

3. Карандашев В.Н. Методика Шварца для изучения ценностей личности: концепция и методическое руководство. СПб., 2004.
4. Ковров В.В. Психолого-педагогический анализ сущности феномена самореализации человека // Вестн. Вятск. гос. гуманит. ун-та. 2006. № 14.
5. Кудинов С.И. Полисистемный подход исследования самореализации личности // Сибир. пед. журн. 2007. № 11.
6. Кудинов С.И. Системная модель самореализации личности // Вестн. Рос. ун-та дружбы народов. Сер. «Психология и педагогика». 2008. № 1.
7. Мантикова А.В. Структура ценностно-потребностной сферы личности и общественно-родовой конфликт старшего подростка // Образование и общество. – Орел, 2015. – №2
8. Шварц Ш., Бутенко Т.П., Седова Д.С., Липатова А.С. Уточненная теория базовых индивидуальных ценностей: применение в России // Психология. Журнал Высшей школы экономики. 2012. Т. 9. № 2.

УДК 373

DOI 10.33514/1694-7851-2022-3-296-307

Ли Цзиньпин

Түндүк - Батыш педагогикалык университети, окутуучу, Ланчжоу, Кытай

Ли Цзиньпин

Северо - Западный педагогический университет, преподаватель, Ланьчжоу, Китай

Li Jinping

Northwest Normal University, Teacher, LanZhou, China

**БАШТАЛГЫЧ МУГАЛИМДЕРДИН БИЛИМИН КАЛЫПТАНДЫРУУ ЖАНА
ОКУТУУНУН НАТЫЙЖАЛУУЛУГУ: БИР КЛАССТА ГЕТЕРОГЕНДИК
ОКУТУУНУН НЕГИЗИНДЕ ДИСКУРСТУ ТАЛДОО
ФОРМИРОВАНИЕ ЗНАНИЙ И ЭФФЕКТИВНОСТЬ ПРЕПОДАВАНИЯ
НАЧИНАЮЩИХ УЧИТЕЛЕЙ: АНАЛИЗ ДИСКУРСА НА ОСНОВЕ
ГЕТЕРОГЕННОГО ОБУЧЕНИЯ В ОДНОМ КЛАССЕ
KNOWLEDGE FORMATION AND TEACHING EFFECTIVENESS OF NOVICE
TEACHERS: DISCOURSE ANALYSIS BASED ON HETEROGENEOUS LEARNING IN
ONE CLASSROOM**

Аннотация: Көптөгөн изилдөөчүлөр гетерогендик окутуу ыкмасын бир класста окуучулардын жеке айырмачылыктарынын окутуунун натыйжалуулугуна тийгизген таасирин изилдөө үчүн колдонушса, Кытайда бул ыкма негизинен мугалимдердин кесиптик өнүгүүсүнө түрткү берүү жана педагогикалык чөйрөдө тендикке жетишүү үчүн колдонулат. Өз кезегинде, Билимди башкаруу практикасы билимди чогултууга, кодификациялоого жана мектепте жайылтууга жардам берет. Бул мектептерде пландаштырууну жана башкарууну өркүндөтүп, мугалимдерге жаңы билим жана көндүмдөрдү алууга жардам берет. Мындай процессте мугалимдер билимди жайылтуу жана бөлүшүү үчүн дискурстун операторуна ишенишет, ошондой эле Дискурсту жаңы билимди жаратуу куралы катары колдонушат. Ошентип, бул изилдөө бир класста башталгыч мугалимдердин педагогикалык тажрыйбасын жана гетерогендик окутуу процессиндеги (ар кандай деңгээлдеги мугалимдердин иши)

педагогикалык ой жүгүртүү иш-аракеттерин изилдеп, башталгыч мугалимдердин билим алуу жолун жана дискурстун мүнөздөмөлөрүнүн окутуунун натыйжалуулугуна тийгизген таасирин изилдейт. Натыйжалар көрсөткөндөй: (1) башталгыч мугалимдердин дискурс моделдери негизинен дискурстун чыгымына жана дискурстун киришине бөлүнгөн жана гетерогендик окутуунун ар кандай баскычтарында (ар кандай деңгээлдеги мугалимдердин эмгектери) бир класста ар кандай дискурс моделдери болгон; (2) олуттуу айырмачылык, башталгыч мугалимдердин педагогикалык рефлексиялык иш-аракет процессиндеги дискурстун узактыгы жана өзүнүн педагогикалык жүрүм-турумун чагылдырган дискурстун узактыгы тажрыйбалуу мугалимдерге караганда кыйла көп болгон; (3) бир класста гетерогендик окутууда (ар кандай деңгээлдеги педагогдордун ишинде) башталгыч мугалимдерди окутуунун натыйжалуулугу алардын өзүнүн баштапкы педагогикалык жүрүм-турумун баалоосу жана педагогикалык ой жүгүртүү учурунда дискурстун узактыгы менен оң божомолдонушу мүмкүн. Бул жыйынтыктар башталгыч мугалимдердин кесиптик өсүшүнө жана билим топтоого чоң таасирин тийгизет.

