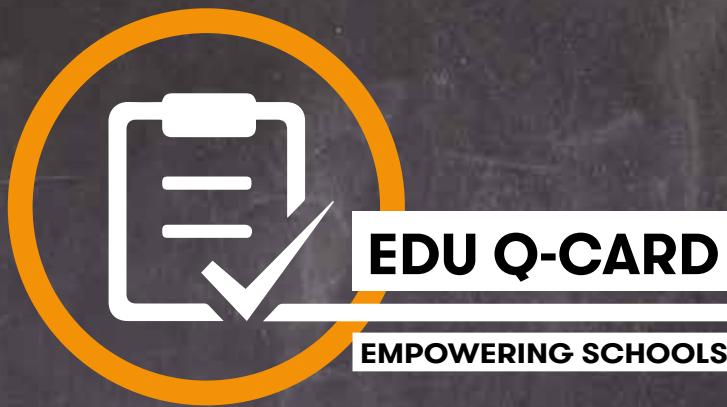


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EDU Q-CARD: A PARTICIPATORY APPROACH FOR EDUCATION QUALITY IMPROVEMENT

*The validity and reliability of school assessments using
ICT in Ethiopia and Suriname*





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INTRODUCTION

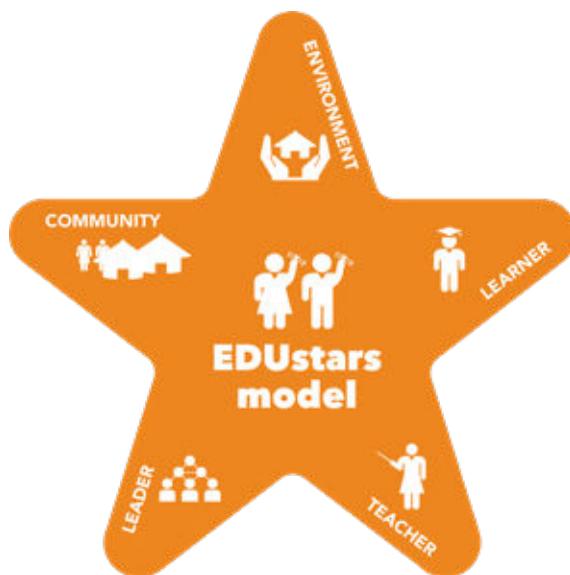
The EDU Q-card is an interactive web-based instrument assisting primary and secondary schools in systematic improvement of education quality.

Performance reviews are essential in this process as they provide the most reliable form of information.

The EDU Q-card is designed to provide education professionals with a psychometrically sound tool to assess and monitor education quality and assist them in their road towards improvements.

The EDU Q-card is designed to develop a realistic action plan to achieve improvements within constraints of time and finances. It emphasises five domains that are globally crucial to achieve high quality in education: learning environment, teaching, learning, school management and parent and community involvement (five domains of Edukans EDUstars school model). The assessment process is structured to create co-responsibility among all those directly involved in the schools. This is expected to contribute to long-term outcomes.

The EDU Q-card uses a participatory approach, in which it is important to involve all the stakeholders of the schools in the process. During the process, an internal self-assessment is facilitated. The assessors fill in questionnaires on a mobile application or a laptop. The questionnaires follow the five domains of the Edukans school model. Each domain has eight indicators which are scored on a four-point scale with a range from weak to excellent. In a second round, external assessors (school inspectors and education experts) score the school on its quality. All the results are immediately generated including a comparison between results from the external and self-assessments. The application provides a report immediately in pdf showing strong points, weak points and discrepancies between the judgements by the internal and external assessors. The stakeholders discuss this on spot in a dialogue which results in an actionable school improvement plan.



In 2018, the validity and reliability of the EDU Q-card is examined and evaluated by Ünal (2019). This study evaluated the items of the EDU Q-card and made suggestions to make the items understandable for every stakeholder. The current study adds qualitative empirical insights on how the approach of the EDU Q-card intervention (participatory multi-stakeholder approach and self-reflection) works in Suriname and Ethiopia.

