COGENT EDUCATION
2026, VOL. 13, NO. 1, 2670907
https://doi.org/10.1080/2331186X.2026.2670907

INCLUSIVE & SPECIAL EDUCATION | RESEARCH ARTICLE

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'Individual strengths, collective power!', a teacher-driven proof of concept for strengths-based education

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ABSTRACT

This proof-of-concept study evaluated the relevance and applicability of 'Individual Strengths, Collective Power!', a character strengths-based program designed to improve classroom climate in inclusive Swiss schools. Inspired by the 'Awesome Us!' program, it incorporates five key steps: building shared language, recognizing others' strengths, identifying own strengths, practicing strengths, and recognizing collective strengths. A simplified version was implemented in three classes of 9–12-year-olds over five weeks, with teachers using it thrice weekly. Students were assessed using the Positive and Negative Affect Schedule (PANAS) and a questionnaire survey, while teachers participated in a focus group. Results showed high interest in character strengths among students and teachers. Students' positive affect increased significantly throughout the program. Both students and teachers provided positive feedback on the activities' pedagogical quality, with students finding them engaging. Suggestions for improvement included clearer instructions and visual supports. The material proved relevant and applicable to the Swiss school context, indicating potential for larger-scale implementation. The study highlights the promise of strengths-based interventions in Swiss inclusive education and emphasizes the need for cultural and contextual adaptability. Limitations include a small sample size and potential subjectivity in data interpretation. Future research should evaluate the program's efficacy on classroom climate and student relationships.

ARTICLE HISTORY
Received 4 August 2025
Revised 3 October 2025
Accepted 5 May 2026

KEYWORDS
Proof of concept; positive interdependence; classroom climate; character strengths; strengths-based program

SUBJECTS
Social Sciences; Education; Social Sciences; Behavioral Sciences; Educational Psychology; Social Sciences; Behavioral Sciences; Cognitive Psychology; Motivation

1. Introduction

Inclusive classrooms, where students of all abilities learn together, require pedagogical strategies that foster positive relationships among diverse students. This study evaluates the relevance of 'Individual Strengths, Collective Power!', a pedagogical program designed to foster positive interdependence and improve classroom climate in inclusive settings in Switzerland.

Developing a positive classroom climate is becoming increasingly important in inclusive settings (Margas, 2023). The term *inclusive* refers to a classroom where the teacher undertakes to integrate students regardless of their needs or resources (Ainscow & César, 2006; Forlin, 2010). This political vision lies at the heart of the Salamanca Statement (UNESCO, 1994), highlighting the inalienable right of the student to experience ordinary schooling, close to their place of residence, regardless of their educational needs. The implications of the Salamanca Statement are visible in Switzerland through a major political initiative known as the '*concordat intercantonal de pédagogie spécialisée*'[1] (CDIP, 2023). In the wake of this historic initiative, Swiss education systems have committed themselves to developing specific policies to support more inclusive education (e.g. Etat du Valais, 2023).

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This political framework states that teachers are responsible for facilitating the progress of all students within a shared school experience. This progress encompasses not only academic achievement but also psychosocial skills within the school community (Cipriano et al., 2023). Therefore, the quality of an inclusive school system cannot be solely determined by students' grades; a successful system is one in which every student makes both academic and psychosocial progress, learning to coexist in a diverse human environment (Molina Roldán et al., 2021; Wang & Degol, 2016).

Classroom climate refers to the evaluation of the quality of relationships within the classroom, as perceived by both students and teachers (Allodi, 2010; Fraser, 2012; Margas, 2023). It provides insights into how students, with their diverse resources and needs, manage to coexist and progress by recognizing and utilizing available resources. In a supportive educational context, available resources become evident when a student perceives differences among peers in a positive light (see Bates-Krakoff et al., 2022). This leads each student to develop positive relationships, i.e. positive interdependence, within the class by benefiting from what each peer can contribute to the group (Quinlan et al., 2015). *Positive interdependence* can be defined as the student's recognition of relationships with others that foster mutual flourishing (Johnson et al., 2008). One example would be a situation of school assistance where one student helps another learn to read by communicating suitable strategies, mutual aid based on mutual trust, a spirit of cooperation, and belief in the importance that each student possesses unique resources that can be shared for the benefit of the community. Positive interdependence has been shown to be a good predictor of psychosocial skills development (Goodman et al., 2015; White & Murray, 2015) and academic achievement (White & Kern, 2018).

Establishing this educational context requires considerable pedagogical effort. It seems that humans may be influenced by a negativity bias that encourages a detrimental perception of others. *Negativity bias* can be defined as a natural inclination to focus on the negative aspects (Baumeister et al., 2001), such as attaching more significance to memories of negative emotions rather than positive ones, or finding it easier to recall criticism compared to other forms of encouragement. Specifically, as students develop, they need an educator who actively promotes prosocial values to support a positive view of others. In addition to values, it is necessary to implement a specific pedagogical framework; simply declaring values is not enough, and teachers may struggle to incorporate prosocial values into everyday school life. Providing an education that allows each student to feel comfortable within the group and to progress is a central challenge of the profession; a negative perception of classroom diversity by teachers can have disastrous effects on their sense of pedagogical effectiveness and classroom climate (Booth et al., 2003; White, 2021). It is, therefore, essential to support teachers' development of their ability to act positively in an inclusive setting.

Developing teachers' skills is achieved through continuing education and involving them in creating pedagogical solutions (Egert et al., 2020; OECD., 2009). Continuing education provides a space for teachers to reflect on their own teaching practices and identify ways to improve. Creating teaching material is a promising solution discussed in continuing education. By offering a training context where teachers can nurture autonomy and competence while sharing their pedagogical innovations and ideas under the trainer's supervision, the engagement of participants increases (Ryan & Deci, 2000). In other words, a program of this nature promotes the evolution of a teacher's professional position.