Аннотация: Хотя многие исследователи применяют метод гетерогенного обучения в одном классе, чтобы изучать влияния индивидуальных различий учащихся на эффективность преподавания, в Китае этот метод в основном используется, чтобы стимулировать профессиональное развитие учителей и добиться равенства в педагогической среде. В свою очередь, практика управления знаниями могла бы помочь в сборе, кодификации и распространении знания в школе. Это могло бы улучшить планирование в школах и управление ими, а также помочь учителям приобрести новые знания и навыки. В таком процессе учителя, как правило, полагаются на носителя дискурса для распространения знаний и обмена ими, а также используют дискурс как инструмент для создания новых знаний. Таким образом, в этом исследовании изучены педагогическая практика начинающих учителей и деятельность по педагогической рефлексии в процессе гетерогенного обучения (работы педагогов разного уровня) в одном классе, исследованы путь приобретения знаний начинающими учителями и влияние характеристик дискурса на эффективность их преподавания. Результаты показали, что: (1) модели дискурса начинающих учителей были в основном разделены на выходные данные дискурса и входные данные дискурса, и на разных этапах гетерогенного обучения (работы педагогов разного уровня) в одном классе были разные модели дискурса; (2) существенная разница была в том, что продолжительность дискурса начинающих учителей в процессе педагогической рефлексивной деятельности и продолжительность их дискурса при отражении их собственного педагогического поведения были значительно больше, чем у опытных учителей; (3) при гетерогенном обучении (работе педагогов разного уровня) в одном классе эффективность преподавания начинающих учителей может быть положительно спрогнозирована их оценкой собственного начального педагогического поведения и продолжительностью дискурса во время педагогической рефлексии. Эти результаты имеют значение для профессионального роста начинающих учителей и накопления знаний.

Abstract: Although there were many researchers applied heterogenous teaching in the same-course (HTSC) to explore the effect of individual differences on classroom teaching effectiveness, it was a way to promote teachers' professional development and achieve educational equity in China. On the other hand, knowledge management practices could help to capture, codify and diffuse knowledge in a school. It could improve schools planning and management, and also help teachers acquire new knowledge and skills. In this process, teachers generally relied on discourse carrier to

spread and exchange knowledge, and also use discourse as a tool to create new knowledge. Therefore, this study investigated novice teachers' teaching practice and teaching reflection activities in the process of HTSC, explored novice teachers' knowledge acquisition path, and the effect of discourse characteristics on their teaching effectiveness. The results showed that: (1) novice teachers' discourse patterns were mainly divided into discourse output and discourse input, and there were different discourse patterns at different stages in the HTSC. (2) there was significant difference that novice teachers' discourse temporal in teaching reflection activities, and their discourse length in the reflection for their own teaching behavior was significantly longer than that of for the expert teachers'. (3) The novice teachers' teaching effectiveness would be positively predicted by their evaluation of their own initial teaching behavior and the discourse length during teaching reflection activities. These results have implications for novice teachers' professional growth and knowledge creation.

Негизги сөздөр: бир класста гетерогендик окутуу; Билимди башкаруу; дискурс; башталгыч мугалим

Ключевые слова: гетерогенное обучение в одном классе; управление знаниями; дискурс; начинающий учитель

Key-words: HTSC; knowledge management; discourse; novice teacher

Introduction. The professional growth of teachers, especially novice teachers, is a common issue in the field of education. Recently, heterogenous teaching in the same course has gradually become an important method to cultivate teachers' teaching ability, and it has been widely used in China (Cui & Chen, 2021; Feng, & Xia, 2022; Sun, 2012). Of course, it was also one of the educational issues actively explored by foreign researchers (Pango,2015; Pospisilova, 2008).

In doctoral dissertation, Pospisilova (2008) examined the application of mixed-ability/heterogenous classes in teaching, and discussed types of activities used, classroom management in heterogeneous classes. In the study of Andrejczuk, Bistaffa and Blum et al., (2018), a computational model was proposed to evaluate the influence of classroom heterogeneity from learners' abilities, personality and gender on learning performance. There are also some researchers based on classroom teaching practice, applied teaching experiments explored strategies and devices fitting heterogeneity of classes of French foreign language (Pango,2015). The researchers believed that in the process of classroom teaching, because of students with different knowledge, personality and personal culture, teachers must face the heterogeneity of students, which inevitably requires teachers to create its own model by being inspired by the reality and different experiences in the field. It was not difficult to find that the researchers focused on the classroom composed of heterogeneous students, and explore how the heterogeneity of students affects the teaching effect. They were eager to help teachers find more appropriate teaching strategies and teaching methods to better adapt to the learning needs of heterogeneous students (Pango,2015; Samsudin, Das, & Rai, 2006).

Although it was an important issue how to implement teaching in accordance with different students' aptitude in China, there was significant different with foreign research. Heterogenous teaching in the same course was regarded as an important approach to improve teachers' teaching ability in China (Wang, 2008; Feng & Yin, 2011). That was, for the same teaching content, teachers with the same major and different teaching experience carried out teaching design and teaching practice, and communicated and learned from each other to improve teachers' teaching ability (Cui & Chen, 2021; Feng & Xia, 2022). This approach was not only used in the teaching group of the same course in the same school, but also widely used in cross-school teacher interaction and continuing-education learning. For example, school administrators might organize, or invite expert teachers with

rich experience to communicate the application of teaching methods, teaching design, etc. in heterogenous teaching in the same course, so as to cultivate young teachers in the school (Chen & Zhao, 2022). Similarly, heterogenous teaching in the same course was organized by the education administrative department of a certain region, and they would invite teaching experts to different schools to help novice teachers acquire new knowledge and skills. It was also a way which promoted educational equity and improve the quality of school teaching. Then, how to realize the transformation and generation of knowledge, and improve novice teachers' teaching ability?

