Комплекс упражнений как средство формирования иноязычной научно-исследовательской компетенции студентов магистратуры

В условиях введения новых государственных стандартов высшего образования актуальным остается вопрос организации образовательного процесса, где приоритетным направлением остается формирование у студентов как субъектов собственного развития, готовности и способности к самостоятельному получению и обработке информации для ведения научно-исследовательской деятельности. Статья посвящена рассмотрению вопросов, связанных с подготовкой магистров к ведению научно-исследовательской деятельности на иностранном языке в контексте освоения дисциплины «Деловой иностранный язык». Цель данной статьи – описать процесс формирования иноязычной научно-исследовательской компетенции посредством комплекса упражнений, направленных на ознакомление студентов магистратуры языкового профиля с характером образовательных исследований, методологией и особенностями исследовательской деятельности за рубежом. При выполнении предложенных заданий студенты обсуждают актуальные исследования, способы познания, виды и типологию исследова-ний; развивают навыки критического мышления, знакомятся со структурой исследования. Вторая тема посвящена рассмотрению правильной постановки проблемы исследования: выявлению существенных характеристик исследовательского вопроса, определению понятийного аппарата. В конце изучения каждой темы студенты заполняют «рефлексивные» листы, где анализируются полученные знания, формулируются и корректируются собственные выводы и направления исследования. Предложенная методика помогает студентам четко определить научно-исследовательскую деятельность, проявить знание методологии, способов познания, сформулировать потенциальные проблемы исследований и поставить исследовательский вопрос [1]. Рассмотренный в статье комплекс упражнений не претендует на исчерпывающее решение задач дисциплины «Деловой иностранный язык». В основном методика ориентирова-на на описание процесса сбора и анализа данных, обучение критически анализировать исследование, рассматривать предпосылки, особенности и этапы исследования, его подготовку. Предложенная методика позволяет определить эффективную стратегию формирования у будущего магistra способности и готовности к личностной самореализации при ведении научно-исследовательской и профессиональной деятельности на иностранном языке.

EXERCISES FOR DEVELOPING FOREIGN LANGUAGE RESEARCH COMPETENCE IN MASTER’S DEGREE STUDENTS

While the new National Curriculum of Higher Education has been introduced, the organization of educational process with students’ self-development, ways of receiving and processing the information while conducting the research activity within the scope of competency-based approach remains paramount. The authors focus their attention on mastering research skills of master's degree students by means of a foreign language within the discipline “Academic English”/“English for Specific Purposes”. The objective of the work is to present the development of research competence with a complex of exercises which help language students to identify the nature of educational research, methodology and peculiar features of the research process. While doing the proposed tasks, students discuss the importance of research, ways of knowing, and types of research, critical-thinking skills, and thesis structure. The second topic concerns the research question: formulation and identification of the research question, definition of research terminology. At the end of the study of each topic students fill in the "reflection sheet", which makes them analyze the acquired knowledge, formulate and correct their own conclusions and direction of the study. This technique helps students to define the term "research activity", demonstrate knowledge of research methodology, methods of cognition, and formulate potential research problems and research question [1]. It is necessary to continue to develop tasks that will affect other topics of the discipline, which are aimed at describing the process of data collection and analysis, training critical analysis of the study, analysis of the prerequisites, features and stages of the study, preparation of a research report to develop an effective strategy for training specialists, future holders of master's degree, for personal self-realization in scientific and professional activities.

**Keywords:** research competence, research skills, master's degree students, academic English, English for Specific Purposes, methods, English language.

В российском высшем образовании продолжаются процессы модернизации, направленные на приведение их в соответствие с мировыми стандартами. Разработка программ дисциплин остается актуальным вопросом в логике изменяющихся федеральных стандартов. Одним из основных планируемых результатов обучения в вузе является формирование иноязычной научно-исследовательской компетенции студентов [2]. Предоставить студентам информацию для понимания исследовательской деятельности от формулировки проблемы до сбора, анализа, систематизации и интерпретации данных, дать возможность использовать эти знания для организации самостоятельной исследовательской деятельности по выбранной теме, читать и понимать источники на иностранном языке [3] – цели дисциплины «Деловой иностранный язык» в магистратуре.

Декомпозиция целевого компонента позволила сформулировать задачи дисциплины:

1) ознакомить студентов с характером образовательных исследований, рассмотреть методологию и представить обзор исследовательского процесса;
2) обсудить основные понятия и процессы исследования;
3) описать процессы, связанные со сбором и анализом данных;
4) рассмотреть методы исследования (методы сбора данных и методы анализа);
5) научить критически анализировать исследование;
6) проанализировать предпосылки, особенности и этапы исследований;
7) подготовить исследовательский отчет.

