

# Teaching Arabic with Technology Project-Based Learning

## A non-traditional approach to summative assessment

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**Abstract**— This paper seeks to demonstrate how Technology Project-Based Learning can be applied in the classroom to make learning more enjoyable, interdisciplinary, and applicable to real life. Being experienced in teaching Arabic in the traditional, hybrid, synchronous, and asynchronous online environment, the author shares her perspective on implementing a technology-infused, teacher-facilitated, and student-driven, project-based assessment challenge. She explains how this challenge allows for a higher level of creativity and can be applied to other subject areas. She defines Technology Project-Based Learning as a methodology that enriches the learning environment and complements academic instruction and curricular design. The author then summarizes how the Technology in Technology Project-Based Learning allows for a higher level of creativity in the classroom, in which students' perspectives expand as they prepare to navigate an ever-changing technological world.

**Keywords**- Arabic; Learner-Driven, Collaboration; Student-Centered; Technology; Project-Based Learning; Instructor-Designed; Student-Driven

### I. INTRODUCTION

While many schools in K-12 and higher education realize the importance of teaching foreign languages to prepare students to contribute to a better tomorrow, many obstacles present themselves limiting the teaching of foreign language in the United States and around the world. These obstacles include, but are not limited to, pedagogical, teacher-related, learner-related, and financial challenges, among many others [1].

The foreign language classroom, just like any other subject, has suffered from being teacher-centered and has struggled to find a balanced learning environment and to transition from being dominated by the teacher to being student-centered [2]. On page 88 of reference [3], the author cites Odom et al. stating that in today's classroom, students' attitude towards any subject is "positively associated with student-centered teaching practices and negatively associated with traditional (teacher-centered) teaching practices." Student-centeredness, however, requires, a shift-in-the-minds of both educators and students [4].

How do we promote this shift-in-the-thinking as educators? Available technological tools seem to make a difference in creating a healthy language learning environment that is also sustainable and affordable. The foreign language classroom is seeing more use of

multimedia, moving toward student-centeredness, leaving behind the aging mentality of lecture-based instructions and teacher-dominated, teacher-centered classroom. This resolution to create a classroom atmosphere that puts the students in the center of their learning promotes a healthy relationship between the teacher and the learner, fosters critical thinking and shows the relevance of academic content to real life [5].

To highlight her efforts to overcome the roadblocks to a student-centered classroom, the author shares a success story of adopting a student-centered pedagogical approach to teaching Arabic. She encourages students to use existing tools to design their learning and think beyond the classroom walls by infusing technology into Project-Based Learning (PBL). In this paper, the author focuses on sharing her experience in implementing Technology Project-Based Learning in Introduction to Arabic I.

Elementary Arabic I is the beginner level course in Arabic language and culture. It is a course which covers and emphasizes the development of the basic skills of the Arabic language, including basic pronunciation, comprehension, communication, and grammar. Students in this course also become acquainted with the culture of the Arabic world [6]. This course may be offered in the traditional face-to-face, hybrid, synchronous, or asynchronous online environments. In a culminating, end-of-semester, instructor-designed assignment, students are required to create individual, digitally-recorded autobiographies. Clips of these autobiographies are to be included in a collaborative project, "Arabic 101 Class Documentary," in which the whole class contributes.

The following sections provide information on how Technology Project-Based Learning methodology is used to complete two teacher-designed projects in a beginning Arabic course. Additionally, future implications for the language and other classrooms are discussed:

- Section II offers background information on Project-Based Learning.
- Section III presents the design brief, including two hands-on, individual and whole class activities: "My Cultural Autobiography" and "Arabic 101 Class Documentary."
- Section IV shows how the two (individual and class semester projects) exemplify the characteristics of Technology Project-Based Learning (TPBL): using technology, taking

- ownership, collaboration, and incorporating of the entire curriculum
- Section V introduces work samples of students' and a perspective on the benefit of TPBL in the Arabic classroom
- Section V is the conclusion. It contains a reflection and future implications for the language and other classes.

## II. BACKGROUND ON PROJECT-BASED LEARNING

Project-based learning (PBL) is “an innovative approach to learning that teaches a multitude of strategies critical for success in the twenty-first century” [7]. It is known to help students take ownership of their learning and take pride in their accomplishments in an environment that invites creative thinking. Students practice collaboration, planning, problem-solving, communication, among other skills. They create projects, utilizing resources available to them, including technology, books, personal experiences, talents, and the Internet. Project-Based Learning incorporates the entire curriculum and encourages the exploration of multiple subjects while requiring a broad knowledge to complete tasks. John Savery defines PBL in reference [9] as “an instructional approach that has been used successfully for over 30 years and continues to gain acceptance in multiple disciplines”.