Teachers' professional development is an issue that has been paid more attention by all countries in the world. Many researchers were also devoted to exploring how teachers could acquire new knowledge and develop their teaching ability (Shalem & De Clercq, 2019). There are many relevant empirical studies and theoretical models on the creation of individual knowledge in the field of organizational behavior, i.e., Nonaka and Takeuchi 's SCEI (1995), Ologbo and Nor's the 7-Circle Model (2015), and some of these have also been applied in the research of school teaching. In the research of Jaleel and Verghis (2015), Nonaka and Takeuchi's (1995) theory about knowledge management was applied to explore the effectiveness of e- learning in developing the knowledge creation ability of student. In the field of school education, researchers generally believed that communication, sharing, and application were important ways of knowledge generation and management (Jaleel & Verghis, 2015; Wang, Zhang, Zhang, Li, & Wang, 2018). In human activities, discourse was a pervasive tool that was applied to precise communication of information, to making decisions, and to enlisting action (Bruce, Connell, Higgins, & Mahoney, 2011). At the same time, it is the carrier of knowledge. In daily life, people realized the dissemination of knowledge through discourse (Hassen, 2015). However, Van Dijk (2012) believed that people acquire knowledge by text or conversation, and they also need vast amounts of knowledge in order to produce and understand discourse language user. It could be seen that knowledge is transmitted and created through discourse, meanwhile, discourse understanding depended also on people's knowledge. Then, how did teachers communicate and share in the process of heterogenous teaching in the same course? and how did they realize the transmission and creation of knowledge with the discourse?

This study applied the method of tracking investigation to study the activity of heterogenous teaching in the same course, and it was organized by a teaching and research institution in Gansu Province. On this basis, we analyzed the discourse characteristics in the process of heterogeneous activities in the same class based on the theory of knowledge management, and explored the knowledge generation mode of novice teachers, and the influence of discourse characteristics on their teaching effectiveness.

2 Method

2.1 Subjects

In the present study, teaching and research teams formed by some researchers and expert teachers from an educational research institution in Gansu Province went to 12 schools to organize the HTSC, and novice teachers, peer teachers and administrators from different schools taken part in this activity.

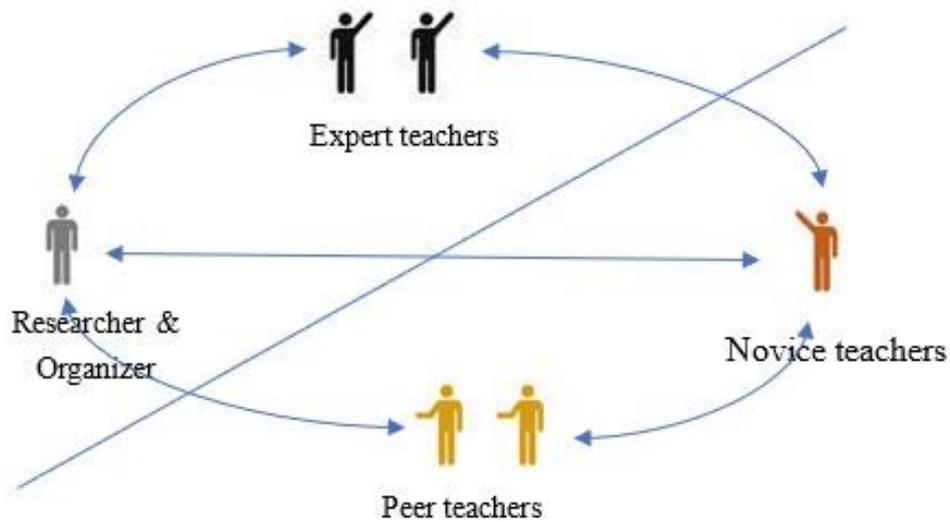


Figure 1. The team members composition of HTSC

During the activity, the expert teachers and researcher (he was the organizer and mentor in this activity) of the teaching and research institutions were the same, and the novice teachers and peer teachers who participated in the activities from different school were different, and the number of participants in the activity was also different.

This study investigated 52 teachers (386 person-times) who participated in HTSC. All subjects were informed about this study and agreed to participate in the investigation. The age of subjects ranged from 28 to 42 years old, with an average age of 33 years, including 23 males and 29 females.

2.2 Organization of HTSC Activities

The activities of HTSC could be divided into three units, each of which consisted of three turn-units of classroom teaching and after-class teaching reflection. In the first stage of the Unit 1, novice teachers organized independently classroom teaching activity (NT_I), and peer teachers observed it. The second stage was after-class reflection on the teaching activities of novice teachers (R_NT_I), and novice teachers, peer teachers, and expert teachers and researchers participate in the activities.

