Developing Resilience and Life Mastery Skills in the Classroom - A Multiple-Case Study Comparing a Norwegian and a Peruvian Context

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Abstract
Despite different circumstances, something is universal for pupils across the world; they need motivation and resilience to succeed. This is what the current study is about; how to facilitate for increased motivation and development of life mastery skills in the classroom so that pupils are resilient when they meet obstacles in their learning and in their lives in general. The study is part of a project called «A Systematic Approach – the fivestep Motivation Method», which started in the southern region of Norway and has spread to new contexts such as Peru. The current study investigates and compares how Norwegian and Peruvian students perceive a fivestep method for working with life mastery and motivation. The study concludes that many students in both groups appreciated the method, but there is a difference. In general, the Peruvian students seemed to benefit more, as the majority there reported that they became better at prioritising and solving problems, and they experienced increased motivation. There is, however, a need for a more thorough study on how the fivestep approach affects students in different contexts.

Keywords: resilience, life mastery, motivation
Introduction

The background for the project of which this study is part was raising concerns about high drop-out rates and low motivation in Norwegian schools (Skoleporten 2017). As a respond to this, we started an action research project applying a systematic approach for working with motivation and mastering life in upper secondary schools (SAMM), where the students reflect on positive and challenging aspects of their lives (Horverak, Aanensen & Langeland, 2019; Horverak & Aanensen, 2019) The essence of the approach is that students learn to take responsibility for their own lives and their own learning, rather than looking for solutions others may provide. The students’ reflections revealed that often, mental problems and learning problems go back all the way through primary school. Therefore, the project was expanded to include lower secondary school and primary school. The focus of the current study is how teachers can facilitate for the development of resilience and life mastery skills in primary and lower secondary school classes, and since these are relevant issues across international contexts, the study includes a comparison of a Norwegian and a Peruvian context.

A national survey in Norway showed that young people in both lower and upper secondary school struggle with mental issues (Bakken, 2018), and the score on feeling of loneliness is higher than ever before. More and more struggle with physical problems as headaches, and there is an increase in sleeping problems and depressive symptoms, A similar survey from 10-12 years old reveal that a majority of around 90% report good health (Løvgren & Svagård, 2019), but that also means that there are quite many children that experience health problems at an early age. There are quite a few children that feel lonely or sad, or have a negative self-image. Children report that they do not have friends, they are bullied, or they feel stressed. Around 20% also report that they have used painkillers the last week, and they report problems such as head aches, pains in neck or shoulders, stomach ache and nausea. Both surveys revealed that 1 of 5 dread going to school. Another report revealed that mental issues and mental suffering are among the largest public health challenges in Norway (Meld. St. 19, 2018-2019). Between 16 and 22 percent of the adult population in Norway suffers mentally for a period of at least 12 months, and about 7 percent of preschool and school children have symptoms that signal mental suffering. These are alerting signs showing that it is not enough to put in efforts in upper secondary school to prevent drop-out, we need efforts all the way from primary school to support children to develop strategies that help them become motivated, resilient and healthy.

The Norwegian government has the last few years made plans to focus on improving mental health in the population, and now there is a focus on improving children and youths’ mental health. The programme Healthpromoting Kindergartens and Schools, of which the current study and the project SAMM is part, is one of the measures taken to improve the situation. Also in Norwegian school curricula, we see this increased focus on health, as public health and life mastery are emphasised as topics that are to be integrated in education. Students are supposed to learn how to master life and influence factors that are of significance in their lives. More specifically, they are to learn how to “handle both success and hard times, and personal and practical challenges in a best possible way” (Overordnet del, 2018, 2.5.1. my translation). One

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1 For more information on the project, see https://samm.uia.no/en/frontpage/
way of meeting this requirement is to implement a systematic approach as presented in the current study.