However, it is important to base the construction of teaching materials on scientific knowledge. Specifically, scientific literature offers promising perspectives on certain pedagogical interventions that have positive effects on interdependence in school. Positive psychology is a field that has developed several such interventions in educational contexts. This area of research studies the conditions and optimal functioning of people, groups, and institutions (Gable & Haidt, 2005). For over twenty years, positive psychology has brought together theoretical models and research aimed at better identifying and understanding how well-being, emotion regulation, and character strengths in particular, influence the functioning of an individual (Coppley & Niemiec, 2021; Peterson & Seligman, 2004).

Character strengths can be defined as positive personality traits that drive high levels of performance, energy, and use (Linley & Harrington, 2006; Waters, 2017). According to the taxonomy of Peterson and Seligman (2004), 24 positive character strengths are identified, such as gratitude, forgiveness, kindness, social intelligence, appreciation of beauty, and leadership. Authors of several studies emphasize the paramount importance of recognizing and using one's character strengths in developing positive

interdependence and promoting optimal functioning (Lavy, 2020; Madden et al., 2020; Schutte & Malouff, 2019; Wood et al., 2011).

In the context of inclusive education, imagining a classroom where every student, regardless of their individual needs, can acknowledge their own strengths as well as those of their peers shows promise. This could be a powerful tool in implementing an educational approach that promotes community living amidst human diversity. As suggested by Waters (2017), this represents a noteworthy change in the deliberate mindset of students. Given its emphasis on social values, further exploration of embracing diversity and using a strengths-based language is warranted in the field of pedagogy.

However, a thorough review of strengths-related theories and practices requires careful examination of the circumstances in which invoking strengths can be relevant. In her thesis review, Quinlan (2012) suggests that the various methods of using strengths are not equal, leaving some questions unanswered regarding optimal implementation strategies, contextual factors that influence effectiveness, and the specific mechanisms through which strengths-based interventions operate in diverse educational settings.

Considering these findings, it is reasonable to believe that reinforcing the character strengths already present can have a positive impact on positive interdependence within a school setting. When each student is aware of the strengths of their peers, the group's diversity can become apparent. It is much more beneficial for a community of students to develop as a group, leveraging the known resources of all members. Choosing to work on character strengths is pedagogically valid as it aligns with the principles of inclusive education and promotes prosocial values. However, this raises the question of how to integrate the concept of strengths into a classroom setting.

There are several strengths-based programs in schools, such as 'Character Counts', 'Cool Kids Helpfulness', 'Giraffe Heroes' (Linkins et al., 2015), or 'Awesome Us!' (Quinlan, 2012). In inclusive contexts, we favor programs offering activities that are interested in character strengths as they are primarily designed to allow each student in the classroom to discover diversity in the form of resources.

Recent systematic reviews have demonstrated the effectiveness of positive psychology interventions in educational settings (Lucciarini et al., 2025; Mendes De Oliveira et al., 2022), with meta-analytic evidence supporting character strengths interventions specifically (Bates-Krakoff et al., 2022; Schutte & Malouff, 2019). Established programs like 'Awesome Us!' provide valuable evidence-based frameworks (Coppley & Niemiec, 2021; Lavy, 2020). However, implementation science evidence suggests that teacher appropriation and program fidelity are enhanced when educators are actively involved in material development rather than simply adopting pre-existing programs (Durlak & DuPre, 2008; Ryan & Deci, 2000). This collaborative approach may be particularly important for cultural adaptation to specific educational contexts.

More broadly, Linkins et al. (2015) have sought to identify the essential steps of a pedagogical sequence that can guide such collaborative program development. Considering how to facilitate student learning, the authors identified five steps that any program should include: (1) develop a common framework/language, (2) recognize and reflect on the strengths of others, (3) recognize and reflect on one's own strengths, (4) practice and apply strengths, (5) identify, celebrate, and cultivate the strengths of the group (class, school, etc.).

Considering its compatibility with the proposals of Linkins et al. (2015) and its extensive research, one program stands out: 'Awesome Us!' provides valuable pedagogical resources to develop character strengths. Created by Quinlan (2012) as a classroom-based intervention for students aged 9–12 years, it aims to teach students how to identify and use their character strengths, with the objective of enhancing well-being, engagement, and relationships. Grounded in positive psychology research, it incorporates various strategies, such as focusing on strengths that students are familiar with or encouraging the identification of peer strengths to foster relationships.

The 'Awesome Us!' program consists of six weekly sessions. First, students are guided to identify their strengths by discussing personal stories, creating collages of moments when they have felt at their best, and connecting to the character strengths of the VIA classification (VIA Institute, 2023), derived from the work of Peterson and Seligman (2004). Students then work on learning to recognize strengths in their peers and share stories of strengths use. The program then applies strengths to personal goals, teaching strategies such as visualization and reminders to support the pursuit of a goal. Students are encouraged

to set a self-concordant personal goal and select the strengths to help them achieve it. The final sessions focus on friendship, with students setting a friendship goal and learning to actively celebrate other people's good news.

This program has been evaluated and is considered effective (Quinlan et al., 2015). Quinlan and colleagues highlighted that 'Awesome Us!' has a positive impact on group cohesion, the sense of belonging, and conflict reduction. Therefore, it serves as a valuable source of inspiration for the present study. 'Awesome Us!' was created specifically for schools and provides practical and engaging pedagogical activities. However, simply duplicating and implementing the program for the Swiss context is not feasible for two main reasons. First, adopting an existing program contradicts the principle of involving teachers in continuing education, where they create or adapt their own pedagogical resources. Second, the Swiss context requires the development of a pedagogical program aligned with the school's functioning and annual goals (CIIP, 2023).

Based on these considerations, the decision was to draw inspiration from the 'Awesome Us!' program, while recognizing the need for a resource that was better adapted to the specific context. Consequently, collaboration with teachers facilitated the development of a new teaching tool from scratch, called 'Individual Strengths, Collective Power!'. This approach was deliberately chosen to encourage the appropriation and relevance of the tool by teachers in their specific cultural context. Through collaborative construction of the material, it was possible to leverage existing resources while maintaining the flexibility to incorporate curriculum-aligned suggestions. This new program follows the five steps outlined by Linkins et al. (2015), providing a strong foundation for positive educational practice.