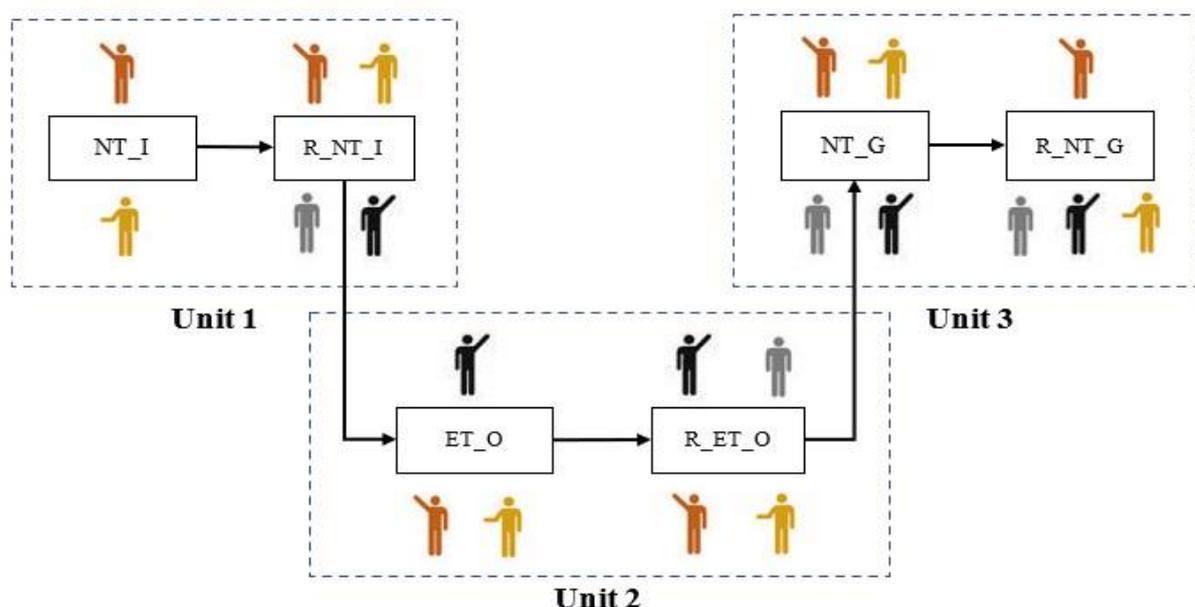


Figure 2. The activities of teaching and reflection in the units of HTSC

In the Unit 2, firstly, expert teachers organize classroom teaching, and novice teachers and peer teachers observe the teaching activities of expert teacher (ET_O), and secondly, novice teachers, peer teachers, and expert teachers and researchers taken part in the activities that was after-school reflection on the teaching activities of expert teacher (R_ET_O). In the Unit 3, novice teachers organized classroom teaching under the guidance of expert teachers (NT_G), others observe the teaching process, and participated in after-class reflection and discussion(R_NT_G).

2.3 Investigation Process

This study adopted the method of tracking investigation, and the basic steps included: (1) Video recording of the total process of teaching and reflection. (2) Convert the dialogue, statement and lecture content in video into text information, and record participants' discourse content and the temporal attributes. (3) Analyze the process of knowledge creation in the HTSC based on the SECI model.

2.3 The indexes of data analysis

During the HTSC, different discourse subjects had different patterns of participating. This study analyzes the discourse output and input of different subjects, the temporal characteristics of novice teachers' discourse, and the evaluation of teaching effects. The ratio of novice teachers' discourse length in the total duration of each after-class reflection was the index for the analysis of time characteristics of discourse, and included specifically the ratio of novice teachers' discourse length in the total duration of the Unit1 reflections (RDL_independent-teaching), the Unit 2 reflections (RDL_expert-teaching) and the Unit 3 reflections (RDL_guidance-teaching).

Meanwhile, the evaluation of teaching effect included novice teachers' self-evaluation on their own independent teaching, that was initial evaluation (NTE_I_S), and the evaluation about the novice teachers' teaching under the guidance of expert teachers (NTE_G). The evaluation of teaching effect adopts Likert's 5-point scoring(1 extremely unsatisfied2 not satisfied.....3 average..... 4 relatively satisfied.....5 extremely satisfied), and the NTE_G was equal to the average of novice teachers' self-evaluation(NTE_G_S), peer evaluation(NTE_G_P) and expert teachers evaluation(NTE_G_E) of the novice teachers' teaching effect under the guidance of expert teachers, and that was the overall evaluation.

3 Results

3.1 Subjects' participation mode and discourse patterns in the HTSC

Three Units of the HTSC could be divided into six stages, such as NT_I—R_NT_I—ET_O—R_ET_O—NT_G—R_NT_G. The discourse patterns of novice teacher, peer teacher, expert teacher and organizer in all stages were different, as shown in Table 1.

Table 1: Subjects' discourse patterns in the HTSC

subject	discourse patterns	NT_I	R_NT_I	ET_O	R_ET_O	NT_G	R_NT_G
novice teacher	output	1	1	-	1	1	1
	input	-	1	1	1	-	1
peer teacher	output	-	1	-	1	-	1
	input	1	1	1	1	1	1
expert teacher	output	-	1	1	1	-	1
	input	1	1	-	1	1	1

organize	output	-	1	-	1	-	1
	input	1	1	1	1	1	1

Note: "1" means "Yes". If it is "1" in the cross-contingency table, it means that the discourse form of the stage is output or input, and "-" means "No". If it is "-" in the cross-contingency table, it means that the stage has no discourse form.

Table 1 showed that different subjects' discourse was one-way in stages 1, stage 3 and stage 5, and two-way in stage 2, stage 4 and stage 6. For novice teachers, in the stage 1 and stage 5, it was mainly the discourse output for students, and in the stage3 was one-way discourse input by observing expert teacher's teaching behavior. In the stage 2, stage 4 and stage 6, novice teachers putted forward their questions about teaching practice and expound their own views through discourse output, and they also accepted the guidance of expert teachers through discourse input to gain knowledge and experience from others.