## III. THE DESIGN BRIEF: TWO HANDS-ON LEARNING PROJECTS INTO ONE

Although they are due during the last week of class, the instructor shares “Arabic 101 Class Documentary,” along with “My Cultural Autobiography,” design brief several weeks before the conclusion of the course. At the time of introducing the two projects, students have learned the entire Arabic alphabet and can connect the letters to make words, spell (dictate) words, and pronounce words using correct grammar, special characters, and short and long vowels. Students have accumulated a substantial amount of vocabulary to cover different topics such as greetings, self-introduction, jobs, places of residence, family members, other people in their lives, and their likes and dislikes. They have learned to construct simple sentences, have taken several quizzes, and have completed a midterm exam. Students are encouraged to begin working on their individual and class projects early in the semester since they must finish their autobiographies in time to have their work included in the whole class documentary.

### A. “My Cultural Autobiography”- An Individual Project

For this project, each student in Elementary Arabic I is expected to write and record his/her autobiography in Modern Standard Arabic. Students are expected to include the following information in their projects:

- A proper greeting
- Name and place(s) of residency
- Their field(s) of study

- The number of brothers and sisters they have, if any
- Favorites (Pets, food, colors, movies, drinks, etc.)
- Names of and information about other people in their lives (siblings, teachers, doctors, neighbors, etc.)

Each student is required to submit his/her English and Arabic versions of the written autobiography. They also create video recordings of the individual autobiography and upload them to the class online learning management system to present them to class. Students are graded as follows for this individual project:

- Five points for the submission of the Autobiography in English
- Five points for the Autobiography in Arabic
- Ten points for correct grammar
- Twenty points for correct pronunciation of individual words in Arabic and clarity of student's recorded voice
- Twenty points for using new vocabulary from each unit (7 words minimum)
- Ten points for helping at least one classmate peer-review his/her autobiography. Assessment of this task is accomplished through each student completing and submitting a form called “My Cultural Autobiography Evaluation Form.”

### B. “Arabic 101 Class Documentary” – The Whole Class Project

For 30 additional points, students collaborate to create a whole class documentary. In one video presentation, each student is asked to state her/his name, major of study, origin, citizenship, current home location, and the reason they are taking Arabic. The students' clips are edited and used as part of the final collaborative project. Each student is also required to complete an “Arabic 101 Class Documentary Survey” to share feedback with the instructor regarding difficulties experienced, students who were helpful or not, and their contributions in completing the class project.

## IV. THE ARABIC SEMESTER PROJECTS - AN APPLICATION OF TECHNOLOGY PROJECT-BASED LEARNING

How does such a design brief in the Arabic classroom represent Technology Project-Based Learning? The above-presented design brief requires the use of technology while encouraging students to take ownership of their learning and work in collaboration with others.

### A. Using Technology

To complete both their individual projects and the whole class documentary, students use technology across many stages of their work while communicating, collaborating, and presenting their products. They learn to use digital presentations, video production software and applications, and online collaboration and communication tools. They employ project planning, project management, production,

and design tools such as video editing, storyboarding, and clip sequencing.

**B. Taking Ownership**

Another Technology Project-Based Learning (TPBL) is satisfied while implementing the mentioned summative assessment activity. To complete their work, students must take ownership of their learning. They carefully plan, manage, design, and execute the steps to present their stories. They express pride in their work, apply what they learned to their lives, and use their creations in real-life situations.

**C. Collaboration**

As a part of the requirements, students are asked to collaborate with classmates while working on their individual and whole class projects design. They use an evaluation form and a survey to self-evaluate their work and their classmates' contribution to the whole-class project. They evaluate how they and other classmates:

- Help one another in peer review
- Work together to accomplish project planning, project management, and task completion
- Work together to design the whole class video presentation

Another characteristic of Technology Project-Based Learning, i.e., collaboration, is satisfied by the requirement of cooperation and group-based learning among students. Everyone in the class uses his/her talent(s) to complete the final culminating project.

**D. Incorporation of the Entire Curriculum**

Designing activities that incorporate other academic subjects that focus on the whole student make learning an enjoyable experience and applicable to real life. Completing their individual autobiographies and the class documentary, students enjoy cross-disciplinary exploration. Students:

- Practice self-study and reflection
- Conduct writing critiques
- Explore the geography and climate of unfamiliar areas
- Recognize the names of other professions and fields of study in Arabic
- Learn about hobbies outside of their areas of interest
- Become familiar with diverse family structures and relationship styles
- Use multimedia and digital tools to design digital environments
- Participate in problem-solving, project planning, management, and communication

This design brief proves to incorporate many content areas such as critical thinking and writing, geography, social studies, family structure, multimedia, and project planning, management and communication.

**V. REFLECTION AND STUDENTS WORK EXAMPLES**

Following are two students' work samples of the Arabic autobiographies: Figure 1 and Figure 2. All identifying students' information (names, names of family members, school, origin, etc.) are removed from both work examples. In addition to the Arabic text, students also submit an English version of the autobiography to clarify any possible ambiguity in the Arabic language, if needed. The students also create a digital form of the autobiography that shows their pronunciation and fluency skills in Arabic.

