

Виды исследований. Структура рукописей для научных журналов

Развитие научного потенциала молодых ученых
региональных вузов Республики Казахстан:
модель менторства (ИРН АР13068325)

Теоретические методы

анализ

синтез

абстрагирование

обобщение

индукция

дедукция

моделирование

классификация

Эмпирические методы

наблюдение

измерение

эксперимент

Структура научной статьи

1. Название (заголовок)
2. Аннотация
3. Ключевые слова
4. Введение
5. Обзор литературы
6. Основная часть (методология, результаты)
7. Выводы и дальнейшие перспективы исследования
8. Список литературы

Название научной статьи

1. Информативное
2. Должно привлекать внимание читателя
3. Научный стиль речи
4. Четко отражает главную тему исследования и не вводит читателя в заблуждение относительно рассматриваемых в статье вопросов
5. Включены некоторые из ключевых слов, отражающих суть статьи
6. Используются только общепринятые сокращения

Аннотация

1. Вступительное слово о теме исследования
2. Цель научного исследования
3. Описание научной и практической значимости работы
4. Описание методологии исследования
5. Основные результаты, выводы исследовательской работы
6. Ценность проведенного исследования
7. Практическое значение итогов работы

Введение

1. Цель и объект предпринятого автором исследования

Что вы хотите создать в итоге проведенного исследования?

Итог - новая методика, классификация, алгоритм, структура, новый вариант известной технологии, методическая разработка и т.д.

Формулировка цели: выяснить, выявить, сформировать, обосновать, проверить, определить.

2. Актуальность и новизна

Степень важности темы в данный момент и в данной ситуации, способность результатов работы быть применимыми для решения значимых научно-практических задач.

Новизна - это то, что отличает результат данной работы от результатов, полученных другими авторами.

3. Исходные гипотезы, если они существуют.

Введение

Структура статьи

Проанализировать:

- Четко ли сформулированы цели, объект и исходные гипотезы, если они существуют?
- Нет ли противоречий?
- Указана ли актуальность и новизна работы?
- Упомянуты ли основные исследования по данной теме?

Обзор литературы

Основная часть:

Методология

Результаты

Обсуждение

Выводы

A case study was initiated from the perspective of three research questions: 1) CLIL teachers' practices at secondary schools of Aktobe during COVID-19 pandemic; 2) challenges for the teachers; 3) support provided for the teachers. The research methodology combined face-to-face personal interviews, and non-participant observation. Data analysis was conducted in line with Mayring's (2020) approach to content analysis and by means of categorization into specific themes that emerge from teachers' conceptualization of their CLIL practices. The analysis of teachers' reflections on their experiences and challenges of using the CLIL approach during the pandemic, support provided to them and teachers' attitudes towards the approach is presented in the paper. Research data on the secondary schools Science teachers' CLIL practices in a remote learning setting was categorized related preparation to teaching, resources used by the teachers, students' interaction during the lessons, and stakeholders' attitudes and perceptions of the approach. The obtained data enables to understand Science teachers' practices in terms of using the CLIL approach in Kazakhstani secondary schools in the period of COVID-19 pandemic, and will contribute to teacher development and preparation for successful CLIL realization in a non-traditional classroom.

Ethnographic research in education - fostered by globalisation and neoliberal forces - continued by studying Science teachers' CLIL practices through a Critical Sociolinguistic Ethnography (Heller & Martin-Jones, 2001; Martín Rojo, 2010; Patiño-Santos, 2016; Rampton, 2006). As stated by Breidbach and Medina-Suárez (2014), since the so-called social turn (Block, 2003) in Applied Linguistics, teacher development research has increasingly focused on teachers' identities (Varghese et al., 2004).

Despite numerous research outcomes on CLIL benefits (Jimenez Catalan & Ruiz de Zarobe, 2009; Lorenzo et al., 2010), there are some critical points of CLIL implementation as ambiguity of defining CLIL or lack of CLIL materials (Birdsell, 2020). It is important to understand in which way teachers involved in CLIL are supported (or not) as language or content teachers, as classroom practitioners following learner-centred or subject-centred pedagogies, or as educators who see themselves as embedded in a relevant community of practice or as individual performers without much support from an imagined or factually existing group of peers (Breidbach & Medina-Suárez, 2014).