The analysis of novice teachers' discourse length in the stage 2, stage 4 and stages 6 showed that the $RDL_{independent-teaching}$ was 18.28%, the $RDL_{expert-teaching}$ was 9.77%, and the $RDL_{guidance-teaching}$ was 15.26%, vicariance analysis showed that there was a significant difference among three discourse length, $F(2,184) = 255.03, p < 0.05$, and the $RDL_{expert-teaching}$ was significant shorter than $RDL_{independent-teaching}$ and $RDL_{guidance-teaching}$.

3.2 The relationship between discourse temporal attributes and teaching effects in the HTSC

The creation and development of knowledge and skills were realized through the discourse communication and teaching practice in the HTSC. While novice teachers need to actively reflect on their own teaching behavior, and to communicate with expert teachers and peer teachers, then, they would find their own shortcomings and solve their difficulties that be faced in teaching practice.

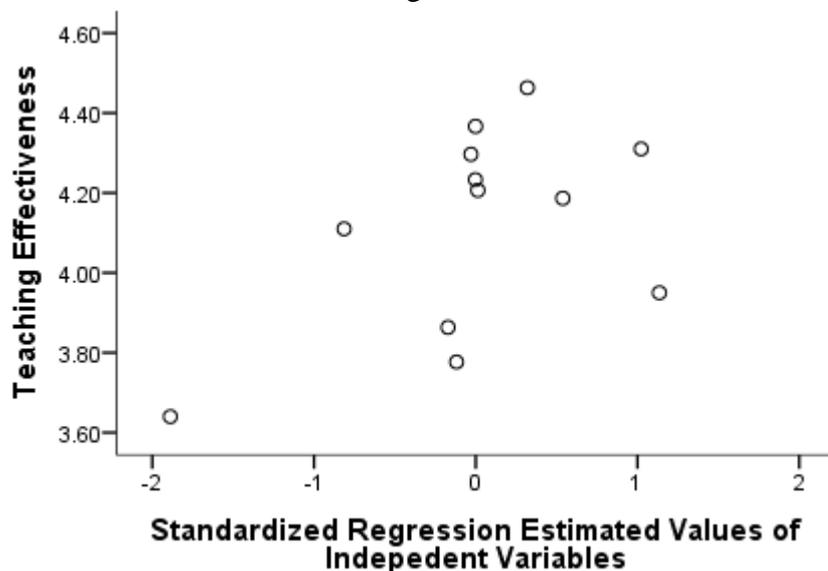


Figure 3. Scatter chart of standardized regression estimates of teaching effectiveness

This study applied the method of regression analysis to analyze the relationship between discourse length and teaching effectiveness, and results showed that novice teachers' teaching effectiveness could be predicted positively by the $RDL_{independent-teaching}$, $RDL_{guidance-teaching}$ and NTE_{I_S} . The regression equation is:

$$Y_1 = 0.14 \chi_1 - 0.08 \chi_2 + 0.72 \chi_3 + 0.17 \chi_4 \quad R^2_{adjusted} = 72.2\%$$

In the regression equation, Y_1 was NTE_G_E, that is teaching effectiveness, χ_1 was RDL_independent-teaching, that is the ratio of novice teachers' discourse length in the total duration of the Unit 1 reflections; and χ_3 was RDL_guidance-teaching, that was the ratio of novice teachers' discourse length in the total duration of the Unit 3 reflections. Both indicators reflected the discourse duration of novice teachers in reflective activities on their own teaching. However, χ_2 is RDL_expert-teaching, that was the ratio of novice teachers' discourse length in the total duration of the Unit 3 reflections; it reflected the discourse duration of novice teachers in reflective activities on expert teachers teaching. χ_4 was the self-evaluation of teaching effectiveness after the NT_I.

4. Discussion

HTSC was a typical form of the teaching and research activities organized by primary and secondary schools in China. Its main purpose was to train novice teachers and improve their teaching ability through the communication between novice teachers and their peers, teaching and research experts, expert teachers, etc. Novice teachers were encouraged to reflect on their own teaching behavior and discover their own shortcomings in teaching practice; at the same time, they should actively learn from others with rich teaching experience to improve their own teaching ability. In this process, novice teachers not only applied their own knowledge and experience to organize teaching practice, more importantly, they would develop their own new knowledge and new skills through teaching and sharing activities. Then, how do novice teachers create new knowledge and experience to improve their teaching ability by the HTSC?

4.1 Pattern analysis of novice teachers' knowledge creation in HTSC

According to the SECI model of knowledge creation (Nonaka & Takeuchi, 1995), the process of knowledge creation could be divided into four basic stages: socialization, externalization, internalization and combination. In this process, novice teachers not only apply their existing knowledge, experience and skills in teaching practice, but also generate new knowledge and skills through communication and reflection, and their teaching ability was improved. An analysis of the HTCS showed that novice teachers needed to prepare teaching plan and teach independently (NT_I), observed the classroom teaching activities of expert teachers (ET_O), and participated in communication and seminar (R_NT_I). Finally, it was also necessary to organize classroom teaching (NT_G) and after-class reflection evaluation (R_NT_G) under the guidance of experts.

