

Exploring the Perspectives of Undergraduate Students and Teachers on Student Investment in Language Learning

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Abstract:

Learning languages alongside their studies offers undergraduate STEM (Science, Technology, Engineering, Mathematics, and Medicine) students the opportunity to broaden their cultural awareness, improve their communication skills, and expand their career prospects. It also supports building social connections and enhancing cognitive abilities. This qualitative research explores students' and language teachers' perspectives at a UK university focused on STEM, using interviews and questionnaire analysis to understand why learners choose to invest time and effort in learning an additional language. This research links learner motivation and identity to the concepts of the 'ideal-self', 'ought-to-self' and consider learner 'investment' and gaining of cultural capital in Anderson's imagined communities. Despite focusing on their disciplines and operating in a context of high competitiveness and limited time, students still dedicate time to languages and view language learning as a pathway to broader cultural understanding, intercultural competence and a potential future identity.

This study discusses the role of social factors in second-language acquisition and offers recommendations for engaging and sustaining investment in the target language. This study suggests that language centres and Institution-Wide Language Programmes can help learners develop a meaningful, long-term plan that outlines the educational steps needed to achieve their language goals.

Keywords: motivation, investment, imagined communities, ideal-self

1. Introduction

This study aims to explore how STEM (Science, Technology, Engineering, Mathematics, and Medicine) students negotiate their identities and capital across various social spaces, the impact of this negotiation on their language learning, and the most effective ways to support them.

The starting point of this study is a reflection on students' engagement. During my experience as a language teacher, I have noticed that, despite my efforts, some students still seem quieter or do not always complete their assignments, while others actively participate, speak in class, and engage in activities. After discussing this with my colleagues, I found that they often face similar issues. These quieter students are often described as unmotivated, shy, uninterested, anxious, or overwhelmed by their workload in their primary degree.

This study aims to explore how STEM students who engage in additional language learning navigate their identities and cultural capital across various social spaces, analysing how these negotiations influence their language learning experiences and identifying strategies to support them more effectively.



2. Literature Review

Dörnyei (2005, 2009) introduced the L2 Motivational Self System (L2MSS), which serves as a theoretical framework for research in second language acquisition (SLA), particularly concerning the global status of English (Howard and Oakes, 2024). This model explains motivation to learn a second language through two self-guides: the ideal L2 self and the ought-to self. The ideal L2 self represents the learner's visualisation of their future self as a proficient L2 speaker, symbolising an aspirational identity they aim to attain. This concept highlights the learner's desire to close the gap between their current self-perception as a language learner and their future self, driven by the goal of achieving fluency. Dörnyei (2009) argues that the ideal L2 greatly influences learners' motivation for L2 acquisition, supported by empirical evidence from studies such as that of Csizér and Kormos (2009), who found that Hungarian learners' motivation was closely linked to their ability to envisage themselves as competent users of the target language.

Conversely, the ought-to self pertains to external influences that shape the learner's perceived duties and responsibilities, such as pressures from parents or societal expectations (Dörnyei, 2009). This idea emphasises the motivating factors that arise from the desire to meet or avoid negative outcomes linked to external expectations.

Additionally, Lanvers (2012) concurred with these findings in her research among UK university students, emphasising a growing awareness of the disadvantages linked to monolingual English speakers. She argues that despite a decline in language study within the UK, the language learners she studied transformed the negative stereotype of British monolingualism into a source of pride. This perspective reflects a broader trend where embracing linguistic diversity is seen as both a challenge and a valuable asset in an increasingly globalised world.

Investment, unlike motivation, reveals the complex relationship between language learners and the target language, reflecting their sometimes conflicting desires to use it. Unlike motivation, which can be seen as a fixed trait, investment involves the time, effort, and resources learners dedicate to their language learning, expecting to gain tangible or intangible rewards. When learners invest in a second language, they aim to acquire a wider range of symbolic and material resources, thereby boosting the value of their cultural capital (Norton, 2000, p.10). They expect these investments to bring rewarding returns, giving them access to opportunities and resources that were previously out of reach.

Investment should be understood as a social construct shaped by the surrounding social environment. Additionally, Norton (1995, 2001) developed the concept of imagined communities. This term was initially introduced by Anderson (1991) to describe nations as imagined communities because members of these communities are unlikely to meet most of the other members. He argued that a nation should not be defined solely by territorial boundaries but as an imagined political community connected by shared beliefs, values, and narratives. Our imagination creates our sense of nationalism and belonging, enabling us to build a bond with other members we do not know and may never meet.

