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DEVELOPING SELF-DIRECTED LEARNING SKILLS OF PRE-SERVICE EFL TEACHERS THROUGH FLIPPED CLASSROOM TECHNOLOGY

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Abstract. Digital technologies are changing the way we prepare future language teachers. This paper looks at how the Flipped Classroom (FC) approach can help pre-service EFL teachers at Namangan State Pedagogical Institute (NSPI) become more independent and self-directed learners. The study involved 64 third-year students over one semester. Results showed that students who learned through the FC model improved significantly in their ability to manage their own learning, stay motivated, and reflect on their progress. Student journals and group interviews also showed that when students take more responsibility for their learning, they become more confident and develop a stronger sense of professional identity.

Keywords: flipped classroom, self-directed learning, pre-service EFL teachers, teacher education, Uzbekistan, autonomous learning, metacognition

Mana ikki tilda tarjima:

Annotatsiya. Raqamli texnologiyalar kelajakdagi til o'qituvchilarini tayyorlash usullarini o'zgartirmoqda. Ushbu maqola Namangan davlat pedagogika institutida (NDPI) ingliz tili bo'yicha bo'lajak o'qituvchilarning mustaqil o'rganish ko'nikmalarini rivojlantirishda "Teskari sinf" (Flipped Classroom — FC) yondashuvining qanchalik samarali ekanligini o'rganadi. Tadqiqotda bir semestr davomida 64 nafar uchinchi kurs talabasi ishtirok etdi. Natijalar shuni ko'rsatdiki, FC modeli orqali o'qigan talabalar o'z o'qish jarayonini boshqarish, motivatsiyasini saqlash va o'z rivojlanishini baholash qobiliyatlarini sezilarli darajada oshirdilar. Talabalar kundaliklari va guruhli suhbatlar ham shuni tasdiqladi: o'z ta'limi uchun ko'proq mas'uliyat olgan talabalar o'ziga bo'lgan ishonchini mustahkamladi va kasbiy o'zini anglash hissini kuchaytirdi.

Kalit so'zlar: teskari sinf, mustaqil o'rganish, bo'lajak ingliz tili o'qituvchilari, o'qituvchilar ta'limi, O'zbekiston, avtonom o'rganish, metakognitiv ko'nikmalar.

Аннотация. Цифровые технологии меняют подходы к подготовке будущих учителей иностранных языков. В данной статье рассматривается, насколько эффективен метод «Перевернутого класса» (Flipped Classroom — FC) для развития самостоятельности и навыков самоуправляемого обучения у будущих учителей английского языка в Наманганском государственном педагогическом институте (НГПИ). В исследовании приняли участие 64 студента третьего курса на протяжении одного семестра. Результаты показали, что студенты, обучавшиеся по модели FC, значительно улучшили свои способности управлять собственным учебным процессом, поддерживать мотивацию и анализировать свой прогресс. Данные студенческих дневников и групповых интервью также подтвердили, что когда студенты берут на себя большую ответственность за своё обучение, они становятся увереннее в себе и формируют более устойчивое профессиональное самосознание.

Ключевые слова: перевёрнутый класс, самоуправляемое обучение, будущие учителя английского языка, педагогическое образование, Узбекистан, автономное обучение, метакогнитивные навыки.

1. Introduction. Teacher education programs around the world share a common goal: preparing graduates who can not only teach their subject well, but also continue learning and growing on their own throughout their careers. In Uzbekistan, this goal is especially important. Government reforms in language education, introduced through presidential decrees between 2019 and 2023, have placed English language teaching at the center of the country's educational development plans. However, the everyday realities of teacher training — too many students, too few hours, and teaching methods that still rely heavily on the teacher telling and students listening — make it difficult to develop the kind of independent, thinking professionals that these reforms call for.

Self-directed learning (SDL) refers to the ability of learners to identify what they need to learn, set their own goals, find appropriate resources, choose effective strategies, and assess their own progress (Knowles, 1975). For language teachers, these skills are essential. A teacher who can direct their own learning will be better at adapting to new curricula, meeting the needs of different students, and keeping up with developments in their field. However, developing SDL in university students is not easy. Many students have spent years in classrooms where the teacher does most of the work, and shifting this habit requires both time and carefully designed learning experiences.

The Flipped Classroom model is one promising response to this challenge. In a flipped classroom, students watch video lectures or read materials at home before class, and then use class time for discussion, problem-solving, and collaborative activities. This arrangement naturally pushes students to engage with material independently, make decisions about their own learning pace, and come to class prepared. When done well, it does not just change when learning happens — it changes who is responsible for making it happen.

This paper reports on a one-semester study of the FC model at NSPI, examining how it affected the SDL skills of pre-service English teachers. It aims to add to the growing research on flipped learning in EFL settings and to offer practical suggestions for teacher educators working in similar contexts across Central Asia.