To validate the proof of concept, the present study focused primarily on an evaluation of the relevance and applicability of a selection of activities from 'Individual Strengths, Collective Power!' in an inclusive educational context. Specifically, this proof-of-concept study investigated: (1) the relevance of the program, defined as its ability to engage students and teachers and align with their educational needs in the Swiss context; and (2) the applicability of the program, defined as its practical feasibility and usability in real classroom settings, including identification of implementation challenges and areas for improvement.

2. Methodology

Kendig (2016) notes that the purpose of a proof of concept is to determine the feasibility of a project. This design was particularly appropriate for our research objectives for several key reasons. First, our collaborative approach with teachers in developing culturally adapted materials represented a pedagogical strategy that required preliminary validation within the Swiss educational context before larger-scale implementation. Second, the integration of character strengths interventions within existing classroom practices needed an initial assessment to ensure relevance and applicability. Third, the proof-of-concept methodology enabled us to identify potential implementation challenges and gather essential feedback from both students and teachers to guide future program development. To this end, this study focused specifically on the last two steps of the five-step development process of the 'Individual Strengths, Collective Power!' program (see Figure 1).

As Kendig (2016) emphasizes, proof-of-concept studies have inherent limitations that must be acknowledged. These designs prioritize feasibility assessment over definitive efficacy demonstration, resulting in limited generalizability beyond the specific context studied. Additionally, the focus on preliminary evidence means that the more rigorous experimental controls and larger sample sizes necessary for robust causal inference are typically not implemented in favor of exploratory investigation.

2.1. Preliminary steps description

The final two steps, implementation and evaluation, are specifically related to analyzing the relevance and applicability of the 'Individual Strengths, Collective Power!' program. These steps culminate from three preliminary steps: (1) initial exploration, (2) conceptualization, and (3) material construction. The exploration step gathered pedagogical proposals from teachers, with the aim of developing a program based on teachers' actual practices (Bressoud et al., 2019). Subsequently, during the conceptualization

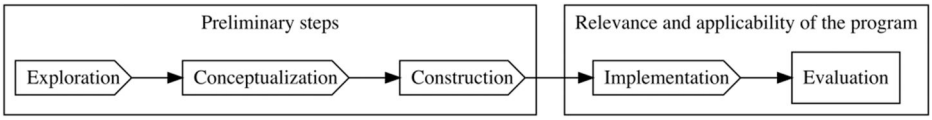

Figure 1. Development process for the 'Individual Strengths, Collective Power!' program.

Figure 2. Program board game. *Note:* The game board shows a path with milestones corresponding to the school year progression. French text translations: "Départ" = Start; "Arrivée" = Finish; "A chacun ses forces" = Individual strengths.

step, pedagogical activities were selected for each of the five steps outlined by Linkins et al. (2015). These activities were chosen for their instructive quality, connection to the regular teaching program, and ease of use in the classroom. The program's concept aimed to provide specific teaching material for each learning step, allowing teachers to make choices that align with their work context and meet specific challenges. Lastly, the concept implied that the program should be implemented over a period long enough to have an impact on the daily life of the class.

2.2. Program description

During the construction step, a kit was developed that included a board game displaying a path consisting of 20 milestones, each milestone corresponding to one week of the 38-week school year (see Figure 2). The milestones were organized into four categories, with the first three categories corresponding to the initial three steps of the pedagogical sequence outlined by Linkins et al. (2015): developing a common framework/language, recognizing and reflecting on the strengths of others, and recognizing and reflecting on one's own strengths. The fourth category represented the final two steps of this sequence (practicing and applying strengths, and identifying collective strengths), and the remaining milestones served as summary points. A poster and cards were included to describe the 24 character strengths, each with its own illustration (see Figure 3). A box of activities, categorized by the five stages, was also included for teachers to use as they wish when progressing through the course (see Figure 4). Aligned with the school's functioning and annual goals (CIIP, 2023), these activities offer flexibility and cover various academic subjects, modes of collaboration, durations (ranging from 5 to 45 minutes), and materials (such as crosswords, stories, and role-play). The program started with an introductory story and ended with a concluding story. Intermediate stories were provided at each summary milestone, allowing students to apply what they have learned. The teacher's manual provided a concise overview of the project, its scientific and theoretical foundation, and the practical value of its components.

2.3. Participants selection and description

To evaluate the relevance and applicability of the program, three classes were selected based on voluntary participation and teacher interest. In a regional French-speaking Swiss context, these classes came from the same region, were under the same school administration, and were made up of students aged 9 to 12. The teachers were already familiar with character strengths. All students from the three classes ($N = 51$) participated in the activities (see Table 1). Most of the participants in the sample were aged 9