Norton (2001) drew on the ideas of imagined communities and applied them to SLA. She argued that learning extends beyond the physical communities where learners participate, such as schools, churches, and language clubs. Instead, learners are connected to distant imagined communities that greatly influence their learning experience. These imagined communities provide a space for learners

to see themselves as members of groups they aspire to join, thereby increasing their engagement and sense of identity.

A critique of motivation research is that language learners are often viewed as having fixed traits and personalities, with participants frequently assigned characteristics such as introverted or extroverted, inhibited or uninhibited, motivated or demotivated (Darvin, 2019). For instance, Norton and Kramsch (2013) conducted a study with three immigrant women in Canada, showing that they became more tense and forgot simple grammar rules when their interlocutor commented on their accents. This indicates that anxiety is not a fixed trait of language learners but a social construct that varies depending on their lived experiences.

Most research literature on motivation and investment focuses on English learners, with some studies examining languages other than English. There is also limited literature on non-specialist language learners, especially university students enrolled in STEMM.

How do students' identities, interactions, and responses to their learning environment influence their investment in their optional language studies? How can teachers better support them in maximising this investment?

3. Methodology

Constructivism underpins this research. Constructivists believe that reality is built by individuals, who develop meaning through their experiences. For Savin-Baden and Major (2013), constructivists argue that reality is a mental construct created by individuals, and the role of the researcher is to understand and interpret individuals' experiences to make sense of their subjectivity.

During my research, I focus on how students negotiate their identities within their social context, so my philosophical stance also leans towards social constructivism. For Wenger (1998), identity is a fluid concept and is negotiated through an individual's lived experience. Learning is socially constructed, and I examine how students' views are shaped through their interactions within the social contexts in which they evolve.

It aligns with the concept of investment that underpins this study. Norton (1995, 2000, 2001) drew on Bourdieu's work and concepts of habitus and language as cultural capital. According to Block (2007), identity is viewed through the lens of post-structuralism, and is socially constructed, constantly changing and negotiated over time and space.

Furthermore, the concept of imagined communities underpins the concept of investment, suggesting that nations are socially constructed entities created through shared identities and experiences (Anderson, 1991).

I used two types of sources for generating data. The first set of data was obtained through interviews with undergraduate students enrolled in an optional language module. The second set of data was obtained via an online structured questionnaire with language teachers to gain their perspectives on students' investment in their context.



4. Presentation of Findings

I have identified three themes across the data set, including interviews and questionnaires. The first section, titled “Future self,” explores the importance of clear goals and imagined communities to which learners participate or aspire to join. The second section, “Language skills,” examines how students and teachers interpret their learning in relation to the development of language skills. The third section discusses resource acquisition, which I view as the aspects of language that students invest in to increase their cultural capital, as claimed by Norton (2000).

4.1 Future self

Jack is a Life Sciences student with a year abroad and is enrolled in German: *“I’m considering staying in research and again, there is a lot of interesting research in Germany and I wouldn’t be surprised if there are gonna be an opportunity for me in the future. Um to interact with the scientific community there. So, and even if I don’t, if I’m going to industry, again, there still gonna be quite a bit of connection and I wouldn’t be surprised”*.

Teachers also emphasise the importance of a goal by a clear idea of what they want to achieve.

Teacher One: *“In my view, learner investment is mostly determined by learners having a clear idea of what they want to achieve in the language and why they want to learn it”*.

Another teacher emphasises the importance of knowing students’ goals: “Find out why they are learning the language, what interests them most about it, and integrate it in your teaching”.

These examples show that having a clear goal and vision of the future self is important for both students and teachers.

4.2 Languages skills

Chloe recognises the benefits of practising speaking, an activity she mainly does in the classroom. She mentioned that it is fun, but she also gets nervous and shows an ambivalent desire to speak.

Chloe: *“I know that we can make mistakes, but when you know that your turn is coming and you have to think, you don’t want to sound stupid or say something totally wrong, like if I say something I’d rather it be something correct”*.

Speaking aloud can be intimidating for some, even though they recognise the supportive environment and the general acceptance of making mistakes in class. They also mention that they usually do not speak the language they are learning outside of class, despite recognising its importance.

