



TLEF Project – Final Report

Report Completion Date: (2025/02/15)

1. PROJECT OVERVIEW

1. General Information

Project Title:	Interactive Web-based Course Material for Learning Alphabet and Basic Literacy Skills for Heritage Students of Persian		
Principal Investigator:	Hessam Dehghani		
Report Submitted By:	Hessam Dehghani		
Project Initiation Date:	Sep. 2021	Project Completion Date:	Sep. 2023
Project Type:	<input type="checkbox"/> Large Transformation <input type="checkbox"/> Small Innovation <input type="checkbox"/> UDL Fellows Program <input type="checkbox"/> Hybrid and Multi-access Course Redesign Project <input checked="" type="checkbox"/> Other: [Online Supplementary Material for Several Courses]		

2. Project Focus Areas – Please select all the areas that describe your project.

- Resource development (e.g., learning materials, media) development/implementation, learning communities)
- Infrastructure development (e.g., management tools, repositories, learning spaces)
- Pedagogies for student learning and/or engagement (e.g., active learning)
- Innovative assessments (e.g., two-stage exams, student peer-assessment)
- Teaching roles and training (e.g., teaching practice development, TA roles)
- Curriculum (e.g., program)
- Student experience outside the classroom (e.g., wellbeing, social inclusion)
- Experiential and work-integrated learning (e.g., co-op, community service learning)
- Indigenous-focused curricula and ways of knowing
- Diversity and inclusion in teaching and learning contexts
- Open educational resources
- Other: [please specify]



3. Final Project Summary – *What did you do/change with this project? Explain how the project contributed toward the enhancement of teaching and learning for UBC students.*

This project resulted in the creation of an open-access, open-source online book on Pressbooks designed for heritage learners of Persian at the beginner level (PERS 100, 101, and 104). The course material provides students with interactive, self-paced learning resources that align with classroom instruction, allowing them to practice pronunciation, grammar, reading, and vocabulary acquisition in a risk-free environment.

Key innovations and enhancements in this project include:

1. Comprehensive Online Course Material - Hundreds of structured exercises help students sharpen their skills independently, at their own pace, and without requiring an instructor.
2. Integrated Audio and Pronunciation Support - Every letter, word, and sentence is accompanied by audio recordings, eliminating the need for students to guess pronunciation.
3. Instructional Videos for Writing and Pronunciation - A series of short and long instructional videos teach students how to write Persian letters and pronounce sounds correctly.
4. Guidance on Digital Adaptation - English-language tutorial videos explain how to use the website, set up Persian typing on various devices, and navigate technical challenges.
5. Automated, Extensive Feedback on Exercises - Students receive detailed explanations for correct and incorrect answers, allowing them to learn from mistakes and build confidence.
6. High-Quality Visual Support - Carefully curated images and illustrations make learning more engaging, interactive, and accessible, especially for visual learners.

How did this project contribute to the enhancement of teaching and learning for UBC students?

This project significantly improves the learning experience of Persian heritage students at UBC by:

- ✔ Providing independent learning opportunities - Students can practice as much as needed without classroom pressure, reinforcing their knowledge outside of class.
- ✔ Reducing the need for direct instructor intervention - Self-explanatory lessons and instant feedback on exercises increase efficiency and allow instructors to focus on higher-order language instruction.
- ✔ Enhancing pronunciation and writing skills - With audio recordings and video tutorials, students improve accuracy in pronunciation and script writing without external assistance.
- ✔ Improving accessibility and flexibility - The open-access format allows any student, anytime, anywhere to engage with the material at their own pace.
- ✔ Promoting engagement through interactive content - Visually rich materials, immediate feedback, and structured exercises motivate students to learn actively rather than passively consuming information.

4. Team Members – *Please fill in the following table and include **students**, undergraduate and/or graduate, who participated in your project.*

Name	Title/Affiliation	Responsibilities/Roles
Maryam Mohammad Khani	Masters Student in Education	H5P designer
Pardis Shirvani	Undergrad assistant	Team leader- H5P designer
Marjan Cheraghi	Undergrad assistant	Team leader- H5P designer
Roham Goudarzi	Undergrad assistant	Graphic Designer
Saeed Dehghani	Graduate assistant	Graphic Designer



Anahita Bakhshaei	Graduate assistant	Video Recording Assistant
Mohammadmahdi Salehi	Graduate assistant	Video Recording Assistant
Atousa Mehraei	Undergrad assistant	Material Developer
Amir Reza Dashti	Undergrad assistant	Material Developer
Pooya Katani	Undergrad assistant	Material Developer
Dina Taherkhani	Undergrad assistant	Material Developer
Tara Nouhi	Undergrad assistant	Material Developer
Kimia Nouhi	Undergrad assistant	Material Developer
Rozhan Aali	Undergrad assistant	Material Developer
Nikoo Vali	Undergrad assistant	Material Developer
Sholeh Mahlouju	Outside contractor	Graphic Designer

5. **Courses Reached** – Please fill in the following table with ***past*** and ***current*** courses (e.g., HIST 101, 2017/2018) that have been reached by your project, including courses not included in your original proposal (you may adapt this section to the context of your project as necessary).