Reflecting on issues important in life and developing strategies for taking control of their own learning are also central elements in the Peruvian school curriculum. It states that “the student understands and appreciates the spiritual and religious dimension in the lives of people and societies” (Currículo Nacional, 2019, p.17, my translation). This is specified as learning to reflect on the meaning of life, and the ethical and existential commitment in building a more just world. It also includes learning to show respect and tolerance for people's diverse worldviews, religions and beliefs. That students are to take responsibility of their own learning process is also included: “The student develops autonomous learning strategies for the continuous improvement of their learning process and their results” (Currículo Nacional, 2019, p.17, my translation). This means that they become aware of learning as an active process, identify advantages and difficulties and organise their learning. Based on this, the systematic approach developed in the project SAMM in the southern region of Norway was implemented also in several groups in Peru through a pilot project to investigate the potential of the five-step approach here. This is a very different context from the Norwegian context, as Norway is one of the richer countries in the world (GDP per capita in 2018: 81,697 USD, the fourth highest in the world), whereas Peru is a country with much lower living standards (GDP per capita in 2018: 6,941 USD) (The World Bank, retrieved 02.01.2020). As much as 21% of the population was below the poverty line in 2017 (United Nations Association of Norway, retrieved 02.01.2020), and the country has received aid from Norway for many years (NORAD, retrieved 02.01.2020).

This background led to the following research questions: 1) Can a systematic approach to teaching life mastery skills in the classroom support students to become more focused, motivated and resilient, and if so, how? 2) Is there a difference between how Norwegian and Peruvian students respond to a systematic approach to working with life mastery and motivation? To investigate this, the five-step approach presented in this study was implemented in several groups in both Norway and Peru, in both primary and lower secondary school. The approach applied in this project builds on motivation theory, emphasising intrinsic motivation as crucial for seeking new situations and challenges such as exploring or learning new knowledge (Ryan & Deci, 2000, 2017). Having intrinsic motivation means that one really wants to do something, not just for the sake of others or external rewards, but for the enjoyment of the activity. Ryan and Deci argues that in order to achieve intrinsic motivation, the three basic needs of competence, autonomy and relatedness must be met. This is what we aim for with the five-step motivation method, meeting these three basic needs so that students feel that they want to learn, that they can master both school and life and that they belong in a group.

The motivation method also builds on Antonovsky’s salutogenic model as the aim of the method is to support health and well-being rather than on identifying symptoms of illness and causes of health problems (2012). Antonovsky focuses on the importance of developing resilience, meaning a feeling that it is possible to cope with possible changes and challenges that may occur, and he presents the concept of «sense of coherence». Having a sense of coherence includes three elements: a) one feels that one understands surroundings and events that take place, b) one understands what
resources one has available and believes that one can master possible challenges that may occur, and c) one can see the value of one’s own engagement, or one’s own contribution when meeting with challenges. He also points out that experiencing a sense of coherence also leads to motivation. Research has shown that children develop resilience if they feel safe, they receive support, they belong to a community and they have relations with adults (Ungar, 2015). When applying the motivation method in classrooms we try to facilitate for creating such an environment, at the same time as teaching a strategy for coping with emotions and challenges in life.

**Methodology**

This study investigating how a systematic approach to working with life mastery and motivation works in different contexts combines qualitative and quantitative data, all self-reported data from students. After an intervention of four sessions, the participants evaluated the method applied and how it had influenced them. The conclusions in this study are based on the analysis of these evaluations. In the following, the intervention, the measuring instrument and the sample are described in more detail. Some reflections on validity and reliability of the findings are also included.

**Intervention**

The five steps in the method applied in the teaching intervention are illustrated in figure 1 below. Students discuss and define 1) what is important in life, 2) success factors; what skills they have and what is positive in life and 3) possible obstacles; whether something stops them in life. Then they decide: 4) what to focus on, and 5) how to carry this out.

