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Motivating Language Learners through Collaborative Autonomy and Materials Development: Case Studies from European projects

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Abstract

This paper explores how collaborative autonomy and learner involvement in materials development can enhance motivation and creative engagement in language learning. Drawing on case studies from two European projects, CORALL – *Coaching-oriented Online Resources for the Autonomous Learning of Languages for Specific Purposes* (2019-2022) and SEED – *Sustainable Entrepreneurship in Education* (2022-2024), the study highlights how integrating learners into the design of their own learning pathways and materials fosters a sense of ownership, self-awareness, and critical reflection, all of which positively influence motivation. The research, conducted in English and Spanish language courses at universities in Hungary and Portugal (N=200), employed classroom observations, reflective student portfolios, and interviews with teaching assistants to investigate the relationship between collaborative materials development and learner motivation. Findings indicate that when students act as co-creators of learning content, they exhibit higher levels of engagement, autonomy, and creative thinking, shifting from passive recipients to active agents in the learning process. This paper offers practical recommendations for fostering collaborative autonomy through materials design, with strategies to support creative expression, peer collaboration, and reflective learning in university language classrooms. The paper also provides adaptable suggestions for applying these principles to other educational contexts, encouraging educators to embed collaborative materials development into diverse learning environments to sustain learner motivation, autonomy, and creative engagement.

Keywords: Collaborative Autonomy, Materials Development, Learner Motivation, Creative Thinking, Language Learning

INTRODUCTION

Motivating language learners involves not only strengthening their language skills but also building their overall learning strategies. These include critical and creative thinking, autonomy, and teamwork, all of which can be supported through engaging and well-designed materials. As students develop interdependent and collaborative learning strategies, the value of co-creating learning materials becomes more apparent.

Teachers can play a role in enhancing learner autonomy by offering students opportunities to actively contribute to their learning processes and even to building their learning materials. This principle is central to two European projects: CORALL (*Coaching-oriented Online Resources for the Autonomous Learning of Languages for Specific Purposes*) and SEED (*Sustainable Entrepreneurship in Education*). The teacher guides developed for these initiatives ensure that language learning remains relevant, engaging, and student-centered. In shaping these guides, students were involved at every stage, contributing meaningfully and collaboratively. For both CORALL and the SEED course on *Entrepreneurship for a Sustainable Future*, their constructive feedforward and co-creation of learning material were an integral part of collaboration to develop content and suggest teaching strategies based on their assessment of their own learning experiences.

This article explores how materials development and learner autonomy intersect, particularly through the integration of structured yet flexible approaches to teaching. Grounded in action research with Spanish and English language students, we examine the impact of involving students in materials design and strengthening their ability to work autonomously together. Our findings show that this integrated coursework can enhance motivation, self-awareness, and engagement in language learning. We offer strategies for dealing with the challenges that arise and offer a framework that links autonomous learning and creativity. These learning spaces that involve co-creation and personal development can contribute to language learning experiences that are engaging, relevant and transformative.

1. BACKGROUND

Exploring the synergy between learner autonomy and materials development, sustained by motivation and creative thinking, we find that at the heart of this study is the idea that learners should take charge of their own learning, directing themselves, making decisions, and setting goals (cf. Arau Ribeiro et al., 2024). To help learners become more independent, learning environments must be created where they actively participate in their education. When learners are involved in deciding how they learn and what materials they use, they become more responsible and make better choices about their language development (Little, 1991). A collaborative approach, where students help design activities and resources, is especially helpful (cf. Cotterall, 1999; Dam, 1995; Dillenbourg, 1999; Graves & Freeman et al., 1996; Holec, 1981). By working together to create materials, learners think more critically and become more aware of their own learning process.

Supported by these insights and our own experience, involving learners in materials development should be a powerful way to promote autonomy. By participating in the creation of their own learning resources, students begin to take initiative, engage in critical thinking, and become more self-aware of their learning process, which could ultimately lead to greater independence and self-directed learning.