Course	Academic Year
PERS 104	2022,2023 W and S, 2024
PERS 100	2022, 2023, 2024
PERS 101	2022, 2023, 2024



2. OUTPUTS AND/OR PRODUCTS

2.1. Please **list** project outputs and/or products (e.g., resources, infrastructure, new courses/programs). Indicate a URL, if applicable.

Output(s)/Product(s):	URL (if applicable):
Pressbook Website Dastan Asan 1	https://pressbooks.bccampus.ca/dastanasan1/

2.2. **Item(s) Not Met** – Please list intended project outputs and/or products that were not completed and the reason(s) for this.

Item(s) Not Met:	Reason:
Publishing the project as an OER	The Infrastructor of Pressbooks did not let us perform the quality that we wished for a open publication. So at the moment, the material is only accessible through adding the name of individual students as subscribers to the website.

1. PROJECT IMPACT

1.1. **Project Impact Areas** – Please select all the areas where your project made an impact.

- Student learning and knowledge
- Student engagement and attitudes
- Instructional team-satisfaction
- Teaching practices
- Student wellbeing, social inclusion
- Awareness and capacity around strategic areas (Indigenous, equity and diversity)
- Unit operations and processes
- Other: [please specify]



2.3. Please provide details on each of the impact areas you selected in 3.1. – *For example, explain in which ways your teaching practices changed; how student wellbeing was impacted; how students wellbeing benefited from your project, etc.*

Impact of the Project on Key Areas

1. Student Learning and Knowledge

This project has significantly enhanced student learning outcomes by providing structured, interactive, and accessible materials. The integration of audio recordings, instructional videos, and immediate feedback on exercises ensures that students develop accurate pronunciation, improve reading skills, and internalize grammar rules more effectively. The ability to practice freely, at their own pace, without the pressure of graded assessments or instructor supervision, allows students to reinforce their knowledge systematically.

Additionally, the step-by-step guided exercises help beginner heritage students gradually build confidence in writing, reading comprehension, and vocabulary acquisition, leading to better retention and application of linguistic concepts in classroom interactions.

2. Student Engagement and Attitudes

The interactive, risk-free nature of the platform has positively influenced student engagement. Because students can practice without fear of making mistakes in front of others, they are more willing to experiment with the language, take risks, and actively participate in self-guided learning.

The inclusion of visual and auditory elements, such as high-quality images and recorded pronunciations, makes learning more engaging, dynamic, and enjoyable. The structured feedback on exercises also motivates students to keep practicing, as they can immediately understand their mistakes and improve upon them.

Moreover, students appreciate the flexibility the platform offers, allowing them to review material anytime and anywhere, leading to greater autonomy and investment in their own learning process.

3. Instructional Team Satisfaction

The teaching team has benefited significantly from this project, as it reduces the repetitive instructional workload while enhancing student success. Since the platform provides pre-recorded explanations, pronunciation guides, and self-correcting exercises, instructors no longer need to spend excessive class time on foundational skills like alphabet recognition and pronunciation drills. Instead, they can focus on more advanced skills, such as conversation practice, cultural discussions, and higher-level linguistic analysis.

Additionally, the ability to direct students to online resources for reinforcement outside of class has improved teaching efficiency and reduced the need for individualized reteaching of basic concepts. This frees up time for more personalized instruction and meaningful interaction with students.



2.4. How do you know that the impacts listed in 3.1/3.2 occurred? – Describe how you evaluated changes/impacts (e.g., collected survey data, conducted focus groups/interviews, learning analytics, etc.) and what was learned about your project from the evaluation. You are encouraged to include graphical representations of data and/or scenarios or quotes to represent and illustrate key themes.

Based on the results of the evaluation survey we administered in 2022, the project's impact on different aspects of student learning and teaching practices at UBC is clearly demonstrated. Below is a systematic breakdown of how the data supports these impacts.

1. Impact on Student Learning and Knowledge

Evidence from the Survey:

- ✓ Most students (72%) completed at least 60% of the interactive supplementary materials, showing that they found them useful for learning and reinforcement.
- ✓ 75% of students reported that the materials helped improve their understanding of Persian.
- ✓ 88% felt more prepared to read and write Persian after using the supplementary materials.
- ✓ 84% stated that Persian words come to mind more easily, demonstrating vocabulary retention and fluency development.
- ✓ Students appreciated the "smooth slope of difficulty", meaning the materials provided a gradual and structured learning process suited to their level.

Conclusion:

The structured, self-paced exercises, combined with audio support, extensive feedback, and interactive formats, directly contributed to students strengthening their Persian proficiency, especially in reading, writing, and vocabulary acquisition.