Specifically, in NT_I and NT_G, novice teachers needed to apply their existing knowledge and skills to teaching practice. It was a typical knowledge-creation process through the transformation of tacit knowledge to explicit knowledge (Nonaka & Takeuchi, 1995). During the R_NT_I process, novice teachers needed to evaluate their own teaching effects, reflected on their own teaching behaviors, and at the same time, they needed to accept the opinions and guidance from peer teachers and expert teachers. In addition, they would try to answer questions from expert teachers, peer teachers, and promote their understanding of own teaching behavior. From the perspective of knowledge management (Haslinda & Sarinah, 2009), this process embodied the socialization of knowledge, and participants need to share their experiences and skills, so that novice teachers could acquire tacit knowledge from others. Of course, there was the knowledge externalization of the novice teacher in this process, which could also promote other participants to gain the knowledge (Nonaka, 1994).

In ET_O, expert teacher should apply their own knowledge and experience to organize classroom teaching. The course content was the same as that of the novice teachers. Novice teachers, as observers, learned expert teachers' teaching methods and skills through observation. After that, novice teachers could also learn the knowledge and skills from expert teacher's knowledge

externalization and socialization in R_ET_O. On this basis, expert teachers guided novice teachers to reorganize classroom teaching, that was NT_G. In this process, novice teachers would integrate their experiences of NT_I, reflection of R_NT_I, and expert's teaching behavior and knowledge application that were overserved and internalized, as well as the advice of peer teachers and the guidance of expert teachers. After that, they would apply knowledge was combined to the new teaching practice.

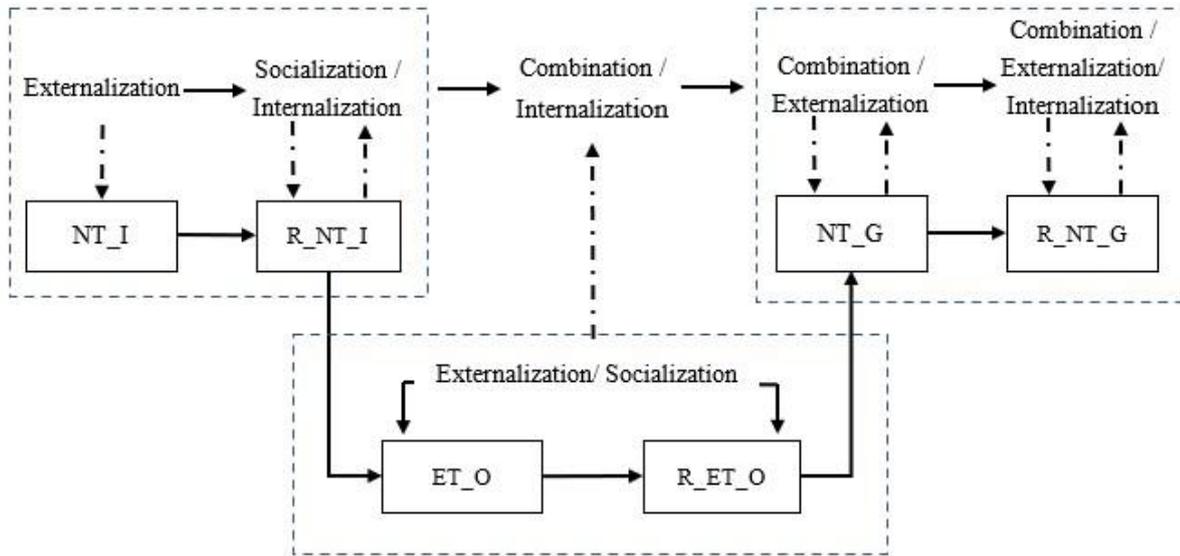


Figure 4. The path of knowledge generation for novice teachers through the heterogenous teaching in the same course

The results of the analysis of novice teachers' participation and discourse patterns in the HTSC showed that teachers' knowledge generation and professional growth have a modeled path as shown in Figure 4. Therefore, for novice teachers, it was necessary to organize special training activities and guide them to acquire new knowledge and skills through the externalization, socialization, combination and internalization of knowledge.

4.2 The influence of novice teachers' discourse characteristics on teaching effectiveness in HTSC

Temporal attribute is an important feature of discourse. Webber (1988) thought that discourse segmentation must depend on the interpretation of tense, and the temporal relations between segments was thought that was a feasible and precise method for discourse segmentation (Rodrigues & Lopes, 1992). Tay(2017) demonstrated the feasibility and complementary use of the time series analysis (TSA), and applied it to a case study of metaphor. The length of each period/cycle was taken as the main indicator of the time series analysis for discourse interaction (Lee, & Tan, 2017). In this study, the activities of the same course with heterogeneous teaching were divided into six stages to explore the relationship between the novice teachers' discourse and the evaluation of teaching effect. The results showed that the NTE_G could be positive predicted by the NTE_I_S, the RDL_independent-teaching and RDL_guidance-teaching, only the RDL_expert-teaching had no significant effect. Meanwhile, the RDL_expert-teaching was significantly shorter than the RDL_independent-teaching and the RDL_guidance-teaching, showing a trend of $RDL_{independent-teaching} > RDL_{guidance-teaching} > RDL_{expert-teaching}$. These results suggested that novice teachers' evaluation of the effect of their own lessons individually, as well as novice teachers' discourse communication process around their own teaching display in the HTSC, could better improve their teaching effect, and it was related possibly to the development of their

teaching ability. In response to problems in teaching practice, novice teachers could actively communicate and learn from experts, which could improve their own teaching ability. Some studies have found that expert teachers rely more on feedback in interaction to improve their teaching ability (Berliner, 2001; Mathew, Mathew, & Peechattu, 2017). Therefore, novice teachers need to learn from others with self-controlled, self-monitored, and self-reinforced in the process of interaction with students, peers, and experts.