Theoretical Framework. The idea of self-directed learning goes back to the 1960s and 1970s, when educational theorist Malcolm Knowles argued that adult learners are capable of — and benefit from — taking charge of their own education. For Knowles, SDL meant that a learner could identify their needs, set goals, find resources, and evaluate their own progress without always depending on a teacher. Later researchers added important dimensions to this view. Garrison (1997) pointed out that SDL also requires motivation and the ability to regulate one's own thinking. Zimmerman (2002) and Pintrich (2004) described how effective self-directed learners move through stages of planning, action, and reflection in a repeated cycle. Benson (2011), writing specifically about language learning, added that true autonomy is not just about learning alone — it involves making thoughtful, informed decisions about how and what to learn, and this is something that can be taught.

In this study, SDL is understood as having three connected parts: the willingness to take responsibility for one's own learning (motivational readiness), knowledge of useful learning strategies (cognitive resourcefulness), and the ability to reflect on and monitor one's own learning process (metacognitive awareness). These three dimensions formed the basis of the measurement tool used in the study.

The Flipped Classroom Model. The Flipped Classroom became widely known in the early 2000s through the work of two American teachers, Jonathan Bergmann and Aaron Sams, who started recording their lessons for students who missed class and soon realized that this approach had much broader potential. The model became increasingly popular in the 2010s as online video platforms became more accessible.

The basic idea is simple: tasks that require lower-level thinking — such as listening to a new explanation or reading about a concept for the first time — are done at home, while class time is reserved for activities that require deeper thinking, such as applying knowledge, solving

problems, and working collaboratively with peers. This reflects a well-known principle in education: students learn more deeply when they are actively involved rather than passively receiving information.

It is worth noting, however, that a flipped classroom only works well when it is carefully designed. Simply asking students to watch videos at home does not automatically make them more independent learners. The pre-class tasks need to be purposeful and well-structured, and the in-class activities must genuinely build on what students did at home (Lo, Hew, & Chen, 2017; Akçayır & Akçayır, 2018).

How FC and SDL Connect. The connection between the FC model and SDL development is not accidental. The FC model, by its very structure, requires students to engage with new material on their own, decide how to manage their study time, and arrive in class ready to participate. Each of these demands directly exercises the three components of SDL described above. Students must stay motivated enough to complete pre-class tasks, use effective strategies to understand the material, and check their own understanding before coming to class.

Researchers have explored this connection in different ways. Kim and colleagues (2014) found that the challenge of independent pre-class work, when supported by appropriate guidance, helps students develop stronger self-regulation skills. Bergmann and Sams (2012) noticed that students in flipped classes began asking better questions — a sign that they were thinking more carefully about their own understanding. In the area of language teacher education specifically, Evseeva and Solozhenko (2015) found that FC participation encouraged stronger reflective habits among student teachers, which aligns closely with the goals of the present study.

Methodology. This study used a mixed-methods design, combining survey data with information from student journals and group interviews. This approach was chosen because SDL — particularly the motivational and reflective dimensions — is difficult to capture fully through numbers alone. The combination of quantitative and qualitative data allowed for a richer and more complete picture of what students experienced.

The study took place at NSPI during the spring semester of the 2023–2024 academic year. Participants were third-year students taking the Teaching Methodology of English course, a required part of the four-year EFL teacher education program. Third-year students were chosen because they have enough subject knowledge to engage seriously with methodology content while still being in the process of forming their professional identity as teachers.

Participants. Sixty-four students took part in the study. They were divided into two groups based on which course section they were already

enrolled in. One group of 32 students followed a redesigned version of the course using the FC model (the experimental group), while the other 32 students continued with the traditional course format (the control group). Both groups were taught by the same teacher to avoid any differences in teaching style affecting the results. The two groups were similar in gender, academic performance, and initial SDL scores at the start of the study. Twelve students from the experimental group were also selected to keep reflective journals and participate in focus group interviews.

Data Collection and Procedures. Two questionnaires were used to collect quantitative data. The first was an adapted version of Fisher, King, and Tague's (2001) Self-Directed Learning Readiness Scale, which measures the three SDL dimensions described earlier across 40 questions. The adaptation was checked by two experienced EFL teachers and tested with a small group before the main study. The questionnaire proved to be reliable (Cronbach's $\alpha = .84$). The second questionnaire measured students' motivation levels, distinguishing between genuine interest in learning, external pressures, and lack of motivation altogether.

Both questionnaires were given to students at the beginning and end of the semester so that changes over time could be measured. Statistical tests were used to compare the two groups while accounting for any initial differences.