Another premise of this study is our belief that materials should not only support language learning but also promote learner autonomy. Effective materials, especially teacher guides created collaboratively, meet the needs of all learners and make learning more engaging (cf. Daflizar et al., 2022; Fink, 2003). The bidirectional relationship between materials and learners means that materials do not simply shape learning; learners themselves can influence materials through their interaction. A sense of shared ownership can come from teachers and students working together to develop materials.

A cascade of research also shows that materials-based learning builds confidence, storytelling, and decision-making skills, deepening language engagement and cultural appreciation. Creative thinking, which helps learners find new ways to use language, is cultivated through collaborative materials design (Dewey, 1938; Dillenbourg, 1999; Ellis &

Barkhuizen, 2005; Maley & Duff, 2005). This involvement can, in turn, drive effective language learning and enhance motivation through a growing sense of ownership and autonomy (Ryan & Deci, 2000; Tomlinson, 2011). The joint construction of learning materials further develops thinking skills and motivation to participate in an interactive, learner-driven environment where students are empowered to shape their own education (Freeman et al., 2011; Little et al., 2017; Tomlinson, 2011).

2. METHODOLOGY

This study adopted a qualitative action research design to explore how collaborative materials development influences learner motivation, creative thinking, and autonomy in university language courses. Data collection took place between 2022 and 2024, involving 200 undergraduate students studying English and Spanish at two European universities: Guarda Polytechnic University (Portugal) and Budapest University of Economics and Business (BUEB, formerly Budapest Business University, Hungary). Our central research question was:

How does learner involvement in collaborative materials development influence their motivation, creative thinking, and autonomous learning in language courses?

Our qualitative research design was built on three primary data collection methods: classroom observations, written reflections and semi-structured interviews. This triangulation of data sources aims not only to provide a comprehensive view of the impact of materials development on learner motivation and engagement, but also to optimise the study's credibility and transferability. The methodological choices align with Dörnyei's (2007) argument that using multiple data sources can provide a more holistic and in-depth understanding of complex phenomena in language learning.

2.1 Data collection tools and procedures

The procedure for data collection and the tools used varied across the three identified methodological sources: classroom observations, written reflections and semi-structured interviews.

2.1.1 Classroom observations

Classroom observations were conducted during class sessions to monitor how students engaged with the development of learning materials. Using classroom action research as a lens (Ellis & Barkhuizen, 2005), we recorded students' behavioural responses in a field-note template, focusing on their levels of participation/interaction, any signs of motivation and engagement and finally, possible indicators of their collaboration in creativity and autonomy in the design and creation phases. **Table 1** replicates the field-note template we used to observe these three focus areas as well as some general impressions**:**

Table 1

The Field-note Template for Classroom Observations

1. Participation/Interaction
Students or groups:
Activities: writing, drawing, using technology, just observing and/or other _____
Interaction/Collaborative behaviours: sharing ideas, debating, working independently within the group and/or other _____
Notable quotes and/or descriptions
2. Signs of Motivation and Engagement
Body language: facial expressions, posture and/or gestures
Verbal cues: excitement, frustration and/or confusion
Sustained attention: staying on task or getting distracted or other
Examples of (dis)engaged behaviour
3. Indicators of Collaboration in Creativity and Autonomy
Decision-making: choices about the content and/or design of the materials
Problem-solving: dealing with challenges without direct intervention from the teacher
Innovative ideas: unique proposals or original solutions
Examples of student-driven decisions or creative contributions

4. General Impressions

Overall atmosphere: energetic, quiet, chaotic, focused

Unexpected events or observations:

Questions for follow-up

The observations gathered in the field-note template helped to identify patterns, errors and developmental sequences as learners worked together in the classroom.