2. Impact on Student Engagement and Attitudes

Evidence from the Survey:

- ✓ 68% of students found the materials engaging/fun, while 80% believed they helped them remember course material better.
- ✓ 44% of students strongly agreed that the materials should continue to be used in the course.
- ✓ The most frequently cited reason for completing the exercises was "wanting more practice" (29.2%), followed by "useful study tool" (27.1%).
- ✓ Students found matching, multiple-choice, and drag-and-drop exercises the most engaging.

Conclusion:

Students enjoyed using the supplementary materials and were motivated to engage with them independently, reinforcing the idea that the interactive design successfully encouraged participation. The combination of structured practice, visual and audio elements, and immediate feedback made learning more engaging and less intimidating, particularly for beginner heritage learners.



3. Impact on Instructional Team Satisfaction

Evidence from the Survey:

- ✓ The materials reduced the need for constant instructor intervention, as students had self-correcting exercises with extensive feedback.
- ✓ Students reported that the materials were well-balanced in difficulty (68%) and provided appropriate feedback (76%).
- ✓ One of the most appreciated features was the inclusion of pronunciation and writing videos, which reduced the burden on instructors to teach these fundamental skills repetitively.

3. **TEACHING PRACTICES** – Please indicate if **your** teaching practices or those of **others** have changed as a result of your project. If so, in what ways. Do you see these changes as sustainable over time? Why or why not?

This project has led to a pedagogical shift in how Persian heritage courses are taught at UBC. By integrating digital, self-paced learning tools, the program has moved towards a blended learning model, where classroom time is optimized for higher-order learning while students engage in foundational practice independently.

The platform has also enabled instructors to adopt a more student-centered approach, where learners actively construct their knowledge rather than passively receiving information. Additionally, the availability of structured online exercises and immediate feedback has introduced data-driven teaching adjustments, as instructors can identify common errors and address them more strategically in class.

Evidence from the Survey:

- ✓ Students overwhelmingly supported continuing the use of the supplementary materials, with 80% agreeing or strongly agreeing that they should remain in the course.
- ✓ Some students requested more informal dialogues, cultural context, and journal-style writing prompts, suggesting an interest in deeper engagement with the language beyond basic mechanics.
- ✓ The structured feedback on exercises allowed instructors to analyze student mistakes and adjust their in-class teaching accordingly.
- ✓ The open-access format made the learning process more flexible, providing an accessible and modernized approach to heritage language instruction.

4. **PROJECT SUSTAINMENT** – Please describe the sustainment strategy for the project components. How will this be sustained and potentially expanded (e.g., over the next five years). What challenges do you foresee for project sustainment?

Building on the success of the interactive web-based course material, we are now in the process of transitioning the resources from Pressbooks to a dedicated, independent website. This strategic move aims to establish the first fully interactive online Persian coursebook, ensuring its long-term accessibility, growth, and sustainability over the next five years.

Steps Toward an Independent Website

Website Development & Infrastructure Creation



- We are designing and launching a standalone website that will serve as the primary platform for the Online Interactive Persian Coursebook.
- This transition will allow greater customization, improved user experience, and scalability as new features and content are developed.
- The website will integrate multimedia resources, including videos, audio, exercises, and interactive learning tools, in a way that enhances usability beyond what is possible in Pressbooks.

Ensuring Long-Term Accessibility and Open-Source Availability

- Moving to an independent platform ensures that the coursebook remains open-access, allowing students, educators, and Persian learners worldwide to benefit from it.
- The coursebook will be designed for long-term maintenance, with an infrastructure that can support expansion, updates, and community contributions over time.

Expanding Features for a More Robust Learning Experience

- The new website will allow for better tracking of student progress, self-assessment tools, and adaptive learning features.
- We aim to improve navigation, searchability, and user interaction to make learning Persian more intuitive and engaging.
- Future plans include the integration of AI-driven exercises that provide customized feedback based on learner performance.

Challenges and Sustainability Strategies

Funding and Budget Constraints

- One of the biggest challenges in this transition is securing sustainable funding for the website infrastructure, hosting, and continuous content development.
- We have already applied for grants and institutional funding to support this initiative.

Seeking External Community and Institutional Support

- We are actively exploring partnerships with academic institutions, Persian cultural organizations, and language learning initiatives to secure additional funding.
- Engaging with the Persian-speaking community and heritage learners to crowdsource support through donations, sponsorships, or institutional collaborations is another avenue we are pursuing.

Phased Development Plan Over the Next Five Years

- Year 1-2: Website launch, content migration, and foundational coursebook features
- Year 3-4: Expanded interactive elements, student engagement tools, and adaptive learning
- Year 5: Sustainability planning, ongoing funding, and possible expansion to higher proficiency levels

5. DISSEMINATION – *Please provide a list of scholarly activities (e.g., publications, presentations, invited talks, etc.) in which you or anyone from your team have shared information regarding this project. Be sure to include author names, presentation title, date, and presentation forum (e.g., journal, conference name, event). These will be included on the TLEF scholarly output page.*

As mentioned above, while through action research and surveys we examined the efficacy of the project, due to infrastructure problems we have not been able to launch the website as an open course book. The results of the survey, we documented and presented at a TLEF presentation forum in 2022.