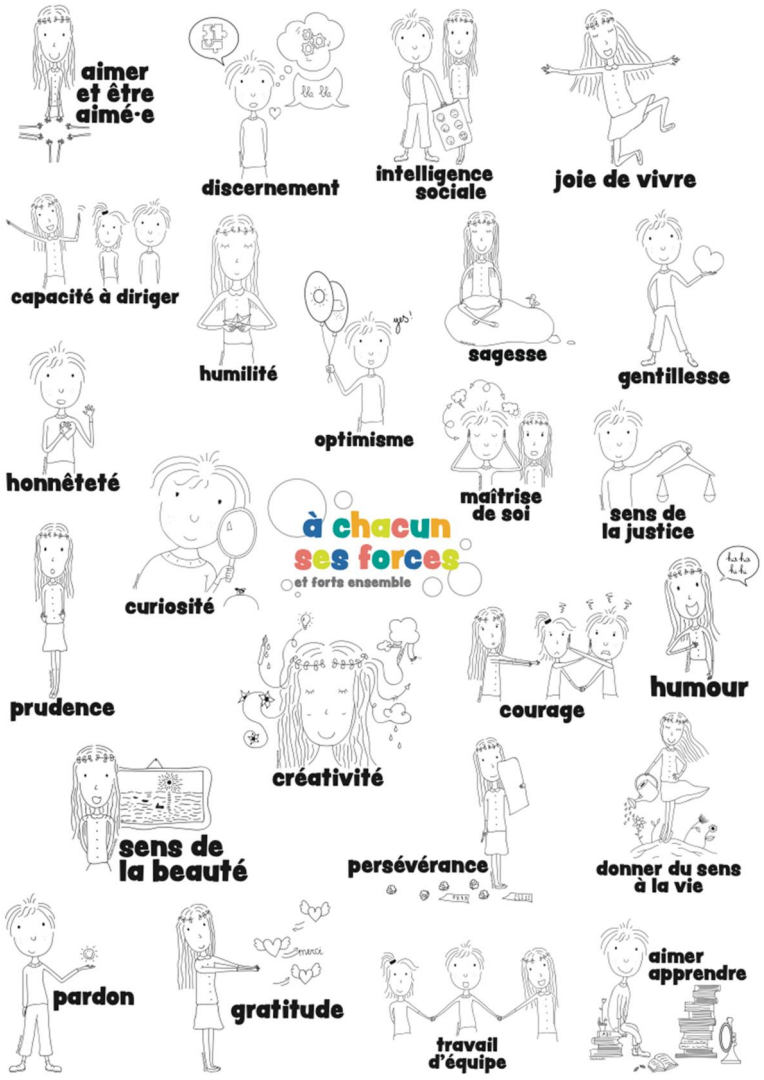

Figure 3. Program poster and cards (examples). *Note:* Examples of character strength cards used in the program. The 24 character strengths are displayed with visual representations. French text shows the character strength names, which correspond to the VIA classification: Appreciation of Beauty and Excellence, Bravery, Creativity, Curiosity, Fairness, Forgiveness, Gratitude, Honesty, Hope, Humility, Humor, Judgment, Kindness, Leadership, Love, Love of Learning, Perseverance, Perspective, Prudence, Self-Regulation, Social Intelligence, Spirituality, Teamwork, Zest.

to 10 years, within the target population. Beyond age and gender, no other external control variables were collected.

The teachers from each class agreed to participate in the evaluation of the material. Each teacher had more than five years' experience with teaching. In addition, they had been introduced to the topic of character strengths through a conference at their school. In this context, they had already had the opportunity to experiment with discovering and using their own strengths in a workshop. They could be considered well-informed about strengths.

2.4. Ethics approval and consent to participate

This study was conducted as part of two Bachelor's theses in teacher education at the Valais University of Teacher Education (Switzerland), following standard academic research protocols for educational research. The study adhered to ethical standards outlined in the Code of Ethics for Research in Universities of Teacher Education adopted by the CDHEP (2002) and the Code of Scientific Integrity

Figure 4. Program activities (examples). *Note:* Sample activities from the program toolkit showing different formats and approaches. French text translations available upon request for specific activity titles.

Table 1. Students' description.

Class	*N* (percentage of girls)	Mean age (standard deviation)
1	15 (33.33)	9.93 (0.26)
2	19 (36.84)	9.05 (0.23)
3	17 (41.18)	10.12 (0.33)

Note: Means and standard deviations are rounded to two digits.

developed by representatives of the Swiss Academies of Arts and Sciences, in accordance with Swiss Federal Law on Research involving Human Beings (LRH, 2011). As this research involved normal educational activities within the scope of teacher professional development, formal ethics committee approval was not required under Swiss educational research guidelines. However, informed consent was obtained in writing from all participating teachers and parents/legal guardians of student participants. All participants were informed about study objectives, voluntary participation, and withdrawal rights. Data were anonymized, stored securely, and accessed only by the research team, in compliance with Swiss federal and cantonal data protection regulations. Student data were collected using anonymous codes provided by teachers, ensuring that researchers never had access to student identities. This double-blind anonymization process provided additional protection for minor participants.

2.5. Implementation

For the evaluation, teachers were required to use a simplified version of the 'Individual Strengths, Collective Power!' program three times per week over a period of five weeks. The five-week trial period serves as a pilot implementation to assess the program's initial feasibility and contextual fit within school constraints, though Durlak and DuPre (2008) note that meaningful implementation assessment typically requires longer periods for comprehensive evaluation. Implementation fidelity was addressed through regular communication between the research team and teachers. This communication enabled

Table 2. Simplified version of the program for the proof-of-concept study.

Week	Steps proposed by Linkins et al. (2015) and related activities	Duration
1	*Developing a common language*	105 min
	Activity 1 – Starting story	
	Activity 2 – Crossword activities	
	Activity 3 – Linking words	
	Activity 4 – Memory activities on strength definitions	
2	*Developing a common language*	30 min
	Activity 5 – Identifying strengths	
	Identifying the strengths of others	60 min
	Activity 6 – Little Red Riding Hood	
	Activity 7 – Expressing gratitude	
3	*Identifying the strengths of others*	45 min
	Activity 8 – Identifying the strengths of those around me	
	Identifying your own strengths	60 min
	Activity 9 – The Strengths Coat of Arms	
	Activity 10 – Strengths Challenge	
4	*Identifying your own strengths*	75 min
	Activity 11 – Identifying all the strengths of the class	
	Activity 12 – Deepening gratitude	
	Cultivating strengths	30 min
	Activity 13 – Resolving conflict	
5	*Cultivating strengths*	90 min
	Activity 14 – Student debate	
	Activity 15 – Problem situations	
	Activity 16 – A story about strengths	

case-by-case pedagogical decisions specific to each classroom. This compromise allowed the practical implementation of sessions to align with classroom life without compromising pedagogical objectives.

The program activities were the same for all three classes and standardized to enable comparison of results (see Table 2).

In summary, the intervention program has been designed in a structured way, respecting the recommended learning steps on character strengths.

2.6. Measurement

The proof-of-concept evaluation relied on student and teacher information.

2.6.1. PANAS scale

The students' affects were collected twice, before and after the five weeks of experimentation, using the Positive Affects, Negative Affects Schedule (PANAS, Thompson, 2007). Internal consistency reliability was acceptable for both positive affect ($\alpha = 0.79$) and negative affect ($\alpha = 0.85$) subscales. A paired-samples *t*-test with R 4.3.2 (R Core Team, 2023) was employed to compare these scores pre- and post-intervention.