![Figure 1. The five-step approach to working with life mastery and motivation](image)

In the first session of the intervention, questions one, two and three were discussed, and then the students wrote individual answers in log books. They chose a random number for the log book so that everything they wrote was anonymous. The teacher collected the books after the session. In the second session, the teacher summed up the students’ reflections, then they discussed how to deal with some of the obstacles mentioned by individuals in the class, or how they could achieve what was important to them. Following this discussion, the students found their log books, and wrote
answers to questions four and five: what they wanted to focus on and what specifically they were to do. The teacher collected the books again, and the third session started with the teacher giving examples of some action plans. The class discussed alternative actions that could be chosen to succeed with the focus area. Then the students found their log books, evaluated whether they had followed their plan from the week before, and wrote a new plan. In session four, this process was repeated.

*Measuring instrument*

The measuring instrument used was an evaluation form including the following questions: 1) Does the motivation method help you find out what is important to prioritise? (alternatives: yes, no, I do not know) 2) Has the method made you more motivated to work with what is important for you? (alternatives: yes, no, I do not know) 3) Do you now find solutions to obstacles more easily? If yes, explain if you can. (alternatives: yes, no, I do not know) 4) Give examples of something you have focused on working with 5) Have you managed to follow your own plans? (alternatives: yes, partly, no) 6) Has working with the method influenced how you behave towards each other in class? (alternatives: yes, no, I do not know) If yes, explain if you can. 7) How satisfied have you been with the motivation method? (alternatives: not satisfied, a little satisfied, satisfied, very satisfied, I do not know). The students also crossed out whether what they had written could be used for research purposes. The evaluations were anonymous, and have been translated to English from Norwegian and Spanish for this study.

*Sample*

The sample consists of a total number of 490 informants, including 138 informants from a Norwegian context (response rate 74%) and 352 informants from a Peruvian context (response rate 83%). The Norwegian sample included students from two 6th grade groups (N=24), one 8th grade and six 9th grade groups (N=114), of which some of them were collapsed for the intervention (see table 1).

<table>
<thead>
<tr>
<th>School number</th>
<th>School type</th>
<th>Class</th>
<th>Age</th>
<th>Total number of students</th>
<th>Number of informants</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Prim.</td>
<td>6*</td>
<td>10-11y</td>
<td>31</td>
<td>24</td>
</tr>
<tr>
<td>2</td>
<td>Sec.</td>
<td>8.-9.*</td>
<td>12-14y</td>
<td>11</td>
<td>9</td>
</tr>
<tr>
<td>3</td>
<td>Sec.</td>
<td>9a</td>
<td>13-14y</td>
<td>29</td>
<td>21</td>
</tr>
<tr>
<td>3</td>
<td>Sec.</td>
<td>9b</td>
<td>13-14y</td>
<td>28</td>
<td>18</td>
</tr>
<tr>
<td>4</td>
<td>Sec.</td>
<td>9a</td>
<td>13-14y</td>
<td>29</td>
<td>22</td>
</tr>
<tr>
<td>4</td>
<td>Sec.</td>
<td>9b</td>
<td>13-14y</td>
<td>30</td>
<td>25</td>
</tr>
<tr>
<td>5</td>
<td>Sec.</td>
<td>9</td>
<td>13-14y</td>
<td>25</td>
<td>19</td>
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<tr>
<td><strong>Total:</strong></td>
<td></td>
<td></td>
<td></td>
<td><strong>183</strong></td>
<td><strong>138</strong></td>
</tr>
</tbody>
</table>

Note. *Two groups were collapsed during the intervention.

The Peruvian sample included students from one 6th grade (N=26) and 14 secondary school groups (N=326): four 1st year groups, three 2nd year groups, two 3rd year groups, two 4th year groups and three 5th year groups (see table 2 below).
In Norway, one primary school and four lower secondary schools participated. The age range of students in lower secondary schools in Norway is from 12 to 15. In Peru, one primary school and three secondary schools participated. The age range of students in secondary schools in Peru is from 11 to 17 years. Hence, the sample from the two contexts differs somewhat in age range.