2.1.2 Written reflections

To give language learners a safe space to articulate their personal learning journeys, they were encouraged to document their experiences and thoughts in written reflections, which were submitted as part of their individual portfolios. **Table 2** presents the reflection template in ten steps:

Table 2

The Written Reflection Template to Accompany Submission of the Course Portfolio

For your final reflection, follow these 10 steps:
1) Begin by describing WHAT you have learned in detail.
2) Then describe the processes and methods you used. This is HOW you learned English in this class.
3) Point out the activities you liked the MOST and justify your selection. Remember that your ideas will help me design better classes for future IPG English students.
4) Do the same thing for what you liked the LEAST in our classes. Explain why it was not a successful strategy for YOU and suggest alternative ideas.
5) Evaluate your general effort in this class on a scale of 1 to 10, where 10 is the best.
6) Apply the same scale for the specific areas of pronunciation, listening, speaking, writing, team work, leadership and empathy.
7) Classify the quality of your participation in class (always on the same scale of 1-10) and justify your evaluation.
8) Classify the quality of your portfolio (always on the same scale of 1-10) and justify your evaluation.

9) Give me some concrete ideas for how to make these classes more interesting, appealing, and useful for other students.

10) Conclude with your own ideas about why English is important for your area, what you could have done differently to improve your work with me AND your specific plans for improving your English in the future.

We then analyzed the results of this artefact created by each student for insights into areas where learners felt more motivated, their perceptions of the materials development process, and their feelings about their involvement.

2.1.3 Semi-structured interviews with students and student teaching assistants

Semi-structured interviews were conducted, as described by Mackey and Gass (2015), with a volunteer sample of student participants and student teaching assistants, notable for their critical thinking and dedication to the teaching experience, in periods varying between 3 and 60 minutes, depending on the synergies created. These interviews allowed for deeper exploration of the themes that had emerged from observations and reflections which, in turn, provided additional perspectives on student behaviour, motivation and creativity. The semi-structured format was leveraged to ensure coverage of key topics while giving participants the flexibility to elaborate on their unique experiences. **Table 3** illustrates these key topics.

Table 3

The Key Topics of the Semi-structured Interviews

1	2	3	4
Participation/Interaction	Signs of Motivation and Engagement	Indicators of Collaboration in Creativity and Autonomy	General Impressions

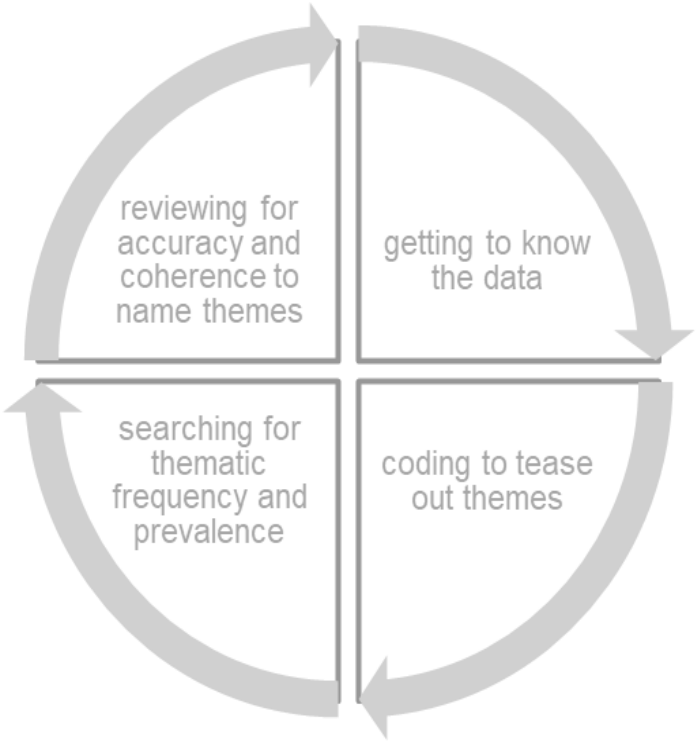
By drawing directly from the themes of the classroom observation template (Table 1) we aimed to preserve coherence while simultaneously encourage exploration of individual perceptions

2.2 Data analysis

All three qualitative data sources were analysed using thematic analysis (Braun & Clarke, 2006) to identify recurring patterns and themes related to learner motivation and engagement; perceptions of creative and autonomous learning; indicators of ownership and personal meaning attached to the learning materials; and peer collaboration dynamics and emerging co-creation processes.