Researcher: *“Do you speak Spanish outside of the classroom?”*

Chloe: *To be honest, no. Yeah, I probably should, but I just like anyone who I know is a Spanish speaker because we speak in English. It’s weird to kind of change the language, you know?”*

Lucy understands that oral skills are crucial for learning a language, and engaging with other learners is an important part of the language learning process.



Lucy: *"I think speaking is the is more useful or, understanding the language stuff because you need to go through your brain to express the thing to actually understand how you use it."*

4.3 Resource acquisition

Olivia, *"There isn't really much communication in science and so I think doing communication in languages, it literally does force you, I think, to talk to people, to give your opinion on things. So, I think that's probably the biggest thing that I've got from learning a language is just being able to talk to people"*.

Chloe clearly reflected on the additional symbolic resources of languages. She perceives languages and engineering as something that should go "hand in hand". As she says:

Chloe: *"If you are an engineer, you should be willing to engage in other aspects, because it's what foster creativity and it's what fosters human imagination, human thought"*.

Sophie explains how learning Japanese will help her gain symbolic resources to set herself apart.

Sophie: *"I don't want to just kind of like pigeonhole myself into just a STEMM student. And learning a language, I think that's a really good way of combining my interest in STEMM with my interest in like, more cultural and more literature stuff"*.

In this example, Sophie explains her desire to expand her cultural capital (more cultural and more literature stuff), both for her personal knowledge and for social recognition (I don't want to just kind of like pigeonhole myself into just a STEMM student). Sophie's investment is focused on gaining social advantage. This example also highlights the relationships between investment and identity transformation. Sophie, by learning Japanese, could develop her identity as not just a STEMM student.

5. Discussion of Findings

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This study confirms the importance of having a clear goal to learn a language, and it appears to be shared by both students and teachers. Participants in this study refer to the other language they speak or have been exposed to, and it seems to have a strong influence on how they value languages.

It is also worth noting the relationship participants establish with their imagined identities as part of larger imagined communities (Norton, 2001). This ability to make connections encourages them to invest in different aspects of languages (Wu, 2017).

It is interesting to note that most students express a conflicted desire to speak the language, recognising its importance but not always taking opportunities to converse. This reflects what Norton and Toohey (2011) describe as the socially situated nature of identity in relation to language learning.



While participants highlight the supportive classroom environment, they often mention experiencing anxiety when they have to speak in class.

By learning a foreign language, learners develop their language skills and enhance the value of their cultural capital (Norton, 2000). Investment takes form in both the opportunity to access more legitimate positions and the development of existing ones (Zarate, 2000). Participants see languages as a pathway to broader cultural context and potential future identity.

6. Conclusion

Students and teachers emphasised the importance of having a clear goal, effective communication, and developing oral skills. Students also clearly connected the professional prospects and the symbolic that learning a second language can offer.

There are some limitations to this research. This study employed a qualitative approach with a small, non-representative sample. Additionally, my role as a member of staff and as a teacher could influence participants' responses. The research was conducted in a highly selective university in the UK specialising in STEMM subjects. The participants interviewed are students undertaking an optional language module alongside their main subject, which limits the generalisability of the findings to other contexts. With this in mind, I would like to conclude with some recommendations for future practice.

Firstly, tutors should give students opportunities to articulate their own objectives and explain why they are learning an L2. This would help tutors create personalised goals for students and foster their ideal L2 selves and imagined identities. It could take the form of a portfolio assignment to encourage learners to set their own learning goals, document their progress, and develop their autonomy. It could include a Language Biography with goal setting and self-assessment related to the target language. A template could be provided depending on the level taught and the language.

Secondly, encourage students to keep a weekly journal of their interactions in the language they are learning. It would help students to practise their oral skills outside of the class in a real-world environment, a key element mentioned by both teachers and students in this study.

Finally, I recommend including a reflective task based on students' own communicative experiences. This would help learners explore different options to enhance their communicative skills and make informed choices about which competencies to focus on and develop (Sung, 2018). It would also foster greater independence and ownership of their learning journey. This task can be completed in English or the target language, depending on the student's level.

Learning a language can sometimes feel demoralising when learners realise how much time and effort it takes to become proficient. Teachers can engage learners' investment by helping them develop a long-term plan, which includes short-term language learning goals to bridge the gap between their current reality and their aspirations.



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