**Reliability and validity**

Whether the method applied in this study actually supports students to master life could be measured in different ways, but as this is a pilot project, the research design has been kept simple. The students filled in an evaluation form that included a limited number of questions and alternative answers, hence, all the data is self-reported. In order to generalise from the findings, more research is needed. Another challenge with the study is that some students may experience what is called the Hawthorne effect (Ary, Jacobs, Irvine & Walker, 2018), that they change behaviour due to participating in research. This is perhaps more likely in a Peruvian context, as quite many research studies and other types of projects are conducted in Norwegian schools. To meet these challenges, the evaluation form used includes questions that urge students to reflect on a possible change they experience. What the students wrote supports the fact that they have really experienced a change.

**Results**

To investigate how a systematic approach to working with life mastery and motivation influenced students in both a Norwegian and a Peruvian context, the students’ answers to the evaluation form are presented in bar charts. The results are supported by examples from the students’ reflections. To the question of whether the motivation method helped them find out what was important to prioritise, the majority

### Table 2. Peruvian sample

<table>
<thead>
<tr>
<th>School number</th>
<th>School type</th>
<th>Class</th>
<th>Age</th>
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<th>Number of informants</th>
</tr>
</thead>
<tbody>
<tr>
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<td>Prim</td>
<td>6</td>
<td>11-12y</td>
<td>28</td>
<td>26</td>
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<tr>
<td>2</td>
<td>Sec.</td>
<td>1</td>
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<td>Sec.</td>
<td>2</td>
<td>13-14y</td>
<td>35</td>
<td>31</td>
</tr>
<tr>
<td>3</td>
<td>Sec.</td>
<td>1</td>
<td>12-13y</td>
<td>20</td>
<td>12</td>
</tr>
<tr>
<td>3</td>
<td>Sec.</td>
<td>5</td>
<td>16-17y</td>
<td>25</td>
<td>20</td>
</tr>
<tr>
<td>4</td>
<td>Sec.</td>
<td>1a</td>
<td>12-13y</td>
<td>28</td>
<td>27</td>
</tr>
<tr>
<td>4</td>
<td>Sec.</td>
<td>1b</td>
<td>12-13y</td>
<td>30</td>
<td>27</td>
</tr>
<tr>
<td>4</td>
<td>Sec.</td>
<td>2a</td>
<td>13-14y</td>
<td>29</td>
<td>28</td>
</tr>
<tr>
<td>4</td>
<td>Sec.</td>
<td>2b</td>
<td>13-14y</td>
<td>29</td>
<td>22</td>
</tr>
<tr>
<td>4</td>
<td>Sec.</td>
<td>3a</td>
<td>14-15y</td>
<td>30</td>
<td>26</td>
</tr>
<tr>
<td>4</td>
<td>Sec.</td>
<td>3b</td>
<td>14-15y</td>
<td>24</td>
<td>20</td>
</tr>
<tr>
<td>4</td>
<td>Sec.</td>
<td>4a</td>
<td>15-16y</td>
<td>27</td>
<td>27</td>
</tr>
<tr>
<td>4</td>
<td>Sec.</td>
<td>4b</td>
<td>15-16y</td>
<td>29</td>
<td>20</td>
</tr>
<tr>
<td>4</td>
<td>Sec.</td>
<td>5a</td>
<td>16-17y</td>
<td>26</td>
<td>12</td>
</tr>
<tr>
<td>4</td>
<td>Sec.</td>
<td>5b</td>
<td>16-17y</td>
<td>27</td>
<td>27</td>
</tr>
<tr>
<td><strong>Total:</strong></td>
<td></td>
<td></td>
<td></td>
<td><strong>422</strong></td>
<td><strong>352</strong></td>
</tr>
</tbody>
</table>
of the Peruvian students answered positively, 85% in secondary school and 81% in primary school, whereas about half of the Norwegian students confirmed that it did, 44% in lower secondary school and 50% in primary school (figure 2).