2.6.2. Questionnaire survey

Students' opinions about the material were collected after the intervention using closed and open-ended questions. This questionnaire-based written survey (Fink, 2013) was explicitly structured around three themes: (1) interest in the material (e.g. 'Did you enjoy working on the strengths?'), (2) understanding of the tasks (e.g. 'Were the instructions clear?'), and (3) perceptions of the learning achieved (e.g. 'Do you feel you learned new things about strengths?'). The proposed analysis of the students' content follows the thematic analysis approach outlined by Braun and Clarke (2006). This method allows for the identification, analysis, and reporting of themes within the data. The design of the questionnaire facilitated the implementation of the method.

2.6.3. Focus group

Qualitative feedback was collected from the three teachers on a weekly basis using the social networking platform WhatsApp. The data collection was facilitated by the researchers, following the method of focus groups. This approach allows for dynamic and interactive discussions, providing rich and in-depth feedback (Krueger & Casey, 2015). The three teachers were regularly asked to share their perspectives on

Table 3. PANAS descriptive statistics using paired t-test for equality of means.

	Before		After		
	M	*SD*	*M*	*SD*	*t*-test
Positive affect	3.34	0.70	3.59	0.71	2.01*
Negative affect	1.68	0.67	1.94	0.75	ns

*$p < 0.05$.

(1) the pedagogical quality of the material, (2) its usability, (3) the expected impact on student motivation and learning, and (4) the effect in promoting strengths. Any errors or challenges encountered in using the program were recorded. Following systematic thematic analysis procedures, the research team worked collectively to organize the data according to frequency and importance of emerging themes. Priority improvement themes were identified based on the recurrence of feedback across teachers and the perceived importance for program enhancement.

3. Results

3.1. Students – PANAS scores

Table 3 shows the means and standard deviations of positive and negative affect of the students before and after the intervention. A Shapiro–Wilk test for normality was conducted on the score differences for each variable, indicating no violation of the assumption of normal distribution. The paired *t*-test assessing the difference of positive affect scores means before ($M = 3.34$, $SD = 0.70$) and after intervention ($M = 3.59$, $SD = 0.71$) indicated a statistically significant effect ($t(50) = 2.01$, $p = 0.050$, $d = 0.28$). No statistically significant difference was observed for negative affect scores means between the two time points ($M = 1.68$, $SD = 0.67$; $M = 1.94$, $SD = 0.75$; $p = 0.11$).

3.2. Students – Questionnaire survey themes

Results were aggregated around the three themes of interest: interest in the material, understanding of the tasks, and perceptions of the learning achieved. The majority of trends were retained.

3.2.1. Interest in the material

Most students (86%) expressed interest in the theme of character strengths after using the material. They also reported enjoying it (87%). Notably, students enjoyed the activities in the form of games and role-play but were less keen on the reading exercises and searching for definitions (e.g. 'I didn't like looking for words in crossword puzzles'.).

3.2.2. Understanding of the tasks

Students found the proposed tasks to be clear and understandable, with 61% expressing this opinion (e.g. 'I really enjoyed doing this activity and found it useful'.). Specifically, students indicated that the strengths poster (87%) and the main characters throughout the program (73%) facilitated comprehension. However, two tasks were identified as either boring or unclear, namely 'Memory Activities on Strength Definitions' (activity 4) and 'Little Red Riding Hood' (activity 6). 'Memory Activities on Strength Definitions' (activity 4) required students to memorize strengths definitions and match them to the correct strength name by pairing cards. 'Little Red Riding Hood' (Activity 6) asked students to read the story for themselves and represent the protagonist' strengths by writing them down.

3.2.3. Perceptions of the learning achieved

Most students (64%) felt that they had learned something, especially new strengths and their meaning (e.g. 'I got to know myself better'. or 'It made me think of my friends'.). Students reported they could identify their own strengths and weaknesses but had more difficulty identifying these in others.

Table 4. Summary of improvements highlighted by the three teachers.

Activities	Key points
Introductory activity with the story	Interactive support is needed to keep students' attention.
Word matching and crossword activities	Definitions need clearer explanations. Crossword definitions need a title. Several strengths posters could be displayed in the classroom.
Developing a common language activity	The activity was well-received by students. Definition sentences can be lengthy and too numerous. Sentence complexity needs to be reduced to improve understanding.
Defining strengths in a story activity	Short texts should be used to facilitate the activity. Some more complex terms were not identified.
Gratitude activity	Clearer instructions are needed to express the strengths identified in classmates. Students should be encouraged to add concrete examples and drawings.

3.3. Teachers – overall comments

Teachers found the activities interesting and engaging for students. They were enthusiastic about the program and emphasized their desire to see it extended to all schools. The researchers then focused discussions on areas for improvement. Through systematic discussions around the four themes of interest (the pedagogical quality of the material, its ease of use, the expected impact on student motivation and learning, and the impact of building strengths), five activities were clearly identified for improvement. The key points of each of these activities are summarized in Table 4.

Specifically, teachers reported that students had difficulty reading the texts and understanding the definitions of strengths (e.g.)

> "I found the sentences quite long and numerous for some definitions. […] But the goal is for them to understand the definition, so I wonder if we shouldn't simplify the sentences a bit, not too much, but enough to focus on one or two key ideas that convey the strength, making it clearer for them to explain in their own words."

They suggested condensing and simplifying the sentences to make it easier to comprehend. Additionally, they emphasized the need for visual or interactive support to keep students active and engaged during listening activities (e.g. 'We did a little less than 45 minutes, more like 40, and I didn't ask all the questions at the end of the text because I felt they were losing focus, so I cut it short … A support tool, like having them note down the strengths they hear or the advice, or something to make them more active during listening, would be interesting to implement'.). Another concern raised by the teachers relates to the volume of material provided. They proposed including more definition sheets to facilitate a thorough analysis of strengths. One teacher also suggested numbering each definition to help students search and avoid confusion. For 'the Little Red Riding Hood' reading activity, teachers found that oral reading ensured an equitable reading pace for all students (e.g. 'I read 'Little Red Riding Hood' to them, pausing as I had announced, and asked them to note the strengths they identified in their draft notebooks. They worked in pairs, and each time I paused, they could discuss what they had highlighted'.). They observed that students were able to identify the character strengths, although some more complex terms were overlooked. Lastly, during the gratitude activity, teachers noted that students needed clearer instructions on how to express the strengths identified in their classmates. Some students simply listed the strengths, while others crafted eloquent sentences to describe the strengths, giving tangible examples.

