Fostering Learner Autonomy through Personalized Project-Based Learning

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Abstract

Learner autonomy is crucial to the success of foreign language teaching and learning. Although it is defined differently, the essence of learner autonomy is to engage students in the autonomous learning process. In Defense Language Institute Foreign Language Center (DLIFLC), project-based learning is mainly integrated into post-basic language programs to enhance learner autonomy by involving learners into a myriad of teacher-directed language projects. The greatest challenge, however, is the students' resistance to participate in the projects due to lack of personal connection with the projects. This paper proposes that project-based learning be coupled with personalized learning to encourage personalized projects for students. Unlike teacher-directed projects, personalized projects invite students to design and carry out their own projects, enabling students to bring relevance to the project work and to take ownership of their learning. This paper focuses on characterizing personalized project-based learning first, and then outlines a five step framework to practicing personalized project-based learning.

Keywords: Learner Autonomy, Personalized Project-Based Learning, Teacher-Directed Projects, Personalized Projects

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Introduction

The concept of learner autonomy was put forward as a result of the educational promotion of student-centered learning. Holec (1979) first defined learner autonomy as "the ability to take charge of one's own learning" (p.3). Following Holec's classic definition, many other scholars attempted to explain the concept from different perspectives. Little (1991) characterized learner autonomy as "essentially a matter of the learner's psychological relation to the process and content of learning – a capacity for detachment, critical reflection, decision-making, and independent action (p.4). Godwin-Jones (2011) described it as "the skills and mindset that can lead to successful self-guided language study" (p.4). According to Benson (2013), this term encompassed the following: (1) situations where learners study on their own; (2) skills that can be learned to achieve self-directed learning; (3) capacity that can be unlocked; (4) learner's responsibility to take charge of learning; (5) freedom to choose and direct their own learning. In essence, learner autonomy entails a robust ongoing process rather than a static trait.

With the role of learner autonomy being increasingly emphasized in language learning, Nunan (1997) proposed a model to facilitate learner autonomy in five different levels. which can be summarized as (1) Level 1 Awareness: Learners are made aware of the pedagogical goals and learning content; (2) Level 2 Involvement: Learners are given opportunities to select the learning goals aligning with their own learning needs; (3) Level 3 Intervention: Learners are involved in selecting learning materials, learning methods and techniques, and in monitoring their own learning progress; (4) Level 4 Creation: Learners establish their own learning objectives and determine their learning pathways; (5) Level 5 Transcendence: Learners connect what they have learned in the classroom with the real world and beyond. Empirical studies indicated that structured instruction allowing for more choices and supporting students to make independent decisions can have a positive impact on learner autonomy (Chan, 2000). Deci et al (1991) discovered that autonomous students may elicit more autonomy support and demand fewer controlling behaviors from the teachers compared with highly dependent students. Therefore, a well-structured curriculum, which calls for more choices and independent decisions on the part of the students, coupled with teachers that mainly serve the role of facilitators or counselors can help promote learner autonomy.

Previous research also investigated on some instructional strategies such as blogging, portfolios, journaling, and project-based learning in fostering learner autonomy (Dam, 1995; Kamberi, 2013; Lee, 2011; Roh & Kim, 2019; Rostom, 2019). Inspired by the previous studies, this paper proposes personalized project-based learning, which gives students the voice and choice in designing the language projects in accordance with their strengths, needs, and interests to support learner autonomy. It focuses on outlining a five-step framework in the project planning and implementation process.