Specially, the predictive effect of the novice teachers' evaluation for their own teaching practice was significant, which might be because teachers' reflection on their own teaching behavior could promote them to learn from experts more actively. It was consistent with the research results of Ferdowsi and Afghari (2015), Sharifi and Abdolmanafi Rokini (2014), Zahid and Khanam (2019), etc. They also found that reflective teaching was a valuable teaching approach to find out their strength and weakness, and which could prompt teachers to pay more attention to their own teaching behavior (Ferdowsi & Afghari, 2015), and also prompt their professional development based on their enhancement and maturity of knowledge, skills and personal abilities (Sharifi & Abdolmanafi Rokini, 2014; Zahid & Khanam, 2019). On the contrary, if teachers lacked introspection of their teaching behavior, it was not conducive to the improvement of their professional ability. Additional, RDL_{expert-teaching} reflected novice teachers' discourse communication in the process of the discussion for expert teacher's classroom teaching presentation. Novice teachers were more inclined to listen or seek expert answers to their own confused questions in this process; on the other hand, expert teachers had mastered more discourse initiative, and novice teachers needed to rely on the discourse input to learn others' teaching methods, strategies and related knowledge.

References:

1. Andrejczuk, E., Bistaffa, F., Blum, C., Rodriguez-Aguilar, J. A., & Sierra, C. (2018). Heterogeneous teams for homogeneous performance. In: Miller, T., Oren, N., Sakurai, Y., Noda, I., Savarimuthu, B., Cao Son, T. (eds) PRIMA 2018: Principles and Practice of Multi-Agent Systems(pp: 89–105). https://doi.org/10.1007/978-3-030-03098-8_6
2. Berliner, D. C. (2001). Learning about and learning from expert teachers. *International Journal of Educational Research*, 35(5), 463-482.
3. Bruce, B. C., Connell, J. M., Higgins, C., & Mahoney, J. T. (2011). The discourse of management and the management of discourse. *Working Papers*, 3(1/2), 141-154.
4. Chen, C. C., & Zhao, H. X. (2022) The exploration of teaching strategies for senior high English listening and speaking based on heterogeneous classes. *Basic Foreign Language Education*, 24(1), 43-51.
5. Cimer, A., Cimer, S. O., & Vekli, G. S. (2013). How does reflection help teachers to become effective teachers? *International Journal of Educational Research*, 1(4), 133-149.
6. Cui, W. F., & Chen, J. (2021). Research on the professional development path of political teachers under the same course heterogeneous model. *The Teaching of Thought and Political Study*, (7), 87-90.
7. Feng, X. M., & Xia, M. (2022). Characteristics and development of young teachers' teaching behavior in the high-quality class: an analysis of heteromorphic lessons in national middle school physics teacher teaching coemption. *Journal of South China Normal University (Social Science Edition)*, 3, 66-77.

8. Feng, G. C., & Yin, W. K. (2011). The heterogenous teaching in the same course: An effective approach of promoting teachers' professional development. *Education and Teaching Forum*, (16),195-201.
9. Ferdowsi, M., & Afghari, A. (2015). The effects of reflective teaching on teachers' performance. *International Journal of Educational Investigations*,2(6),20-31.
10. Haslinda, A., & Sarinah, A. (2009). A review of knowledge management models. *The Journal of International Social Research*,2(9),187-198.
11. Hassen, R. (2015). Discourse as medium of knowledge: transmission of knowledge by transmission of discourse people live. *Journal of Education and Practice*, 6(31),119-128.
12. Jaleel, S., & Verghis, A. M. (2015). Knowledge creation in constructivist learning. *Universal Journal of Educational Research*, 3(1),8-12. DOI: 10.13189/ujer.2015.030102 2
13. Lee, A. V. Y., & Tan, S. C. (2017). Temporal analytics with discourse analysis: Tracing ideas and impact on communal discourse. In *LAK '17 Proceedings of the Seventh International Learning Analytics & Knowledge Conference* (pp. 120-127). Vancouver, BC, Canada: Simon Fraser University of Southern Queensland.
14. Mathew, P., Mathew, P., & Peechattu, P. (2017). Reflective practices: a means to teacher development. *Asia Pacific Journal of Contemporary Education and Communication Technology*, 3(1),126-131.
15. Nonaka, I. (1994). A dynamic theory of organizational knowledge creation. *Organization Science*, 5(1),14-37
16. Nonaka, I. & Takeuchi, H. (1995). *The knowledge – creation company: How Japanese companies create the dynamics of innovation*. Oxford University Press, New York.
17. Ologbo, A. C., & Nor, K. M. (2015), *The 7-Circle Model: a practical and coherent KM Model for managing organizational knowledge*. *Mediterranean Journal of Social Sciences*,6(4),120-128.
18. Pango, A. (2015). Heterogeneous class and teaching practices within the French course. *Journal of Educational and Social Research*,5(2), 53-59.
19. Pospisilova, R. (2008). *Teaching in Heterogeneous Classes* (Unpublished master's thesis). University of Masaryk, Brno, Czech Republic.
20. Rodrigues, I. P., & Lopes, J. G. P. (2003). Temporal structure of discourse. In *COLING 1992 Volume 1: The 14th International Conference on Computational Linguistics* (pp. 331-337).
21. Samsudin, S., Das, J., & Rai, N. (2006). Cooperative learning: heterogeneous vs homogeneous grouping. *The Asia Pacific Education Research Association International Conference 2006*.
22. Shalem, Y., De Clercq, F. (2019). Teacher Development and Inequality in Schools: Do We Now Have a Theory of Change? In: Spaul, N., Jansen, J. (eds) *South African Schooling: The Enigma of Inequality. Policy Implications of Research in Education*, vol 10. Springer, Cham. https://doi.org/10.1007/978-3-030-18811-5_13
23. Sharifi, S., & Abdolmanafi Rokini, J. (2014). The effect of reflective teaching on pre-service teachers' learning and teaching development in a learner-cantered situation. *International journal of language learning and applied linguistics world*, 5(4), 49-58.
24. Sun, D. F. (2012). Different teaching for the same course: the effective path for the acquisition of teachers' practical knowledge. *Journal of Tianjin Normal University (Elementary Education Edition)*,13(3),22-24.
25. Tay, D. (2017). Time series analysis of discourse: a case study of metaphor in psychotherapy sessions. *Discourse Studies*,19(6),694-710.