4. Discussion

The aim of this article was to evaluate the pedagogical relevance and applicability of the 'Individual Strengths, Collective Power!' program. It documents the implementation and evaluation of a simplified version of the program. Throughout these phases, consistent indicators emerged: the strengths-based program aroused the interest of both students and teachers. Three types of data support this conclusion. First, from the beginning to the end of program implementation, there was a significant increase in positive affect among students, while negative affect did not show a significant change. Second, students expressed interest in activities that allowed them to focus on their strengths in everyday life. Third, teachers emphasized the relevance and applicability of the program, finding it well-suited for a

school setting. Triangulation of quantitative and qualitative findings strengthened our interpretation of the program's relevance and applicability. The significant increase in students' positive affect (PANAS scores) was corroborated by qualitative findings showing high student interest (86%) and enjoyment (87%) in character strengths activities. Similarly, teachers' positive feedback on the activities' pedagogical quality aligned with quantitative improvements in students. Despite qualitative feedback highlighting specific activities requiring refinement, these elements did not increase scores of negative affect as assessed with the PANAS, indicating targeted areas for improvement rather than fundamental program limitations that could harm student experience.

This proof-of-concept study highlighted opportunities for further development of the program. As suggested, students identified activities that were less engaging, which may guide and improve the selection of activities in the future. Teachers suggested areas for improvement, such as clearer instructions, visual support for students, and attention support. This highlights the need to refine certain aspects of the teaching materials. Modifying the materials as suggested could improve the quality of instructional highlights for students and enhance their understanding.

These various elements indicate a high degree of confidence in the claim that the program is relevant and applicable in the Swiss school context. It offers a promising alternative to Quinlan's 'Awesome Us!' program (2012). The 'Individual Strengths, Collective Power!' program contributes to strengths-based interventions in four key areas. First, and most importantly, the program is tailored to the Swiss context in which it will be used, ensuring cultural and educational relevance (Durlak & DuPre, 2008). Second, the program is based on a theoretical synthesis of existing programs (Linkins et al., 2015). It has also been developed through the continuing education of interested teachers, who have added the possibility for users to adapt the content. In fact, it is designed to be flexible and adaptable to different contexts and moments in school life. Finally, it is designed to foster changes in classroom climate over the course of a school year.

Limitations of the present study include its small sample size ($N = 51$ across three classes), which significantly limits the statistical power to detect effects and restricts the generalizability of findings beyond our specific sample. This limitation is compounded by the study's strong cultural embedding within a specific French-speaking Swiss regional context under a single school administration. The combination of limited sample size and contextual specificity means that results cannot be generalized to other populations, educational systems, or cultural contexts without further validation studies involving larger and more diverse samples.

The absence of control variables, such as classroom environment or prior knowledge, may limit our understanding of the role of the program. In addition, the subjectivity of teachers and students cannot be separated from the interpretation of the pedagogical value of the material. The same applies to minor adjustments that teachers may have made without the research team being able to document them. Despite excellent collaboration between the research team and teachers, the implementation fidelity of the program is not measurable. The use of an implementation checklist (Harden et al., 2015) is a practice to integrate for systematically documenting how the program is used in each classroom. In terms of content, the program attempts to build on each student's current strengths. However, Proyer et al. (2015) point out that focusing on already existing character strengths is not always a guaranteed strategy. The authors suggest that focusing on an individual's less present strengths may yield better results than trying to foster character strengths that are already present.

5. Conclusion

This study represents a successful initial step in evaluating the relevance and applicability of the 'Individual Strengths, Collective Power!' program. The results have promising implications for the field of strengths-based interventions in inclusive education. They position strengths-based interventions at the core of pedagogical approaches that foster self-understanding and mutual recognition through personal resources. Rather than viewing human diversity as a challenge to overcome, the study reframes it as a collective asset, recognizing that each student, regardless of educational needs or disabilities, brings unique strengths to the learning community.

After addressing the improvements identified in this article, the program appears ready for experimental research. The next step would be to assess its impact on students' use of strengths and its ability to improve the classroom environment in an inclusive context in Switzerland. To achieve this, a large-scale intervention is necessary to gain a comprehensive understanding. This intervention should be implemented for a minimum of nine weeks (Cipriano et al., 2023), allowing sufficient time to detect meaningful changes in students' perceptions of themselves and their peers, as well as shifts in classroom relationships. Data collection could include pre- and post-intervention surveys, classroom observations, and focus groups with students and teachers to capture qualitative insights. Beyond program evaluation, a systematic review comparing existing character strengths-based educational programs would provide valuable insights into optimal design features, implementation strategies, and cultural adaptation processes. Such a comprehensive analysis could inform future program development and guide evidence-based selection of interventions across diverse educational contexts.

In terms of practical implications in the field of pedagogy, several recommendations can already be made. Specifically, providing support to teachers through continuing education to develop materials focused on strengths is a promising approach in the Swiss context. This could take the form of (1) workshops focused on integrating strengths-based materials into daily teaching practices, (2) collaborative platforms where teachers share best practices and adapt materials to their classrooms, or (3) ongoing mentorship to help teachers refine their use of strengths-based strategies in inclusive environments. These efforts can greatly enhance the professional capacity of teachers working in inclusive environments.

For policymakers, this research provides preliminary evidence supporting investment in teacher professional development programs that emphasize collaborative material development and strengths-based pedagogical approaches. Policy frameworks that facilitate teacher autonomy in adapting evidence-based interventions to local contexts may improve implementation success. Additionally, our findings suggest that inclusive education policies benefit from programs that explicitly teach students and educators to recognize and utilize individual strengths as community assets. This positive reframing of human diversity could potentially reduce resistance to inclusive practices.