Background of the Present Study

In my organization Defense Language Institute Foreign Language Center (DLIFLC), project-based learning (PBL) is advocated to be integrated into the post-basic language programs to foster learner autonomy. The mission of DLIFLC is to provide culturally-based foreign language education and training for military students, and to

eventually help them become proficient linguists, language analysts, and other language-enabled professionals. The post-basic language programs are intended for those who have already graduated from their two-year residency language studies in the basic programs and have achieved a 2/2/2 or $2^+/2^+/2$ in reading, listening, and speaking in the Defense Language Proficiency Test (DLPT)¹. According to Interagency Language Roundtable (ILR)² scale descriptions, students with 2/2/2 or $2^+/2^+/2$ DLPT score indicate that they have limited working proficiency, or limited working proficiency plus. The major goal for the post-basic language programs is to maintain students' language proficiency level and potentially bring them to the next level, which is level 3, general professional proficiency. Most refresher courses in the post-basic language programs last for six weeks, with the topics ranging from geography, culture, politics, economy, science and technology, to military. A majority of the military students need to come back for the refresher courses on a yearly basis.

In the refresher course programs, a multitude of language projects are woven into the course activities. Students are required to work on daily projects requesting them to conduct online research on assigned topics and then to present their findings, and weekly small-scale projects such as roundtable meetings and panel discussions where students are grouped into different teams to state their own opinions on certain issues. For each course, there is also a large-scale final project asking students to deliver a 30-minute oral presentation.

Through years of teaching, we have noticed that often times when the projects were implemented in those courses, it was basically teachers who did much of the heavy lifting in the learning process. They identified the project topics, or the challenging questions and problems, specified the scope, timeline, and content of the projects, and stipulated the forms of the end products. Once the projects are mapped out, they are assigned for each and every individual student. At its very core, the project-based learning is essentially the teacher-directed learning and students are mainly required to conduct the language projects according to the teachers' specific and detailed requirements. Students' different language proficiency levels, interests, strengths, and learning needs are often neglected, or even disregarded. Furthermore, there is a conflict between the one-size-fits-all projects and student individuality. Students, especially those who come back to study for the same course, have to deal with the same projects and thus find those projects boring, isolating, and frustrating. They are forced to work on the projects in case not to fail in the course. This, in turn, also poses many problems common to the teachers, namely, students' lack of interests, complaints, negativity, or even resistance towards the projects. In this situation, PBL failed to play its intended role in the learning process.

Therefore, the question is how can language projects be leveraged in a better way to foster student autonomy? This paper intends to provide a tentative solution to this

¹ Defense Language Proficiency Test (DLPT) is administered on a regular basis for military linguists. It is intended to assess the reading and listening proficiency levels in the target language. An Oral Proficiency Interview (OPI) is conducted to assess the listening proficiency levels.

² Interagency Language Roundtable (ILR) descriptions characterize language proficiency in six "base levels" and "plus levels" from 0 to 5. The six "base levels" describe different degrees of controls of functions and accuracy in the target language, with 0 being the lowest level and 5 being the highest level. As supplementary to the "base levels", the "plus levels" indicate that one's proficiency level exceeds the base skill level but does not meet the criteria for the next "base level".

question and suggests that project-based learning be coupled with personalized learning so as to tailor the language projects to each individual student and enable student voice and choice in the project initiation and completion process.

Characterizing Personalized PBL

Personalization is everywhere in our life. If we pause and ponder, we will realize that we are getting more and more personalized services: Amazon is recommending products to us based on our browsing and shopping history, and YouTube is suggesting shows to us according to our likes and dislikes. Personalized learning is introduced to education as a result of the national push to design teaching and learning centering around students' academic needs and personal interests. Personalized learning is defined as "tailoring learning for each student's strengths, needs and interests—including enabling student voice and choice in what, how, when and where they learn—to provide flexibility and supports to ensure mastery of the highest standards possible" (iNACOL, n. d.).

With its root dating back to the idea of experiential learning or action-based learning advocated by John Dewey in the early 20th century, PBL, as its name suggests, orchestrates learning on the basis of projects (Du & Han, 2013; Petersen & Nassaji, 2016). PBL in the classroom is defined as "a teaching method in which students gain knowledge and skills by working for an extended period of time to investigate and respond to an authentic, engaging, and complex question, problem, or challenge" (Buck Institute for Education [BIE], n. d.). Thomas (2000) identified five criteria for the projects in PBL: "centrality, driving question, constructive investigation, autonomy, and realism" (p.3). That means PBL projects are derived from real-world questions or problems which involve students to construct their own knowledge and drive their content learning.