Investigation into CLIL teachers' practices is especially relevant in the times of COVID-19, as it will throw light on teachers' reflections on their practices, conceptualizations and attitudes towards CLIL in pandemic, and make sense in the successful realization of CLIL in the situations requiring remote learning.

A case study was employed to best suit the purpose of the research stating three research questions:

1. What are the practices of Secondary Science teachers in relation of CLIL during COVID-19 pandemic?
2. What are the challenges for teachers in teaching practice using CLIL?
3. What kind of support is available for the CLIL teachers?

The research methodology combined face-to-face personal interviews, and non-participant observations. Utilizing interview and observation was aimed at collecting qualitative data, and complement it with quantitative findings.

For the purpose of the proposed research, two schools of Aktobe city (Al-Farabi specialized gymnasium No. 21 and Nazarbayev Intellectual School) have been selected.

Open and close-ended questions were designed according to the aim of research within the framework of the semi-structured face-to-face personal interviews with the CLIL teachers of the research sites. Questions included teachers' reflections on their experiences and challenges of using the CLIL approach during COVID-19 pandemic, support provided to them, and teachers' attitudes towards the approach. The chosen method of collecting research data, as well as non-participant observations on the teachers' daily practices conducted via Zoom, made it possible to obtain thorough and important findings.

Data analysis was conducted in line with Mayring's (2020) approach to content analysis and by means of categorization into specific themes that emerge from teachers' conceptualization of their CLIL practices.