In the FC group, the instructor prepared 24 short video lectures (averaging about 11 minutes each), along with readings and online exercises on the NSPI Moodle platform. Before each class, students completed structured preparation tasks and short reflection prompts. The 80-minute class sessions were then used for group work, lesson planning practice, peer teaching, and discussion of real teaching challenges. The control group attended traditional lectures and completed assigned textbook readings.

Results and Discussion. At the beginning of the semester, both groups showed similar levels of self-directed learning readiness, confirming that any differences found later were due to the teaching approach rather than pre-existing differences between students.

By the end of the semester, the FC group had improved considerably more than the control group in overall SDL readiness. This difference was both statistically meaningful and practically significant — FC students were genuinely more prepared to manage their own learning by the course's end.

Looking at specific areas of SDL, the greatest improvement in the FC group was in metacognitive awareness — students' ability to monitor and reflect on their own learning. This result makes sense: watching video lectures at home requires students to constantly check their own

understanding, pause when confused, and decide when they are ready to move on. Over time, these habits become more natural. Improvements were also strong in motivation and learning strategy use, though slightly less dramatic.

On motivation, FC students reported noticeably higher levels of genuine, internal motivation by the end of the semester compared to the control group. They were studying because they found it meaningful, not just because they had to. This aligns with what we know about learner autonomy: when students feel more in control of their learning, they tend to find it more rewarding and engaging.

Qualitative Findings. Analysis of student journals and group interviews revealed three main themes: dealing with initial difficulty and adapting, growing sense of professional confidence, and the importance of peer support.

Many students initially found the FC format challenging and unfamiliar. They were not used to preparing independently before class, and the absence of a teacher explaining things in real time felt uncomfortable at first. However, most students described this discomfort as productive. It pushed them to develop new habits — pausing videos, rewinding, taking more careful notes — that they had not used before. One student described the shift as moving from simply watching to actually studying, which captures nicely what growing metacognitive awareness looks like in practice.

The second theme was perhaps the most encouraging. Several students began to see the FC format not just as a different way of taking a course, but as preparation for the kind of independent professional learning they would need throughout their teaching careers. They connected the experience of managing their own pre-class study to the future challenge of keeping up with new teaching approaches and adapting to different students. This level of reflection suggests that the FC model can help pre-service teachers develop a deeper and more mature understanding of what it means to be a self-directed professional.

The third theme is a reminder that self-directed learning does not mean learning alone. Students consistently described the in-class collaborative activities as important sources of motivation and support. Working with peers helped them confirm their understanding of pre-class material, stay accountable, and engage more deeply with the content. This suggests that the best FC designs deliberately combine individual preparation with structured social learning, rather than treating self-direction as a purely personal matter.

Challenges and Contextual Considerations. Honest reporting requires acknowledging several difficulties encountered during the study. The most practical challenge was internet access. Not all students

had reliable connectivity, especially those living in dormitories. While videos could be downloaded for offline use, some platform features required an internet connection, and a number of students reported missing out on parts of the online activities as a result. Any future implementation should include offline alternatives for all essential course components.

Time management was another challenge. The FC model assumes that students can find adequate time for pre-class preparation, but this is not always realistic. Some students were balancing their studies with family responsibilities or part-time jobs, and the additional demands of independent pre-class work added pressure. Explicit guidance on managing study time would be a useful addition to future FC courses.

Finally, some students were anxious about whether they were preparing correctly without a teacher to confirm it. This kind of uncertainty is understandable — it reflects habits formed over many years of teacher-dependent learning. Providing brief, low-stakes quizzes or online discussion prompts after pre-class tasks could help students gauge their own understanding and build confidence without adding the pressure of formal grades.

Pedagogical Implications. The findings point to several practical takeaways for EFL teacher education programs, particularly in contexts similar to Uzbekistan. First, the results suggest that the structure of the FC model itself — requiring independent pre-class engagement and active in-class participation — may be a more effective way to develop SDL than simply teaching students about learning strategies within a traditional course. For institutions serious about producing graduates who can direct their own professional growth, redesigning course structures along FC lines is worth the effort.

Second, students engage much more meaningfully with the FC model when they understand why it is designed the way it is. When participants saw the FC format as preparation for lifelong professional learning rather than just a different course delivery style, their engagement was noticeably stronger. Teacher educators should make this rationale explicit from the beginning of any FC course, helping students connect current learning experiences to their future professional lives.

Third, this study reinforces that SDL thrives in social environments. FC designs should deliberately incorporate peer collaboration — group reflection on pre-class tasks, collaborative problem-solving, shared lesson planning — because these activities support individual SDL development rather than competing with it. The goal is not to make students learn alone, but to help them learn independently within a supportive community.