To conduct this analysis, we followed the iterative process in **Figure 1**.

Figure 1 *The Interdependence of Autonomy*



By integrating the data sources into this iterative process, the analysis provides a multi-dimensional picture of how collaborative materials development can promote a sense of agency, creativity, and meaning – the core elements of the proposed framework.

3. FINDINGS AND DISCUSSION

Our research suggests that student involvement in materials development aligns with at least four areas of influence:

- collaborating for autonomy and creative thinking

- building a sense of ownership and critical thinking
- motivating learner engagement in their community of learning
- co-creating with peers.

Taken together, the four areas represent a powerful blend of reflective, critical thinkers with a sense of ownership and self-awareness who are motivated by their community of learning in a positive classroom environment, where creative thinking makes learners feel they are really problem-solvers. The interplay of these influences on learners strengthens their added value as co-creators of educational content. Teachers can integrate these insights into their practice by designing dynamic learning environments that encourage autonomy and creativity, including for example strategies and techniques for design thinking and avoiding bias to support learner engagement in materials development.

The SEED and CORALL projects offer practical guides that support language learning in these interconnected educational contexts. Based on the *SEED Guide* (Arau Ribeiro et al., 2025a), students engage with entrepreneurial endeavors through activities that emphasize risk-taking, boundary-crossing, and sustainability while the *CORALL Guide* drives learners through coaching-oriented resources as they develop language skills for specific purposes. Discovering these structured yet adaptable approaches to teaching involves experimenting with diverse solutions for contextualizing lessons within local realities and for students to take an active role in the iteration and refinement of their learning strategies. Both guides are built on the principle of learner agency, transforming students from passive recipients into active designers of their educational pathways.

3.1 Collaborating for autonomy and creative thinking

The study reveals that this collaborative atmosphere, where learners feel valued and heard, contributes to a positive classroom environment, characterized by active participation and peer support for creative thinking. Our findings on student-teacher collaboration align with Auerbach's (1995) work on critical pedagogy, which showed that participatory curriculum development can challenge traditional power dynamics and

empower learners. Through this shift in power dynamics, an environment of less risk can be created for linguistic and cultural exploration. Positioned as co-creators rather than passive recipients, the learners perceive correction (or failure) as the essential risk-taking required for genuine language acquisition and creative output. The resulting psychological safety acts as a necessary foundation for confidently pushing their linguistic boundaries and engaging with complex, potentially sensitive, cultural topics in depth.

When students see their contributions being taken seriously, it fosters a sense of community and mutual respect. In our study, student teaching assistants reported that learners seemed more willing to share their thoughts and suggestions, knowing that their ideas could shape the learning materials used by others. As a result, our language classes are perceived as dynamic learning spaces where students take initiative, pose thoughtful questions, and demonstrate a greater willingness to explore complex linguistic and cultural topics in depth. This atmosphere of mutual support and involvement has been a key factor in sustaining high participation rates and encouraging learners to take risks and explore new ideas. By explicitly cultivating this safe space for risk-taking, learners especially feel more supported to test unfamiliar linguistic structures without fear of judgment.