Для достижения второй цели – авторы предлагают комплекс упражнений, выстроенный в логике разработки самостоятельного исследовательского проекта. Выполнение заданий и заполнение «рефлексивных листов» являются пошаговыми инструкциями для разработки собственных исследовательских проектов.

Для работы над темами «Природа исследования» и «Проблема исследования» [4] студенты получают для решения и обсуждения следующее задание в предлагаемом комплексе упражнений:

Тема 1. Природа исследования: важность исследований, пути познания, виды и типы исследований, критический анализ и структура исследования

Activity 1.1: Empirical vs. Nonempirical Research
In the list of research topics that follows below, place an X in front of those that are examples of empirical research[5].
1. ______ A study of the effectiveness of a social learning program on the employability of severely disabled adults.
2. ______ The relationship between television watching and school achievement: a review of the literature.
3. ______ A reanalysis of the evidence on school effectiveness.
5. ______ Logical inconsistencies in writings of Sigmund Freud.
6. ______ A comparison of the effectiveness of behavior therapy as compared with client-centered therapy in homes for adolescent runaways.

Activity 1.2: Basic vs. Applied Research
Place a “B” in front of those that you think are examples of basic research and an “A” in front of those that you think are examples of applied research.
1. ______ A comparison of the attitudes of different student ethnic groups toward the general education requirements at the City University of New York.
2. ______ The relationship between adolescent self-esteem and alcoholism in parents.
3. ______ A comparison of the effects of phonics versus look-say teaching on the achievement of Latino children in reading as based on the Amalo theory.
4. ______ Employer perceptions of changes in essential secretarial skills between 1945 and 1995.
5. ______ The effectiveness of counselors who are recovering alcoholics as compared with other counselors at the Rosewood Recovery Center.
6. ______ The effectiveness of using manipulative materials in teaching first-grade mathematics.

**Activity 1.3: Types of Research**

Match the letter of the appropriate research methodology from Column B with its topic in Column A[6].

<table>
<thead>
<tr>
<th>Column A: Topic</th>
<th>Column B: Type of research</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. ______ Diplomatic relationships between Japan and the United States between 1918 and 1941.</td>
<td>a. A group-comparison experiment</td>
</tr>
<tr>
<td>2. ______ Images of women in U.S. history textbooks.</td>
<td>b. A survey</td>
</tr>
<tr>
<td>3. ______ Relationship between student attendance and achievement in chemistry classes.</td>
<td>c. A content analysis</td>
</tr>
<tr>
<td>4. ______ Number of single mothers on welfare in the city of Chicago.</td>
<td>d. A case study</td>
</tr>
<tr>
<td>5. ______ Daily activities of an operating room nurse in a big-city hospital.</td>
<td>e. An ethnography</td>
</tr>
<tr>
<td>6. ______ A comparison of the inquiry method and the lecture method in teaching high school biology.</td>
<td>f. A historical study</td>
</tr>
<tr>
<td>7. ______ Changing impulsive behavior through the use of praise.</td>
<td>g. A single-subject experiment</td>
</tr>
<tr>
<td></td>
<td>h. A correlational study</td>
</tr>
</tbody>
</table>

**Activity 1.4: Assumptions**

In this activity, you are to work with a partner to discuss what assumptions underlie each of the following statements:
1. “Spare the rod and spoil the child!”
2. “We couldn’t beat McAteer High last season and we probably won’t be able to beat them this year either.”
3. “A stitch in time saves nine.”
4. “Oh, brother, I have another one of the Johnson kids in my class next semester!!”
5. “Boy, I dread the thought of taking algebra from Mrs. West next semester!”

**Activity 1.5: General Research Types**

Identify each as being either descriptive, associational, or intervention research [7].
1. A study of the possible relationship that may exist between class size and learning in remedial mathematics courses __________.
2. A survey of the attitudes of parents in a large urban school district toward the advanced placement courses offered by the district __________.
3. A study designed to compare the effectiveness of two methods of teaching spelling to first graders __________.
4. An investigation by a researcher in an attempt to confirm that abstract concepts can be taught to six-year-olds __________.
5. A historical study of high school graduation requirements __________.
6. A detailed ethnographic study of the daily activities of a teacher in an inner-city high school __________.
7. A comparison of inquiry and lecture methods of teaching 11th-grade history __________.
8. A study designed to compare the attitudes of male and female students toward chemistry __________.

**For Discussion:**

1. “Speculation, procedures, and conclusions are not scientific unless they are made public.” Is this true? Discuss.
2. Most quantitative researchers believe that the world is a single reality, whereas most qualitative researchers believe that the world is made up of multiple realities. Which position would you support? Why?
3. Can you think of some other ways of knowing besides those mentioned in this chapter? What are they? What, if any, are the limitations of these methods?
4. “While certainty is appealing, it is contradictory to a fundamental premise of science.” What does this mean? Discuss.
5. Is there such a thing as private knowledge? If so, can you give an example?
6. Many people seem to be uneasy about the idea of research, particularly research in schools. How would you explain this?