Strengths-based interventions seem to be increasingly relevant to the field of education, particularly in inclusive contexts. They also play a valuable role in other areas such as career guidance, coaching, or therapeutic counseling.

Note

1. Special Education Agreement.

Acknowledgements

We thank Laure Coutaz Bressoud, Laetitia Mijanovic, and Anaïs Blot for their essential contributions to the conceptualization, design, creation, and first steps of the 'Individual Strengths, Collective Power!' program.

An earlier version of this manuscript was included as Article 3 in the first author's cumulative doctoral thesis (Bressoud, N., 2024. *Development of positive interdependence and students' power to act in an inclusive context*. University of Fribourg, Switzerland. Available at: https://folia.unifr.ch/global/documents/329131). The present submission represents an updated version of this work.

Author contributions

The contributions of the authors are described as follows:

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Philippe Gay: Methodology, Formal analysis, Writing – review & editing.

Rebecca Shankland: Methodology, Formal analysis, Writing – review & editing.

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Disclosure statement

No potential conflict of interest was reported by the author(s).

Funding

This research received no specific grant from any funding agency.

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Data availability statement

The data supporting the findings of this study are available from the corresponding author upon reasonable request. Due to ethical considerations, privacy concerns, and the small sample size that could compromise participant anonymity, data cannot be made publicly available.

References

Ainscow, M., & César, M. (2006). Inclusive education ten years after Salamanca: Setting the agenda. *European Journal of Psychology of Education*, *21*(3), 231–238. https://doi.org/10.1007/BF03173412

Allodi, M. W. (2010). The meaning of social climate of learning environments: Some reasons why we do not care enough about it. *Learning Environments Research*, *13*(2), 89–104. https://doi.org/10.1007/s10984-010-9072-9

Bates-Krakoff, J., Parente, A., McGrath, R., Rashid, T., & Niemiec, R. M. (2022). Are character strength-based positive interventions effective for eliciting positive behavioral outcomes? A meta-analytic review. *International Journal of Wellbeing*, *12*(3), 56–80. https://doi.org/10.5502/ijw.v12i3.2111

Baumeister, R. F., Bratslavsky, E., Finkenauer, C., & Vohs, K. D. (2001). Bad is stronger than good. *Review of General Psychology*, *5*(4), 323–370. https://doi.org/10.1037/1089-2680.5.4.323

Booth, T., Nes, K., & Strømstad, M. (Eds.). (2003). *Developing inclusive teacher education*. RoutledgeFalmer.

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, *3*(2), 77–101. https://doi.org/10.1191/1478088706qp063oa

Bressoud, N., Gay, P., Shankland, R., Sander, D., & Samson, A. C. (2019). *Character strengths intervention in inclusive settings: A way to promote well-being all together?* 6th World Congress on Positive Psychology, Melbourne, Australia. https://hdl.handle.net/20.500.12162/4159

CDIP. (2023). *Accord intercantonal sur la collaboration dans le domaine de la pédagogie spécialisée*. https://edudoc.ch/record/87690/files/Sonderpaed_f.pdf

CIIP. (2023). *Plan d'études romand*. https://portail.ciip.ch/per/domains

Cipriano, C., Strambler, M. J., Naples, L. H., Ha, C., Kirk, M., Wood, M., Sehgal, K., Zieher, A. K., Eveleigh, A., McCarthy, M., Funaro, M., Ponnock, A., Chow, J. C., & Durlak, J. (2023). The state of evidence for social and emotional learning: A contemporary meta-analysis of universal school-based SEL interventions. *Child Development*, *94*(5), 1181–1204. https://doi.org/10.1111/cdev.13968

Coppley, J., & Niemiec, R. M. (2021). Character strengths interventions in education systems. In Kern, M. L. & Wehmeyer, M. L. (Eds.), *The Palgrave handbook of positive education* (pp. 395–420). Springer International Publishing. https://doi.org/10.1007/978-3-030-64537-3_16

Durlak, J. A., & DuPre, E. P. (2008). Implementation matters: A review of research on the influence of implementation on program outcomes and the factors affecting implementation. *American Journal of Community Psychology*, *41*(3-4), 327–350. https://doi.org/10.1007/s10464-008-9165-0

Egert, F., Dederer, V., & Fukkink, R. G. (2020). The impact of in-service professional development on the quality of teacher–child interactions in early education and care: A meta-analysis. *Educational Research Review*, *29*, 100309. https://doi.org/10.1016/j.edurev.2019.100309

Etat du Valais. (2023). *Loi sur l'enseignement spécialisé*. https://lex.vs.ch/app/fr/texts_of_law/411.3

Fink, A. (2013). *How to conduct surveys: A step-by-step guide*. (5th ed). SAGE.

Forlin, C. (Ed.). (2010). *Teacher education for inclusion: Changing paradigms and innovative approaches*. Routledge.

Fraser, B. J. (2012). *Classroom environment*. Routledge.

Gable, S. L., & Haidt, J. (2005). What (and why) is positive psychology? *Review of General Psychology*, *9*(2), 103–110. https://doi.org/10.1037/1089-2680.9.2.103

Goodman, A., Nasim, B., Joshi, H., & Tyler, C. (2015). *Socio-emotional skills in childhood and their long-term effects on adult life. A review for the Early Intervention Foundation*. https://www.eif.org.uk/report/social-and-emotional-skills-in-childhood-and-their-long-term-effects-on-adult-life

Harden, S. M., Gaglio, B., Shoup, J. A., Kinney, K. A., Johnson, S. B., Brito, F., Blackman, K. C. A., Zoellner, J. M., Hill, J. L., Almeida, F. A., Glasgow, R. E., & Estabrooks, P. A. (2015). Fidelity to and comparative results across behavioral interventions evaluated through the RE-AIM framework: A systematic review. *Systematic Reviews*, *4*(1), 155. https://doi.org/10.1186/s13643-015-0141-0

Johnson, D. W., Johnson, R. T., & Holubec, E. J. (2008). *Cooperation in the classroom*. (8th ed). Interaction Book Co.