26. Van Dijk, T.A. (2012). Discourse and the Production of Knowledge. In: Seel, N.M. (eds) Encyclopedia of the Sciences of Learning. Springer, Boston, MA. https://doi.org/10.1007/978-1-4419-1428-6_753
27. Wang, X. Y., Zhang, Q. S., Zhang, M., Li, X. Y., & Wang, P. W. (2018). Teachers' knowledge management based on knowledge innovation. Journal of Mathematics, Science and Technology Education, 14(4),1317-1324. DOI: 10.29333/ejmste/83566
28. Wang, X. Q. (2008). Analysis of the reflective example of on the heterogenous teaching in the same course. Journal of the Chinese Society of Education, (6),62-65.
29. Webber, B. L. (1988). Discourse deixis: reference to discourse segments. 26th Annual Meeting of the Association for Computational Linguistics, 7-10 June 1988, State Univerity of New York at Buffalo, Buffalo, New York, USA, Proceedings.
30. Zahid, M., & Khanam, A. (2019). Effect of reflective teaching practices on the performance of prospective teachers. The Turkish Online Journal of Educational Technology,18(1),32-43.

УДК 378.046.4

DOI 10.33514/1694-7851-2022-3-307-311

Мажитов Марат Капенович

КГКП №2 балдар музыкалык мектеби – ЮНЕСКО клубу, директор

Мажитов Марат Капенович

КГКП «Детская музыкальная школа №2-Клуб ЮНЕСКО, директор

Mazhitov Marat Kapenovich

KGKP "Children's Music School No. 2-UNESCO Club, Director

**БАЛДАРГА ЖАНА ЖАШТАРГА КОШУМЧА БИЛИМ БЕРҮҮНҮН НАТЫЙЖАЛУУ
ПЕДАГОГИКАЛЫК ТАЖРЫЙБАСЫН ЖАНА ЗАМАНБАП ПРАКТИКАСЫН
ӨНҮКТҮРҮҮ**

**РАЗВИТИЕ ЭФФЕКТИВНОГО ПЕДАГОГИЧЕСКОГО ОПЫТА И СОВРЕМЕННЫХ
ПРАКТИК ДОПОЛНИТЕЛЬНОГО ОБРАЗОВАНИЯ ДЕТЕЙ И МОЛОДЕЖИ
DEVELOPMENT OF EFFECTIVE PEDAGOGICAL EXPERIENCE AND MODERN
PRACTICES OF ADDITIONAL EDUCATION FOR CHILDREN AND YOUTH**

Аннотация: бул макалада Карагандадагы "балдар музыкалык мектеби - ЮНЕСКОнун Музыкалык клубу" КГКПДА балдар жана жаштарга кошумча билим берүүнүн натыйжалуу педагогикалык тажрыйбасын жана заманбап тажрыйбасын өнүктүрүүнүн жолу катары киргизилген долбоордук ишмердүүлүк каралат. "Жылды жакшылыктан башта", "Чеберчиликтин сырлары", " Үй-бүлөлүк абалы", "Билимди искусство менен башта", "Биз чогуу", "Менин мектебимдин тарыхы" сыяктуу долбоорлор жогорку натыйжаларды берет. Балдар музыкалык мектебинде ишке ашырылып жаткан долбоорлор окуу-тарбия процессинин сапатын жогорулатууга өбөлгө түзөт, жамаатта түптөлгөн мыкты салттарды топтойт, педагогдордун, окуучулардын, ата-энелер коомчулугунун жана социалдык өнөктөштөрдүн өз ара аракеттенүү процессин байытат.

Аннотация: В данной статье рассматривается проектная деятельность, внедренная в КГКП «Детская музыкальная школа №2 - Клуб ЮНЕСКО» г.Караганды, как способ развития эффективного педагогического опыта и современных практик дополнительного образования