«Проблемные листы» (Problem Sheets) или использование интерактивной программы The Research Wizard [8] являются формой рефлексивных упражнений для выстраивания индивидуальной исследовательской траектории, которая корректируется по мере поступления новой информации и в процессе групповых обсуждений.

**Problem Sheet 1: What Kind of Research?**

Think of a research idea or problem you would like to investigate. Using Problem Sheet 1, briefly describe the problem in a sentence or two. Then indicate the type of research methodology you would use to investigate this problem. Finally, explain briefly your reasons for choosing this approach.

1. A possible topic or problem I am thinking of researching is……………..
2. The specific method(s) that seem(s) most appropriate for me to use at this time is/are (circle all you think are appropriate):
   a. an experiment
   b. a survey
   c. an ethnography
   d. a correlational study
   e. a causal-comparative study
   f. a case study
   g. a content analysis
   h. a historical study
   i. an action research or teacher research study
   j. a program evaluation
3. The overall research approach I am planning to use is (circle one):
   a. Qualitative
   b. Quantitative
   c. Mixed Method
4. My reason(s) for using this approach is/are as follows……………………

Тема 2. Проблема исследования: постановка и существенные характеристики, определение понятийного аппарата

Activity 2.1: Research Questions and Related Designs
Select the appropriate research design for each question listed below.

Case Study
Causal-Comparative
Content Analysis
Correlational
Experimental
Historical
Surveys
Ethnography

1. What do elementary school teachers in the San Francisco Unified School District think about full inclusion as practiced in their district?
2. Is there a relationship between students’ levels of social skills and successful transition into mainstream classes?
3. How do individuals with physical disabilities perceive themselves in comparison to their able-bodied peers in terms of work-related activities?
4. Does a whole-language curriculum lead to higher student achievement than a phonics curriculum?
5. How are teachers implementing the whole-language approach to reading in their curricula at Harding Elementary School?
6. What were the key events that led to the demise of affirmative action in state hiring and college admissions in California?
7. How do magazines targeted at teenagers present information on safe-sex practices?
8. Are the reasons Native American students give for dropping out of school different than those given by non-Native American Indian students?

**Activity 2.2: Arguable statements vs. statements of fact**

On the blank line beside each statement, write “A” if the statement is arguable or “F” if the statement is a statement of fact [9].

______1. The amount of financial aid available to students should be proportionate to the earning potential of the career fields for which their majors prepare them.

______2. Tom Hanks should have won the Best-Actor award for his performance in *Castaway*.

______3. Frank Sinatra was loved and admired by many people.

______4. The United States contains citizens of many different ethnicities.

______5. Sterling College should make coffee available to students in every building.

______6. Driving under the influence of alcohol is dangerous.

______7. Penalties for drinking and driving should be more severe.

______8. Television networks air a lot of reality shows nowadays.

______9. The *Harry Potter* movies are better than the *Indiana Jones* movies.

______10. Steroid abuse can lead to serious health problems.

**Activity 2.3. Changing General Topics into Research Questions**

1) Each item below contains a general subject and a narrower subject that is derivative of it. Write an arguable thesis statement for each group of words in the column labeled “Narrower Topic.”

<table>
<thead>
<tr>
<th>General Topic</th>
<th>Narrower Topic</th>
<th>Thesis Statement</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. education</td>
<td>distance education</td>
<td>?</td>
</tr>
<tr>
<td>2. communication</td>
<td>the difference in people’s voices</td>
<td>?</td>
</tr>
<tr>
<td>3. work</td>
<td>paid vacation time</td>
<td>?</td>
</tr>
<tr>
<td>4. dishonesty</td>
<td>cheating in sports</td>
<td>?</td>
</tr>
<tr>
<td>5. community</td>
<td>volunteerism</td>
<td>?</td>
</tr>
<tr>
<td>6. television</td>
<td>reality shows</td>
<td>?</td>
</tr>
<tr>
<td>7. relationships</td>
<td>fathers and sons</td>
<td>?</td>
</tr>
<tr>
<td>8. newspapers</td>
<td>college newspapers</td>
<td>?</td>
</tr>
<tr>
<td>9. family</td>
<td>eating together</td>
<td>?</td>
</tr>
<tr>
<td>10. criminal justice</td>
<td>treatment of inmates</td>
<td>?</td>
</tr>
</tbody>
</table>
2) Change the following topics into researchable questions.
1. Class size and student achievement
2. Multicultural education at Thurgood Marshall Middle School
3. Testing anxiety
4. Women college professors and tenure
5. Alcohol consumption on New Year’s Eve and Super Bowl Sunday
6. Single parents and affordable child care
7. Counseling style
8. Asian-American students and positive stereotypes
9. The charter school movement in the twentieth century
10. Diet and exercise