Personalized PBL, by marrying PBL and personalized learning, has been greatly advocated during the past few years to further enhance the effectiveness of PBL and promote personalized learning (McBeth, 2017). So far, there is no unified definition for personalized PBL, but the main tenet behind this approach is to provide students with a personalized project learning experience that allows them to become self-directed learners while also covering important curriculum content. We suggest that personalized PBL encompass the following four essential components.



Figure 1: Four Essential Components of Personalized PBL

The first component gives a deep understanding of each learner and is used to plan a customized project-based learning. The second and the third components allow learners to incorporate their personal ideas, beliefs, and choices in selecting and presenting the projects, and to determine project learning trajectories. Meanwhile, the teachers can also provide scaffoldings and consultations to help students provide benchmark and commitment to learning. The fourth component implies that learners need to reflect, self-assess, and peer assess throughout the learning process.

Unlike the teacher-directed PBL, with personalized PBL, students are given the free rein to come up with their own driving questions, establish their learning objectives, manage their project progression, create their own projects, and choose the format to present their projects. They are no longer passive participants, but rather, they are put into the driver's seat. Throughout personalized PBL process, students may play multiple roles as demonstrated in the following table.

Roles	Descriptions
Decision-maker	Students define what they want to learn, why they want to learn,
	and how they want to learn through personalized projects. They
	will also determine the format to present their projects.
Planner	Students map out the necessary steps involved to complete the
	projects, set the priorities, and consider the duration for the
	project.
Researcher	Students carry out a structured and systematic investigation into
	their project topics. They analyze their findings to develop their
	own opinions.
Designer	Students culminate in a tangible product to demonstrate their
	learning.
Presenter & Facilitator	Students present their final projects to the audience and facilitate
	in-depth discussion while presenting the projects.
Mentor	Students share their expert knowledge they have gained on certain
	subject matters during the project learning process and contribute
	to the learning of the whole class.
Evaluator	Students peer assess, self-assess, and reflect on the learning
	process to set new goals for future learning.
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 Table 1: Student Roles in Personalized PBL

On the other hand, teachers mainly serve the roles of a guide and an advisor. Instead of designing the projects for students, under the approach of personalized PBL, teachers design the projects with students. Prior to project design process, teachers coach students in creating effective driving questions and determine their learning objectives. During the project design process, teachers scaffold students to crystalize their project plans. At the same time, teachers also involve in frequent formative assessments to ensure that students stay on the right track. Table 2 below shows the changed learning environment under personalized PBL compared with teacher-directed PBL.

Teacher-directed PBL	Personalized PBL
Predetermined and unified learning	Students determine their own learning
objectives for all students	objectives based on their learning needs
Rigid project topics, timeline, and	Students have more freedom to select the

presentation formats	project topics, and determine the pace
	and presentation formats for their projects
The teacher has all the answers to the	Students engage in inquiry-based learning
challenging questions in the projects	to seek answers to the questions
Teacher assessment for learning takes	Assessment throughout the process takes
place when students present their projects	on many forms such as self-assessment,
	peer assessment, and teacher assessment
Students are extrinsically motivated due	Students are intrinsically motivated
to fear of failure in the course	-
Students are passive learners to fulfill the	Students take control of their own
teacher's requirements	learning

Table 2: Personalized PBL Compared to Teacher-directed PBL

Five Steps to Practicing Personalized PBL

Based on our teaching experience, there are five steps involved in carrying out personalized PBL in a foreign language class.