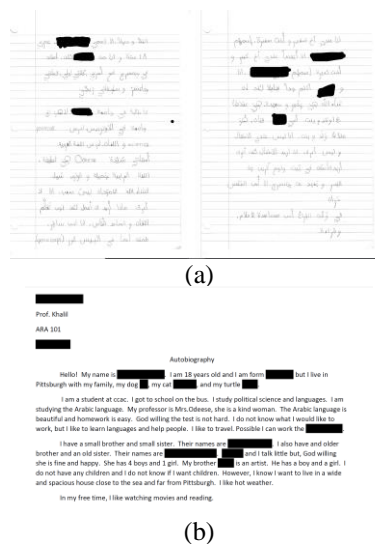


Figure 1. A Sample Female Student Written Autobiography in Elementary Arabic I: (a) Arabic Version and (b) English Version

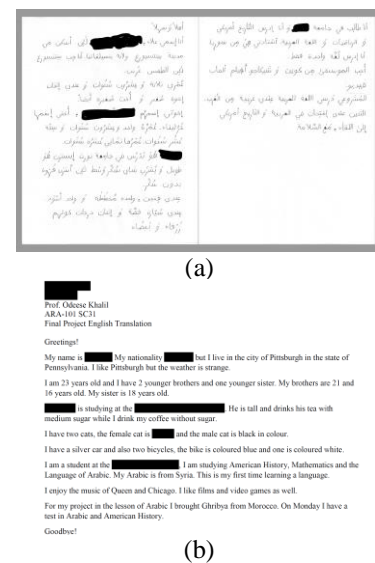


Figure 2. A Sample Male Student Written Autobiography in Elementary Arabic I: (a) Arabic Version and (b) English Version

Students in the above two examples share much about their lives, goals, and social circles. The information they provide includes a proper greeting to classmates, self and

family introductions, hobbies, likes, and dislikes. It is remarkable to see how they put the language to use.

Wu [8] states that “Students write meaningful papers when they are allowed to explore various connections in writing” and that “writer-centered” project resulted in a “student-centered” writing classroom environment. After receiving the instructions for the final projects, the students begin to make connections between the academic content to their daily lives. They draft their autobiographies earlier in the semester and ask questions to clarify any possible unclear use of the language as they progress in their work. They become active learners, take control of achieving the project goals, use new vocabulary in context, and incorporating new vocabulary to add to their stories about themselves. Students are only allowed a limited number of non-course related vocabulary; therefore, during the writing process, students use force themselves to express what they want using the vocabulary they learned in the course. This approach is helpful since “contextualized vocabulary learning is more effective than learning words in lists” [9]. Putting the language to use empowers the learner, makes acquiring new vocabulary less tedious, and relates the knowledge gained in the classroom to real life. Moreover, students show excitement about being able to use that they produced in this final design brief in real life, especially in an interview where the Arabic language is preferred foreign language, with which to be familiar.

## VI. CONCLUSION

Project-Based Learning has been a popular instructional approach to designing instructions for decades. It is the Technology part that is becoming a must-incorporate in every classroom. Technology removes obstacles and roadblocks, shortens distances, and promotes communications among scholars and the education community. Technology, when used correctly, equalizes the education field, spreads opportunities beyond the classroom and institutions walls, and removes obstacles in the way of preparing today’s student to become a leader of better tomorrow.

To represent Technology Project-Based Learning (TPBL), an activity must use technology in a learner-centered, collaborative, innovative, and interdisciplinary environment [10].

As teacher-facilitated, student-driven approaches to learning, the end-of-semester culminating activities in Elementary Arabic I demonstrate Technology Project-Based Learning (TPBL) characteristics. In the foreign language classroom, TPBL is one of many pedagogical solutions to moving away from the unsuccessful concept of the teacher-centered classroom. It opens full doors for active learning and designing working solutions to real-world problems, but it is not the only approach. Many technology-infused pedagogies and instructional methodologies are also worth considering if they focus on the whole student and give him/her the center of the classroom.

An approach such as TPBL can be applied in many academic subjects to help educators and students reach diverse course objectives. [11]. Educators must provide opportunities for students to design, build, and create with their knowledge and the classroom becomes a heaven for fun while learning.

In 1916, John Dewey said, “Give the pupils something to do, not something to learn; and the doing is of such a nature as to demand thinking; learning naturally results” [3]. Technology Project-Based Learning requires students to use technology and their content knowledge to create solutions to real-world challenges. It enriches the learning environment and complements academic instruction and curricular design. It prepares 21<sup>st</sup>-century students to be innovative problem solvers in an ever-changing, technological world.

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