3.2 Building a sense of ownership and critical thinking

Students displayed a stronger sense of ownership and commitment to learning activities when they really believed they were directly involved in the materials development process. This sense of ownership has led to higher levels of engagement in classroom discussions and collaborative projects, as learners see that their input has real value and influence. Mirroring Breen and Littlejohn's (2000) research on materials development as a pedagogical task, both studies emphasize that, when learners become producers – not just consumers – of materials, they develop a deeper, more analytical understanding of the language. When the work they developed in teams was shared on digital platforms for other teams to interact with them, their heightened participation was reflected in their enthusiasm and willingness to participate with in-depth contributions. The context of the projects, going beyond their immediate sphere of

influence, gained relevance since their work would be used by other students across Europe. They felt responsible for thinking more carefully about what other learners might struggle with. As they practiced taking responsibility for an external audience, the task was transformed from a classroom assignment into a more meaningful, authentic, and consequential project.

In their written reflections, the creation of materials stood out as a source of greater understanding of the language content, which went beyond surface-level knowledge. Their perception of the positive impact on their critical thinking and problem-solving abilities enabled a more analytical approach to their language tasks. Thus, for example, they demonstrated more creativity about how a question might be broken down; by asking how a teacher would do it, they were analyzing their language usage differently. This metacognitive shift from merely *doing* the task to actively *designing* it was what activated their higher-order thinking skills.

3.3 Motivating learner engagement

The research findings indicate that involving language learners in a community of learning where they can focus on the development of educational materials has a significant positive impact on their motivation, engagement, and overall learning experience. Our findings on learner involvement directly support the core tenets of Self-Determination Theory (SDT) (Deci & Ryan, 1985; Ryan & Deci, 2000). Through the lens of SDT, learner involvement in materials creation directly satisfies the core tenets of intrinsic motivation, defined as autonomy, competence, and relatedness.

Interviews with the student teaching assistants consistently indicated that these learners, participating in the creation of learning resources, demonstrated increased levels of autonomy and self-directed learning. Their active involvement in designing materials has fostered a sense of ownership and commitment, motivating them to participate in classroom activities and discussions. The freedom to choose not only relevant topics but also the format for their materials satisfied the need for autonomy; receiving and providing feedforward built their sense of competence; and collaborating with peers and teachers established a strong sense of relatedness. This heightened

participation was often noted in their written reflections, where they expressed feeling more engaged and eager to contribute ideas.

3.4 Co-creating with peers

By engaging in this process, the students expanded their roles beyond that of consumers of the materials; instead, the learners became co-creators, enhancing their understanding of language learning dynamics and fostering a deeper connection with the educational content. Their involvement required that they think critically about what makes learning effective and how different materials can support various language skills. Working alongside teachers and other student teaching assistants, the students provided valuable input on the types of exercises, topics, and resources that might be most engaging and effective for learners like themselves. They reviewed drafts, offered feedforward on usability, and suggested modifications to ensure the guides are accessible and relevant to diverse learning styles. They also actively made decisions about the types of tasks, topics, and formats that might be engaging and meaningful. Their collaboration gave them a real influence on the structure and presentation of the learning materials, making the guides more attuned to the needs of future learners. Their contributions helped shape the final versions of the guides, ensuring that the materials were suitable not only for teachers but also for the learners themselves.

As a form of distributed cognition, this co-creation process is characterized by the shared burden of design and the pool of creative solutions across the learning community. With this approach, the learners are actively involved in shaping the content rather than passively receiving it. Their expanding roles in the learning community align with Lave and Wenger's (1991) concept of a *community of practice*, where learners transition from peripheral participants to full members through active collaboration. Through co-creation, they play an active role in language learning dynamics. By collaborating with instructors to design activities and resources, they gain a unique, behind-the-scenes perspective on language learning. Moreover, being part of the creation process encourages students to view language learning as a holistic and interactive process, rather than a series of isolated tasks. As a result, they feel more connected to the educational content and are able to apply this insight to their own

language development, reinforcing their motivation and interest in the subject matter. This more integrated and meaningful learning experience, where students' roles evolve from learners to expert contributors, enables an understanding of how particular activities can develop specific skills and competences, from active listening, semantic selection, cultural mediation, and social agency to how to adapt materials for different contexts and learners. The practical application of pedagogical theory through materials design also serves as a powerful form of knowledge transfer that moves abstract concepts into concrete practice.