Step 1: Students develop their own driving questions and learning objectives under the guidance of teachers

There are several ways teachers can help students with this step. For example, teachers can guide students to probe into the topics of their interests if they have already developed some in the culture of the target language. If not, teachers can encourage students to conduct a comparative study by linking their interests in their culture with those of the target language. If one student is highly interested in the pirates in his own culture, his interest and prior knowledge about the pirates would take him into a joyful ride to look into the pirates in the culture of the target language. Another plausible way is through student reflection which is a starting point for students to continue and expand learning. A sample reflection sheet is provided below.

	Self-reflection Sheet
What is the top area of my interest?	
What is the ONE topic that I'd like to explore most?	
What have I already known about this topic (bullet point)?	
What do I want to learn more about this topic (bullet point)?	
How can they benefit me and my peers?	
What do I need to do to learn more about this topic?	
What difficulties will potentially occur during my learning?	
How will I overcome the difficulties?	

Figure 2: Sample Reflection Sheet

Step 2: Students establish the project framework.

In order to establish the project framework, students need to plan out the specific and detailed steps, conduct research, and collect information. Teachers can coach students to create a storyboard and to outline the blueprint for the project. Teachers also need to schedule "meet time" with students during this step so as to address their questions or concerns, to give "just-in-time" instructions and to run formative assessments about students' project progression.

Step 3: Students create a tangible product based on the project framework.

PBL is typically characterized by the culmination of products by students. Students can use their imagination and creativity to create their products. The products can take on various forms, such as videos, audios, PowerPoint presentations, posters, infographics, and so on. Similar to the previous step, teachers can assist students in their problems, provide guidance and instruction, as well as conduct formative assessments about students' projects.

Step 4: Students share their products with the class.

In a foreign language class, this normally involves student presentation. Teachers need to provide a rubric for both the presenters and the audience so that they know clearly what they are expected of them. The rubric needs to be specific, measurable, attainable and reasonable based on the curriculum requirements and the skills students are fostered. Teachers also need to facilitate the whole process of student presentation.

Step 5: Student reflect on their personalized PBL process.

Although this may be the last step, it is a critical step in personalized PBL. This step allows students to take a moment to ponder over the whole learning process. The purpose is to engage students in reflecting on their own actions and constructing meaning from their learning experiences. To fulfill this purpose, it is very important for teachers to guide students' reflections, otherwise students would be caught in bewilderment, having no ideas of what they are supposed to do. Below is a sample for prompting questions to guide student reflection.

Have you fulfilled your learning objectives through the completion of the project? Please specify.
 What have you learned more about the topic based on the completion of this project?
 How would you rate your project from a scale of 1 to 10, with 1 being the worst and 10 being the best? What do you wish to do to perfect your project if you had more time, energy, resources, etc.?
 How do you think your project contributes to your peer's learning?
 How do you think your peers or teachers contribute to your project?
 What extra help do you wish to get from peers or teachers?
 How do you want to extend your learning based on the completion of this project?

Figure 3: Sample Prompting Questions for Student Reflection

Conclusion

Personalized PBL personalizes students' project-based learning experience by allowing them to choose, design and create their own projects that align with their interests, strengths and needs. It enables students to move beyond the traditional projects standardized by teachers and to come up with their unique projects representing their learning achievement and individuality. It helps resolve the predicament foreign language teachers face in the traditional teacher-directed PBL model. According to our observations, personalized PBL brings about some benefits in the learning process. To start with, student engagement and involvement are enhanced. In personalized PBL, students do not solely rely on teachers to tell them what project they need to work on, instead, they look for their own projects based on their interests, strengths, and needs. Additionally, personalized PBL allows students to become reflective learners. It starts with reflection, and takes a step further to expand the learning. It is believed that students can eventually take ownership of their learning and gradually evolve into being more autonomous in their learning with personalized PBL. Throughout the learning process, students engage in the process of problem solving, inquiry-based learning, and content-based learning. This also allows them to hone their 21st century skills such as critical thinking, creativity, technology literacy, etc.. Meanwhile, it also renders them an opportunity to integrate and interdisciplinary knowledge.

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