Kendig, C. E. (2016). What is proof of concept research and how does it generate epistemic and ethical categories for future scientific practice? *Science and Engineering Ethics*, *22*(3), 735–753. https://doi.org/10.1007/s11948-015-9654-0

Krueger, R. A., & Casey, M. A. (2015). *Focus groups: A practical guide for applied research* (5th edition). SAGE.

Lavy, S. (2020). A review of character strengths interventions in twenty-first-century schools: Their importance and how they can be fostered. *Applied Research in Quality of Life*, *15*(2), 573–596. https://doi.org/10.1007/s11482-018-9700-6

Linkins, M., Niemiec, R. M., Gillham, J., & Mayerson, D. (2015). Through the lens of strength: A framework for educating the heart. *The Journal of Positive Psychology*, *10*(1), 64–68. https://doi.org/10.1080/17439760.2014.888581

Linley, P. A., & Harrington, S. (2006). Strengths coaching: A potential-guided approach to coaching psychology. *International Coaching Psychology Review*, *1*(1), 37–46. https://doi.org/10.53841/bpsicpr.2006.1.1.37

Lucciarini, E., Carr, A., Bressoud, N., Boniwell, I., Audrin, C., Gay, P., & Burel, N. (2025). Evermore wellbeing for teens: A scoping review of stand-alone and brief positive psychology interventions for potential use in educational settings. *Educational Psychology Review*, *37*(3), 63. https://doi.org/10.1007/s10648-025-10033-3

Madden, W., Green, S., & Grant, A. M. (2020). A pilot study evaluating strengths-based coaching for primary school students: Enhancing engagement and hope. In J. Passmore & D. Tee (Eds.), *Coaching Researched: A Coaching Psychology Reader* (1st ed., pp. 297–312).Wiley. https://doi.org/10.1002/9781119656913

Margas, N. (2023). Inclusive classroom climate development as the cornerstone of inclusive school building: Review and perspectives. *Frontiers in Psychology*, *14*, 1171204. https://doi.org/10.3389/fpsyg.2023.1171204

Mendes De Oliveira, C., Santos Almeida, C. R., & Hofheinz Giacomoni, C. (2022). School-based positive psychology interventions that promote well-being in children: A systematic review. *Child Indicators Research*, *15*(5), 1583–1600. https://doi.org/10.1007/s12187-022-09935-3

Molina Roldán, S., Marauri, J., Aubert, A., & Flecha, R. (2021). How inclusive interactive learning environments benefit students without special needs. *Frontiers in Psychology*, *12*, 661427. https://doi.org/10.3389/fpsyg.2021.661427

OECD. (2009). (Ed.). *Creating effective teaching and learning environments: First results from TALIS*.

Peterson, C., & Seligman, M. E. P. (2004). *Character strengths and virtues: A handbook and classification*. American Psychological Association; Oxford University Press.

Proyer, R. T., Gander, F., Wellenzohn, S., & Ruch, W. (2015). Strengths-based positive psychology interventions: A randomized placebo-controlled online trial on long-term effects for a signature strengths vs. a lesser strengths-intervention. *Frontiers in Psychology*, *6*(MAR), 456. https://doi.org/10.3389/fpsyg.2015.00456

Quinlan, D. M. (2012). *Awesome Us: The Individual, Group and Contextual Effects of a Strengths Intervention in the Classroom* [Doctoral thesis]. University of Otago.

Quinlan, D. M., Swain, N., Cameron, C., & Vella-Brodrick, D. A (2015). How 'other people matter' in a classroom-based strengths intervention: Exploring interpersonal strategies and classroom outcomes. *The Journal of Positive Psychology*, *10*(1), 77–89. https://doi.org/10.1080/17439760.2014.920407

R Core Team. (2023). *R: A language and environment for statistical computing*. R Foundation for Statistical Computing. https://www.R-project.org/

Ryan, R., & Deci, E. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *The American Psychologist*, *55*(1), 68–78. https://doi.org/10.1037/0003-066X.55.1.68

Schutte, N. S., & Malouff, J. M. (2019). The impact of signature character strengths interventions: A meta-analysis. *Journal of Happiness Studies*, *20*(4), 1179–1196. https://doi.org/10.1007/s10902-018-9990-2

Thompson, E. R. (2007). Development and validation of an internationally reliable short-form of the positive and negative affect schedule (PANAS). *Journal of Cross-Cultural Psychology*, *38*(2), 227–242. https://doi.org/10.1177/0022022106297301

UNESCO. (1994). *The Salamanca statement and framework for action on special needs education*.

VIA Institute. (2023). *The 24 Character Strengths*. https://www.viacharacter.org/character-strengths

Wang, M.-T., & Degol, J. L. (2016). School climate: A review of the construct, measurement, and impact on student outcomes. *Educational Psychology Review*, *28*(2), 315–352. https://doi.org/10.1007/s10648-015-9319-1

Waters, L. (2017). *The strength switch: How the new science of strength-based parenting can help your child and your teen to flourish*. Penguin Random House.

White, M. A. (2021). A decade of positive education and implications for initial teacher education: A narrative review. *Australian Journal of Teacher Education*, *46*(3), 74–90. https://doi.org/10.14221/ajte.2021v46n3.5

White, M. A., & Kern, M. L. (2018). Positive education: Learning and teaching for wellbeing and academic mastery. *International Journal of Wellbeing*, *8*(1), 1–17. https://doi.org/10.5502/ijw.v8i1.588

White, M. A., & Murray, A. S. (Eds.). (2015). *Evidence-based approaches in positive education: implementing a strategic framework for well-being in schools*. Springer Netherlands. https://doi.org/10.1007/978-94-017-9667-5

Wood, A. M., Linley, P. A., Maltby, J., Kashdan, T. B., & Hurling, R. (2011). Using personal and psychological strengths leads to increases in wellbeing over time: A longitudinal study and the development of the strengths use questionnaire. *Personality and Individual Differences*, *50*(1), 15–19. https://doi.org/10.1016/j.paid.2010.08.004