3.5 Overcoming challenges in materials-based learning

While the collaborative development of learning materials offers clear benefits for building up learner autonomy, creativity, and motivation, the process is not without its challenges. Several recurring issues emerged during the classroom observations, student reflections, and teaching assistant interviews, shedding light on areas where additional support was required to fully engage with the approach.

Scaffolding from CLIL methodology (Morgado et al., 2015) helped meet these challenges to transition learners from traditional roles to co-creators. Providing structured guidance in the early phases of materials development revealed increasing familiarity with the iterative nature of development, especially when learners could feel a sense of accomplishment in meeting the smaller goals in more achievable tasks. The integration of project management skills, whether scope definition or milestone setting, was quite new to most learners, who embraced this addition to their learning process. This also involved becoming familiar with respecting the time frame, which had initially led to setting unrealistic goals and overly ambitious products.

Practice with sharing their design choices and justifying their revisions at each step helped to shift the mindset towards criticism. Building on the influential meta-analysis on the power of feedback (Hattie & Timperley, 2007) when future-oriented to guide the learner toward improvement, constructive feedback – re-framed as feed*forward* – was a successful strategy for revision (Arau Ribeiro & Fischer, 2021). Peer and teacher feedforward became an integral feature of every stage of development. Learners

commented that they came to expect the feedforward due to its added value for refining their work as well as for the opportunity to develop their critical voices.

Another effective strategy involved using the target language with the support of functional language banks and co-created glossaries, which minimized over-reliance on the learners' first language(s). The language banks, where phrases and expressions were collected based on purpose and/or social function, were particularly useful in brainstorming sessions and more conceptual activities, where meaning had to be negotiated and when spirited conversations could have drifted away from the target language. Learners reported that having the terminology at hand, including the useful idiomatic expressions they were curious to try out in context, was beneficial and felt that the act of co-creating a lexical tool gave them a more vested interest in making it work for them and for others.

Learners also struggled with self-assessment, protesting about analyzing their own contributions and evaluating their evolving competences. The prompts opened the door to guided reflection, which quickly led to their own development of these self-assessment rubrics. The key was constant inclusion of reflection moments for metacognitive awareness and opportunities to write about their personal experiences, goals, and creative choices. This resistance to self-assessment echoes a common learner reliance on external validation, which the reflective prompts aimed to internalize.

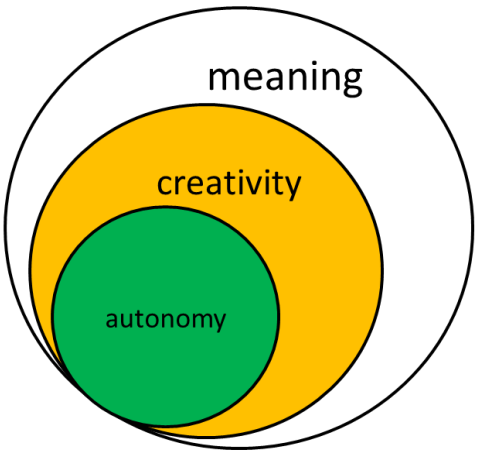
3.6 A proposed framework for developing collaborative work

The results of our research have led to the core tenets of a proposed framework in which autonomy, creativity, and meaning together make for an impactful learning experience. This framework suits the activity of materials development, where learners create a usable, real-world approach for other learners; have control and ownership over their actions and learning (autonomy); generate diverse ideas and possibilities (creativity); and find personal significance and purpose (meaning). The emphasis on co-creation and peer collaboration within a community of learners finds strong support in Vygotsky's (1978) Sociocultural Theory, whereby learning is fundamentally social process. When knowledge is constructed through interaction with others, the effective learning

is best supported in the learner's Zone of Proximal Development (ZPD), guided by a more knowledgeable peer or instructor. This dynamic was a key driver in the enhanced creative and analytical skills observed in our student sample. The framework, therefore, posits that the act of designing learning materials functions as a powerful, situated learning task that inherently operates within the learners' ZPD.