Figure 2. Answers in percentages to the question: Does the motivation method help you find out what is important to prioritise?

To the question of whether the method had made them more motivated to work with what was important to them, we see a similar pattern (figure 3).

Figure 3. Answers in percentages to the question: Has the method made you more motivated to work with what is important to you?

The majority of the Peruvian students answered positively, 85% in secondary school and 92% in primary school, whereas somewhat less than half of the Norwegian students confirmed that it did, 43% in lower secondary school and 46% in primary school. On the question whether they found solutions to obstacles easier now (figure 4), 69% of the Peruvian secondary school students answered positively and 65% of the primary school students, whereas in a Norwegian context, only 29% of the secondary school students and 21% of the primary school students answered yes.

Figure 4. Answers in percentages to the question: Do you easier find solutions to problems now?

Few of the Norwegian students explained how this had changed, but one of them answered «one manages to take time to think» (9th grade). In the Peruvian sample,
there were many reflections on this change, and some of the answers given by secondary school students were: «By talking about it» (year 1), «Because we have a plan that helps us do what we want» (year 1), «I try to look for possible solutions and what may be possible consequences» (year 1), «By trying to see things from another angle, I can see better solutions than before when I only saw them from one side» (year 1), «I do not give up so easily» (year 1), «It helps me see my strengths and weaknesses and remember that in spite of everything, there are important things that makes me progress» (year 3), «Yes, I changed my weaknesses and became more responsible» (year 3), «When I know what my problems are, I can find solutions quickly» (year 4). There were many similar answers in the Peruvian data that stated that they had improved their ability to find solutions to problems, and that learning the fivestep method helped them become more capable of dealing with challenges.

When asked about what they chose to focus on, there were many similar answers in the two different samples. Both focused on school, either improving in subjects or doing more homework, but there is more focus on improving in particular subjects in the Peruvian sample than in the Norwegian. Mathematics is the subject mentioned by most, but only 7 students in the Norwegian sample mentioned it, whereas 68 students in the Peruvian sample mentioned it. In the Norwegian sample, many students wrote that they were to focus on friends, family and sparetime activities, and getting more sleep. In the Peruvian sample there was more focus on family than friends. Generally, to get along well and build good relationships was in focus in more of the answers, as we see in the following examples from secondary school: «One example is that I have tried to live more in harmony with my parents and siblings, and support each other» (year 1), «I focus on talking together and coming to an agreement, to talk without beating» (year 1), «To keep calm in stressful moments and avoid letting anger and frustration affect others» (year 4). We see here a somewhat serious tone relating to controlling emotions that there was no parallel to in the Norwegian data.

When asked about whether they managed to follow their plans, 54% of the Peruvian secondary school students and 77% of the primary school students answered positively, whereas 33% of the Norwegian secondary school students and 50% of the primary school students answered yes (figure 5).

![Figure 5. Answers in percentages to the question: Have you managed to follow your own plans?](image)

However, 18% of the Norwegian secondary school students answered that they partly followed their plans, and only 3% of the Peruvian secondary school students, so when added 57% of the Peruvian students followed their plans at least partly, and 51% of the Norwegian students. This shows that there is not much difference between the two contexts here.
On the question of whether working with the five-step method had affected how they behaved towards each other in class, more than half of the Peruvian sample answered positively, 54% in secondary school and 62% in primary school, whereas fewer students in the Norwegian sample answered yes, 17% in secondary school and 21% in primary school (figure 6).

Figure 6. Answers in percentages to the question: Has working with the method affected how you behave towards each other in class?

There were little reflections on this change in the Norwegian data, but one of the 9th grade students wrote: «I cannot really explain, but...». The Peruvian data revealed that not everybody had understood the question correctly, as their answers rather reflected a change on an individual level. Some of the Peruvian secondary school students did, however, reflect on how the environment in the class had changed, or how their behaviour in class had changed: «I am more supportive towards my peers» (year 1), «Yes, because we respect each other» (year 3), «In the classroom, we are more independent and capable of solving problems» (year 4).

