment logic. In accordance with the theory of pedagogical modelling, a model is treated as a simplified but scientifically grounded representation of a pedagogical process that preserves its essential components and relationships (Dakhin, 2005; Lodatko, 2010).

The modelling procedure included four steps. First, the purpose and object of diagnosis were defined. Second, the recurring components of intercultural communication competence were identified. Third, methods and digital tools were aligned with the type of evidence required from each component. Fourth, assessment results were linked with monitoring and developmental decisions.

The analysis retained the following diagnostic methods described in the dissertation: questionnaire, test, interview,

pedagogical observation, case study, situational tasks, role play, debate, expert assessment, self-assessment, portfolio analysis, simulation and digital activity records. These methods were not treated as interchangeable. Each was assigned a specific function within the model.

RESULTS

The resulting diagnostic model consists of four interrelated blocks: target, methodological, process and assessment-result. The target block determines the social demand and the purpose of diagnosing students' readiness for effective intercultural communication. The methodological block defines the system, competence-based, activity-oriented and reflective principles of assessment. The process block organises diagnostic tasks and technologies. The assessment-result block interprets the collected evidence and translates it into levels, recommendations and further developmental actions.

Table 1. Components and diagnostic technologies in the integrative model

Component	**Main indicators**	**Diagnostic evidence**	**Recommended technologies**
Cognitive	Knowledge of cultures and communication norms; analysis of cultural information; recognition of context	Answers, explanations, comparative analysis, case interpretation	Adaptive tests, case studies, source analysis, interactive quizzes
Emotional-axiological	Openness, empathy, tolerance, respect for cultural diversity, sensitivity to ambiguity	Self-assessment, reflective explanation, response to difference	Questionnaires, reflective prompts, scenario tasks, peer feedback
Communicative-activity	Ability to interact, adapt behaviour, manage misunderstanding, select strategies	Observed performance in real or simulated interaction	Role play, debate, simulation, video dialogue, situational judgement
Reflective	Self-analysis, stereotype recognition, evaluation of assumptions, revision of judgement	Initial and revised interpretation, reflective note, portfolio evidence	Reflection diary, portfolio, guided interview, feedback cycle
Digital	Responsible participation in digital intercultural environments; verification and adaptation in online communication	Digital activity record, online interaction, evidence of source checking	E-portfolio, online simulation, platform analytics, digital task history

The model treats diagnosis as a cycle. A learner first performs a task or responds to a culturally significant situation. Evidence is then collected from the response, communication process and reflective explanation. The result is interpreted according to the relevant indicators, after which the learner receives feedback and a recommendation for further practice. Repeated use of the cycle allows the teacher to observe development rather than only a single performance.

A distinctive element of the model is the Digital Intercultural Footprint. In the dissertation, this concept characterises a student's communicative activity, tolerance and cultural adaptability as displayed on international and digital platforms. The footprint should not be understood as indiscriminate monitoring of online behaviour. Its pedagogical meaning is narrower: it refers to learning evidence deliberately produced within educational digital environments, such as participation in an intercultural discussion, revisions after feedback, responses to alternative viewpoints or source-verification actions.

The model also includes an integrative index for summarising several diagnostic dimensions. The dissertation expresses the index as MMKT = (MK + MR + MS + MRaq + MP) / 5, where MK is the cultural knowledge index, MR is the cultural reflection index, MS is the cultural sensitivity index, MRaq is the digital intercultural activity index, and MP is the intercultural adaptability index. The value of the formula is not that it replaces qualitative interpretation, but that it provides a common summary when the five indices have been measured using comparable scales.

ANALYSIS

The main advantage of the model is the alignment between components and evidence. A cognitive component should not be assessed only through a general attitude questionnaire, just as communicative behaviour should not be inferred solely from factual knowledge. Each component therefore requires tasks that make the relevant competence visible.

For example, cultural sensitivity can be explored through a self-assessment scale, but a scenario-based task can test whether the same learner suspends premature judgement when confronted with ambiguous behaviour. Communicative

adaptability can be observed through role-play or simulated interaction. Reflection becomes visible when students compare an initial interpretation with a revised one and explain why their judgement changed.

Digital tools expand the amount and variety of evidence available. An e-portfolio can combine written reflections, project work, recordings and teacher feedback. Interactive simulations can standardise difficult communicative situations so that different students respond under comparable conditions. Platform records can show whether students return to a task, revise an answer or consult additional sources. Yet digital quantity should not be confused with competence: frequent clicks or prolonged online presence do not, by themselves, indicate intercultural development.

The integrative index also requires methodological caution. Averaging five dimensions is meaningful only if the scales are defined consistently and each component is independently assessed. A high overall index should therefore be accompanied by a component profile. Otherwise, strong cultural knowledge could conceal weak reflection or limited adaptability. For pedagogical purposes, the profile is often more useful than the total score.

DISCUSSION

The proposed structure corresponds to the dissertation's view of the diagnostic model as a complex pedagogical system composed of target, methodological, process and assessment-result blocks. This block structure is useful because it prevents assessment from becoming detached from teaching. The model begins with an educational purpose and ends with a developmental decision.

The integration of digital evidence is also consistent with the changing environment of higher education. However, digital diagnostics should remain transparent and educationally justified. Students should know what evidence is being collected, why it is needed and how it will be interpreted. The most defensible digital evidence is therefore evidence intentionally produced within learning tasks rather than unrelated personal online behaviour.

The model has practical value for differentiated support. If a student demonstrates strong cognitive knowledge but weak reflective ability, additional verification and reflection tasks can be assigned. If another student shows empathy and openness but hesitates during interaction, simulated communication and role-play tasks may be more appropriate. Diagnosis thus becomes a basis for selecting pedagogical interventions.

This developmental orientation distinguishes the model from one-time testing. Repeated assessment, feedback, self-assessment and portfolio evidence make it possible to monitor the dynamics of competence and to identify whether pedagogical support has resulted in meaningful change.

CONCLUSION

An integrative diagnostic model for intercultural communication competence should connect purpose, methodology, process, evidence and pedagogical decision-making. The model described in this article evaluates cognitive, emotional-axiological, communicative-activity, reflective and digital components through complementary methods rather than a single test.

Digital diagnostic technologies expand the possibilities of observation, simulation, portfolio assessment and longitudinal monitoring, while the Digital Intercultural Footprint provides a concept for analysing intentionally produced evidence of intercultural activity in educational digital environments. The integrative index can serve as a summary measure when component scores are methodologically comparable, but it should always be interpreted together with the learner's multidimensional profile.

The principal pedagogical outcome of diagnosis is therefore not a number but a justified decision about further development. When assessment identifies specific strengths, limitations and changes over time, it becomes an instrument for improving intercultural communication competence rather than merely recording it.

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