The interconnectedness of this framework, depicted in an iterative interdependence of rolling wheels, joins autonomy, creativity, and meaning (**Figure 2**). When taken as decidedly integrated concepts, the wheels are aligned and synergetic reinforcement comes into play. Note that *creativity without autonomy* can lead to frustration; *autonomy without meaning* can lack direction; and *meaning without creativity* can be stagnant, all of which are descriptions antagonistic to what we imagine as dynamic, collaborative learning in higher education.

Figure 2 *The Interdependence of Autonomy, Creativity and Meaning*



The iterative and interconnected rolling wheels of creativity, autonomy, and meaning together emphasize their dynamic nature in a system aimed at re-invention that can be applicable to either practical, real-world situations or the fantastic and imaginary. Learner-centeredness here is critical – in individual and collaborative learning – so that the students know, see, and feel that not only are autonomy and meaning at the forefront but also that their learning experiences are shaped by a blend of their collective academic, cultural, and personal backgrounds (Némethová et al., 2022). Essentially, the framework encourages a reflective, active, and meaningful approach, where learners

take ownership of their development and connect that progress to their own personal and cultural contexts.

In order to illustrate the observed trends in the classroom as per the collection of data, the tenets of autonomy, creativity, and meaning have been codified below (**Table 4**).

Table 4 *Trends Correlated with the Framework Tenets*

Observed Trend	**Evidence from Data**	**Autonomy (A)** **Creativity (C)** **Meaning (M)**
Increased team participation and peer interaction	Learners negotiated materials design choices, debating wording, visuals, and formats	A+C: learners took ownership of decisions and applied creative solutions
Increased willingness to take creative risks	Learners experimented with humor, visual metaphors, and alternative formats, like podcasts and puzzles	risk-taking and innovation may be due to the freedom they were given to design
Higher sense of ownership over learning process	Portfolio reflections repeatedly mentioned their pride in contributing to materials that other learners would use	A+M: learners attached personal significance to the co-created materials
More frequent reflection and self-assessment	Learners asked themselves, "How would a teacher design this?" and reflected on how and why they made certain choices	active metacognition linked personal growth to creative tasks
Stronger connection to real-world relevance	For SEED, learners reported that designing sustainability-themed materials helped them connect language learning to future career goals For CORALL, learners repeatedly noted the curious interconnection between collaboration and autonomy. The INTERdependence was a new notion for them to better understand teamwork	M+C: Creative work became purposeful and tied to personal aspirations
Enhanced sense of classroom community	Learners provided more and better peer support, helping teammates revise content and brainstorming collectively and identifying more with their community of practice and learning	Collaboration and shared creative work supported a growing sense of belonging and cultural exchange

Shift from passive learning to active co-creation	Teaching assistants observed more volunteering, even from the more timid, to lead segments of teamwork and offering solutions to design challenges	A+C+M: Co-creation cultivated motivation through ownership, innovation, and relevance

To provide insight to our data, we share some student voices from learner reflections submitted with their final portfolios.