Activity 2.4: Justification
A researcher wished to study the following question: “Are ‘open’ classrooms more effective (do children learn more) than structured, non-open classrooms?” Here are two different justifications that were written. Which do you think would be most likely to convince skeptics of the importance of the study? [10]

1) The general purpose of this research is to add knowledge to the field of education at this time when classroom freedom is a cornerstone of today’s educational revolution. Various authorities (Leonard, Holt, Kozel, etc.) have suggested that the strictly structured, teacher-directed classroom may impede the learning process of students. They argue that less-structured, “open” environments may help students to learn more, faster, and in greater depth. It is this controversial thesis (since many “structuralists” disagree strongly) that has provoked many teachers to modify their classrooms in hopes of achieving greater educational gains for their students. While the reformers have written convincingly from an inspirational point of view, scant “hard data” exists to provide support. If educators are to jump on this bandwagon, and if money is to be diverted from the more traditional type of arrangement to support open classrooms, they should have information of the type that answers to this research question will provide. It is one thing to think something has potential for improving the learning of the young; it is quite another to have evidence that illustrates that this is so. Hopefully, this study will provide some information in this regard.

2) Education of children in elementary schools has always been a controversial issue among parents and teachers. There are various ideas regarding the type of setting that would be (or provides) a constructive learning situation for children. One such setting might be the open classroom type. That is what this research will set out to determine.

Activity 2.5: Evaluating Research Questions
In this activity, you will interview another student in your class about their research question. Evaluate his or her question with regard to each of the following characteristics of good research questions [11].
1. The question is **feasible**.
   _____ Yes, the question can be investigated without a considerable amount of time, energy, or money.
   _____ No, as stated, it would take a considerable amount of time, energy, or money to investigate this question.
   **Suggestions for improvement**

2. The question is **clear**.
   _____ Yes, most people would agree as to what each of the key words in the question mean.
   _____ No, most people would not agree as to what each of the key words in the question mean.
   **Suggestions for improvement**

3. The question is **significant**.
   _____ Yes, this question is worth investigating because it will contribute important knowledge about the human condition.
   _____ No, answers to this question would not contribute important knowledge about the human condition.
   **Suggestions for improvement**

4. The question is **ethical**.
   _____ Yes, the question will not involve physical or psychological harm or damage to human beings, or to the natural or social environment.
   _____ No, the question could involve physical or psychological harm or damage to human beings, or to the natural or social environment.
   **Suggestions for improvement**

5. The question suggests a **relationship**.
   _____ Yes, the question does suggest a relationship of some sort.
   _____ No, the question does not suggest a relationship.
   **Suggestions for improvement**

**For Discussion:**
Here are three examples of research questions. How would you rank them on a scale of 1 to 5 (5= highest, 1= lowest) for clarity? for significance? Why?

a) How many students in the sophomore class signed up for a course in driver training this semester?

b) Why do so many students in the district say they dislike English?

c) Is inquiry or lecture more effective in teaching social studies?

2. How would you define *humanistically oriented classroom*?

3. Some terms used frequently in education, such as *motivation*, *achievement*, and even *learning*, are very hard to define clearly. Why do you suppose this is so?

4. How might the term *excellence* be defined operationally? Give an example.

5. “Even the clearest of definitions does not always guarantee meaningful communication.” Is this really true? Why or why not?
6. We would argue that operational definitions should always be accompanied by constitutive definitions. Would you agree? Can you think of an instance when this might not be necessary?

7. Most researchers do not believe that research efforts based primarily on personal interest warrant investigation. Do you agree in all cases? Can you think of a possible exception?

**Problem Sheet 2: The Research Question**

1. My (restated) research problem is……………….

2. My research question(s) is/are…………………………………………………

3. Following are key terms in the problem or question that are not clear and thus need to be defined:
   a) __________________________  d) __________________________
   b) __________________________  e) __________________________
   c) __________________________  f) __________________________

4. My justification for investigating this question/problem (why I would argue that it is an important question to investigate) is as follows……………………………

Таким образом, по окончании изучения тем «Природа исследования» и «Проблема исследования» студенты определяют термин «научно-исследовательская деятельность», демонстрируют знание методологии научных исследований, способов познания. Учащиеся могут сформулировать проблему исследования.

Дальнейшие исследования авторов посвящены решению других задач дисциплины, которые направлены на разработку эффективной стратегии иноязычной подготовки будущего магистра к личностной самореализации при ведении самостоятельной научно-исследовательской деятельности.

**Список литературы**


References
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