Conclusion. This study examined how the Flipped Classroom model affected the self-directed learning development of pre-service EFL teachers at Namangan State Pedagogical Institute. The results were encouraging: after one semester, FC students showed meaningful improvements in their readiness for independent learning, their motivation, and their ability to reflect on their own learning processes. Student journals and interviews added depth to these findings, showing that the FC experience helped students develop a growing sense of professional confidence and a more mature understanding of what it means to be a self-directed teacher.

These findings are promising but come with limitations. The study was conducted at a single institution over a single semester, and it is not yet clear whether the improvements observed will last as students move into practice teaching and their early careers. Future research should follow students over a longer period, include multiple institutions, and use stronger experimental designs to build a more complete picture.

What this study does confirm is that the Flipped Classroom model, when thoughtfully designed and clearly explained to students, creates conditions in which self-directed learning genuinely develops. For teacher education programs in Uzbekistan and similar contexts working to meet the demands of ambitious educational reform, the FC model represents a practical and well-grounded way forward.

References

- 1.Akçayır, G., & Akçayır, M. (2018). The flipped classroom: A review of its advantages and challenges. *Computers & Education*, 126, 334–345.
- 2.Avezova, D., Sobirova, F., Sotiboldiyev, A., Muminjonova, S., Tursunboyeva, M., Sobirova, R., ... & Kibriyev, B. (2026).
- 3.Bergmann, J., & Sams, A. (2012). *Flip your classroom: Reach every student in every class every day*. International Society for Technology in Education.
- 4.Deci, E. L., & Ryan, R. M. (1985). *Intrinsic motivation and self-determination in human behavior*. Plenum Press.
- 5.Evseeva, A., & Solozhenko, A. (2015). Use of flipped classroom technology in language learning. *Procedia – Social and Behavioral Sciences*, 206, 205–209.
6. Dehqanova, G. A., & Polvanova, M. F. (2022). National-cultural specificity of phraseological units in english and uzbek languages. research and education, 1(4).

7. Fisher, M. J., King, J., & Tague, G. (2001). Development of a self-directed learning readiness scale for nursing education. *Nurse Education Today*, 21(7), 516–525.
8. Garrison, D. R. (1997). Self-directed learning: Toward a comprehensive model. *Adult Education Quarterly*, 48(1), 18–33.
9. Kim, M. K., Kim, S. M., Khera, O., & Getman, J. (2014). The experience of three flipped classrooms in an urban university: An exploration of design principles. *The Internet and Higher Education*, 22, 37–50.
10. Muminjonova, S. M. (2025, December). FLIPPED CLASSROOM AS A TOOL FOR PROMOTING SELF-REGULATED LEARNING IN HIGHER EDUCATION. In *International Conference Platform* (No. 6, pp. 187-190).
11. Odilboyeva, U. Z. (2026, January). THE DEVELOPMENT OF AUTOPEDAGOGICAL COMPETENCE IN STUDENTS DURING ENGLISH LANGUAGE EDUCATION. In *Claritas Conference Platform* (No. 1, pp. 90-93).
12. Pintrich, P. R. (2004). A conceptual framework for assessing motivation and self-regulated learning in college students. *Educational Psychology Review*, 16(4), 385–407.
13. Shaxlo, M. M. (2025). DESIGNING AN ENGLISH FOR BUSINESS PURPOSES (EBP) COURSE: A TASK-BASED AND PROBLEM-BASED APPROACH FOR PRE-INTERMEDIATE BUSINESS PROFESSIONALS. PROSPECTS OF TEACHING ENGLISH FOR PROFESSIONAL PURPOSES IN NON-PHILOLOGICAL HIGHER EDUCATION INSTITUTIONS: PROBLEMS AND SOLUTIONS, 518-525.
14. Tuychiyeva, M. O. Q., & Odilboyeva, U. Z. Q. (2026). THE ROLE OF TECHNOLOGY IN LEARNING ENGLISH AS A FOREIGN LANGUAGE. *European Review of Contemporary Arts and Humanities*, 2(3), 3-6.
15. Ahmadjonovna, D. G. (2024). The importance and role of lexical competence in teaching foreign languages to students. *Ethiopian*
16. Nosirova, S. Y., & Umarjonova, S. (2025, December). THE ROLE OF COMICS IN TEACHING ENGLISH TO YOUNG LEARNERS. In *International Conference Platform* (No. 6, pp. 171-172).
17. Zafar, D., & Sardor, O. (2022). DIFFICULTIES OF NON-PHILOLOGICAL STUDENTS IN LEARNING VOCABULARY AND USING RELEVANT TEXTS IN TEACHING ENGLISH. *INTERNATIONAL JOURNAL OF SOCIAL SCIENCE & INTERDISCIPLINARY RESEARCH* ISSN: 2277-3630 Impact factor: 8.036, 11(02), 163-165.