"At first, I was nervous about designing something for other students to use. When we got started, I discovered that we could use our creativity. My team decided to create a bunch of role-playing games instead of making a regular worksheet. A much cooler way to practice that gave our colleagues an opportunity to interact." [S1]

"When [our teacher] told the class that our work was for the public, I was confused. How was our contribution important? It was a crazy idea to imagine that other students can use our work. Even from other countries? But it is true. I checked. The alterations and adaptations we made are in the final project and other countries can use it. I even told my family." [S2]

"The collaboration in designing materials with [our teacher] for other people to use made me feel like the activities were important. I felt responsibility for creating added value and led my team better. We were careful with our choices and how we explained things. We also wanted to make our examples interesting, especially the technical and cultural parts." [S3]

"The project was about sustainability and I have to say that it is a topic that is really old. Every year, in every class, it is the same. But then our team understood what was special - our work and our decisions were going to be used by other students outside of [our university]. So I was actually interested in sharing my ideas about upcycling for ethical fashion and my team liked that a lot." [S4]

"Part of this reflection is dedicated to our work on the Erasmus projects so I just have to say that I felt like a teacher. On our team, we thought about how other students learn and the problems they usually have. We worked on the [company] app to discover how it was created and we wrote questions that were important to us and FOR other students." [S5]

"We started badly. We had such a hard time on our team because we did not agree about anything. But then we discovered that our disagreement was like divergent thinking and we suddenly could see it as an opportunity to find many new ideas. That was awesome. We had the greatest selection from all of our disagreements and then the techniques for finding the best options were so much fun. We completely forgot about grades with so much creating." [S6]

While S1 shows a shift from nervousness to discovery, where they seem proud and confident about taking creative risks and clearly owning their team's creation, S2 and S3 show the impact of personal purpose in their work. These three extracts show the connections between creativity and autonomy [S1] and then link autonomy to meaning [S2, S3].

The example of S4 is important for teachers to understand that a topic can be overused and requires re-framing to elicit ongoing interest; more specifically for this learner, they connected creation for language learning to their own passion and personal, thus linking creativity to meaning. Bringing it all together, S5 and S6 reflect the full integration of the three aspects as well as the importance of peer-collaboration and creative support.

These reflective excerpts demonstrate how learners can experience the creative autonomy process as both personally meaningful and socially collaborative. Their sense of ownership, creative risk-taking, and desire to contribute to a broader learning community can be taken as critical factors in sustaining motivation. By framing materials development as a collaborative, student-driven process, learners adopted more active roles. As they moved beyond a receptive, more passive engagement, they found meaning in self-directed, creative, and purposeful learning behaviors.

CONCLUSIONS AND FURTHER RESEARCH

To help teachers implement co-creation, the specific teaching strategies used to meet challenges were adjusted, resulting in a collaborative classroom culture (see **Table 5**).

Table 5 *Teaching Strategies to Overcome Co-creation Challenges*

Challenge	Strategy
Unrealistic goal-setting	Goal-setting frameworks can break down large tasks into achievable stages to manage progress and understand the iteration
Reluctance to engage with feedforward	Frequent reflective exercises where learners justify their design choices and revisions can encourage them to incorporate feedforward
Excessive reliance on mother tongue	Scaffolding with functional language banks and co-created glossaries can support learners as they negotiate meaning
Reluctance to reflect and self-assess	Guided reflection prompts and self-assessment rubrics are valuable tools to link their creative choices with their personal learning goals and build metacognitive awareness

These strategies not only helped students develop more manageable, realistic projects but also nurtured their ability to engage critically with feedforward, express themselves in the target language, and build metacognitive skills. As a result, learners transitioned to their role as active co-creators, which contributed significantly to a collaborative environment for enhancing their motivation and engagement.

Our research-based argument for involving language learners in the development of educational materials finds support in their experiences. The findings advocate for a collaborative approach to materials development where learners' insights, preferences, and creativity are integrated into the design of learning activities. This approach has dual benefits in that it tailors the materials to learner needs and makes the materials more relevant. Inclusive steps like these, such as involving learners in their own assessment and visions of progress, further enhance the learning process and even provide support for authentic assessment through learning journals, portfolios, and collaborative open-book exams (Arau Ribeiro et al., 2025b). Ultimately, involving learners in this creative process aligns with teaching and learning objectives that prioritize learner-centered approaches, promoting a richer, more meaningful educational experience.

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