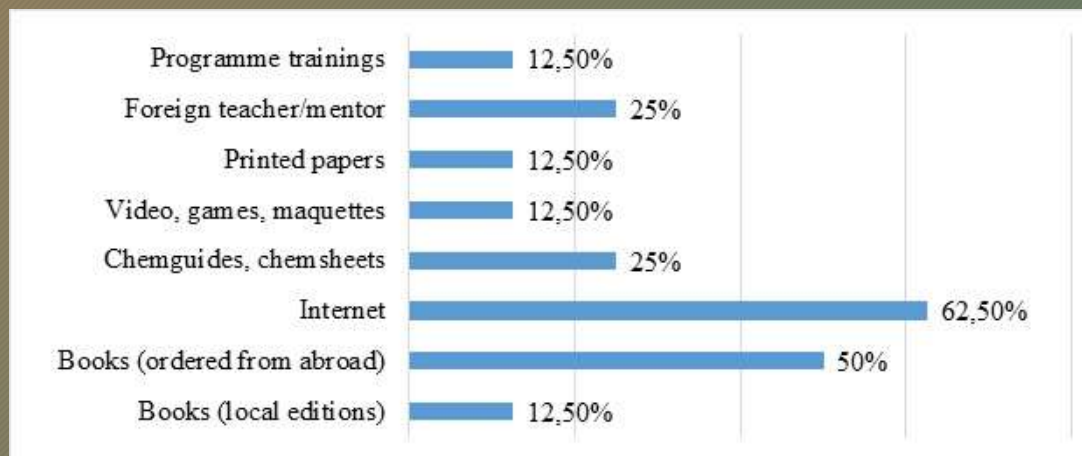


Figure 2. Resources available and used for preparing to CLIL lesson

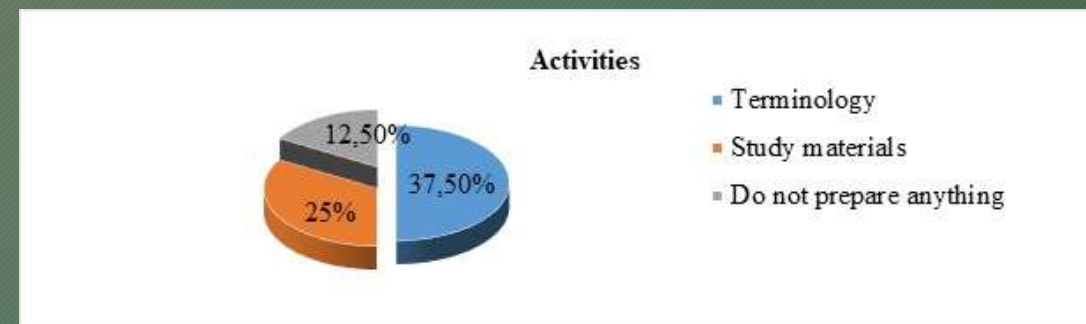


Figure 1. Preparation to CLIL lesson

Resources Used by CLIL Teachers

As it was noted in the previous subsection, for their CLIL lessons teachers use videos, games, maquettes and models. The books they use now contain different types of activities for the lesson to make them more interesting (S1). However, some teachers note that the books they use at the moment are not suitable in teaching high-performing students as the tasks they contain do not comply with the level of the students, and they don't have teachers' book (methods book) (S4). There are books printed abroad on the CLIL lessons methodology containing needed materials for the Science teachers. These books can be ordered via internet, though teachers have to pay from their own.

Thus, as the teachers are aimed at making their students engaged and interested in studying they have to bring into the lesson some additional material from the internet. According to the teachers, internet is another valuable source of study materials. There is a special website on the CLIL materials in Chemistry as <http://chemsheets.com>, which is considered to be very effective among Chemistry teachers. Shared web hosting <http://pinterest.com> and Cambridge study materials are also helpful. The only problem about finding extra study material is that using some websites is not free and requires annual purchases. Therefore, teachers have to pay for them from their own, as well as for any paper or printing. Resources used on CLIL lessons by the local teachers of secondary schools can be classified according to the **Figure 2**.

The obtained data enabled to understand Science teachers' practices in terms of using the CLIL approach in Kazakhstani secondary schools during COVID-19 pandemic that reflected overall positive perceptions of CLIL in a remote learning setting. This contradicted the results of research conducted in Russian universities, where teaching school subjects in English have not met clear support, and it was offered to reduce the amount of English discourse (Pavenkova et al., 2018).

Data of the study demonstrated the students' active interaction through different techniques as reflected in Koopman et al. (2014), Gubaidullina et al. (2016), Oattes et al. (2018), Van Kampen et al. (2018), Tugun et al. (2020), Villabona and Cenoz (2021) even in a remote learning setting. Results of studying pedagogical practices showing that students had enough opportunity to use English in CLIL classes contradict with those of other studies stating the challenges of using target language while studying content (Dalton-Puffer, 2007; Mahan et al., 2018; Villabona & Cenoz, 2021).

Overall, the pedagogical practices of Kazakhstani secondary school Science teachers in relation to CLIL in COVID-19 pandemic are efficient. The teachers interviewed and observed demonstrated a well-organized and resourceful realization of CLIL lessons even in a different than a traditional setting.

The students showed motivation and eagerness to interact during the on-line lessons due to their understanding of the importance of CLIL for their progress, and the teachers tried to evoke students' critical thinking and creativity. The challenges in practicing CLIL according to the interviewed teachers are mostly in using classroom language and students' language barrier.

The support provided for the CLIL teachers in teaching Science subjects at the secondary schools includes intensive language training, guidance of foreign experts and mentoring system, organization of CLIL courses abroad, online courses, sharing good practices and cooperative work, and financial motivation.

The results of study suggest that studying Science subjects through CLIL approach expand intellectual horizons of students while improving their English language skills and knowledge adapting CLIL to new teaching environments and situations.

Alekseeva, L., Shaidullina, A., Lipaev, A., & Sadykova, L. (2015). Informal environment in occupational English training. *International Multidisciplinary Scientific GeoConference Surveying Geology and Mining Ecology Management*, 3(5), 909-915. <https://doi.org/10.5593/SGEM2015/B53/S22.119>

Birdsell, B. J. (2021). CLIL in the times of COVID-19: Content, communication, and creative cognition in remote learning. *The Journal of the Japan CLIL Pedagogy Association*, 3, 134-149.

Capone, R., Del Sorbo, M. R., & Fiore, O. (2017). A flipped experience in physics education using CLIL methodology. *Eurasia Journal of Mathematics, Science and Technology Education*, 13(10), 6579-6582. <https://doi.org/10.12973/ejmste/77044>

Поиск научного интереса. Постановка научного вопроса

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