When evaluating how satisfied they were with the method, a majority of the total sample answered positively (figure 7).

Figure 7. Answers in percentages to the question: How satisfied have you been with the motivation method?

Of the Peruvian sample, 62% of the primary school students were very satisfied, and 31% satisfied, and only 4% were not satisfied. A total of 93% of the Peruvian primary school students expressed satisfaction with the method. In the Peruvian secondary schools, 24% were very satisfied, 48% satisfied, 15% a little satisfied, and only 2% were not satisfied. In total, 87% of the Peruvian secondary school students expressed satisfaction with the method. In the Norwegian sample, 21% of the primary school students were very satisfied, 50% were satisfied, 8% were a little satisfied, and only 4% were not satisfied. A total of 79% of the Norwegian primary school students were satisfied with the method. Of the secondary school students, 10% were very satisfied,
36% were satisfied, 24% were a little satisfied and 12% were not satisfied. In total, 70% of the Norwegian lower secondary school students were satisfied to a certain degree.

Discussion

To sum up the results of this study, many students express satisfaction with the systematic approach applied in this project to facilitate for developing resilience and life mastery skills. However, it seems to like the Peruvian students appreciate it more than the Norwegian students. Still, quite many students, both Norwegian and Peruvian express that they have become better at prioritising, more motivated and better at finding solutions. From the students’ more open reflections, we see that the Peruvian students focused more on school subjects and serious issues, so this may have affected to what extent they appreciated the method applied. That the Peruvian students seem to have taken this work more seriously could also be related to the fact that they have tougher living conditions than Norwegian students, and have a greater need for a method that can help them build resilience and experience a sense of coherence (Antonovsky, 2012).

An important aspect in the five step method is the inclusion of discussions in the classroom, and creating a safe atmosphere. As stated in research, children need to feel safe and supported in order to develop resilience, and relations with adults is also important (Ungar, 2015). Not all problems can be solved by a child, and perhaps being given this type of channel to write to an adult what is difficult is exactly what children need. In some cases, the teachers had to follow up on serious problems that appeared in the reflections by finding out who had written this and making sure they were followed up and had somebody who could help them. This could be a challenge in large groups with several individuals who struggle, but still, the anonymity is perhaps what makes them confide in the teacher in the first place.

Even though quite few students reported an effect on how the individuals in the class behaved towards each other, the students may have increased their feeling of relatedness just because the teachers chose to apply this approach. Perhaps there also was some kind of change in the class that was difficult to pinpoint. As one of the Norwegian students said, «I cannot really explain, but…». This indicates that there has been a change, but it is difficult to describe it with words. Perhaps bringing the topic of life mastery into class and discussing difficult issues was what helped the students rather than following the steps in the method. Regardless of what element of the method helped the students, the results in this study shows that this is an approach worthy of further investigation.

Conclusion

This study concludes that a systematic approach to teaching life mastery skills in the classroom may support students to become more focused, motivated and resilient. As some of the students report, applying the method helped them identify their problems, consider different solutions and make plans for how to progress. There is a difference between how the Norwegian and the Peruvian students responded to the approach. Many students in both groups reported positively to how the method affected them, but the Peruvian students showed a greater appreciation than the Norwegian students. 
did. Perhaps this implies that the approach is more beneficial in some contexts, perhaps in contexts where the students struggle more, but this is an aspect that needs further investigation before any conclusions can be drawn. It is a limitation that the study relies only on self-reported data, but the students’ reflections show that something changed as a result of working with the five-step method. Further studies are needed to investigate what type of effect this approach has on students, and there is a need to look at how it actually affects the learning environment. Another relevant issue that needs to be discussed more and investigated further is to what extent children can be made responsible for changing their own lives and surroundings.

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