To this aim, data were collected in February and March 2019 in Ethiopia and Suriname to gain insight in **1) Whether the EDU Q-card assessment supported the intended participatory approach and 2) Whether it is a valid tool in the cultural contexts of both countries**. These researches are of key interest for both Edukans and other organizations that are working with participatory and evaluative approaches to educational change in an era where participatory approaches to development are both praised and criticised for their ability to foster long-term commitment and abilities to sustainable context-sensitive change.

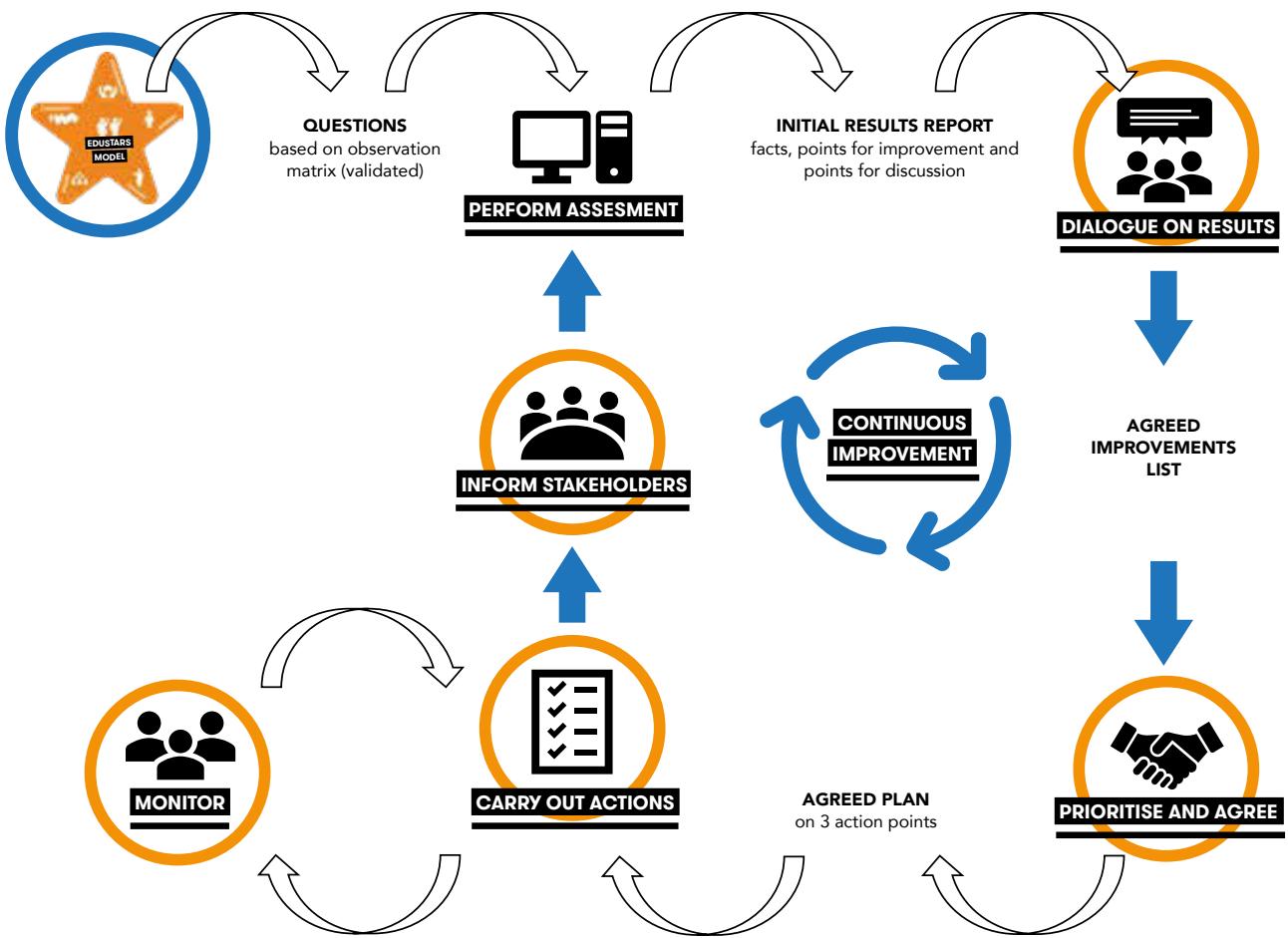
METHOD



In this study, qualitative data collection methods were used. In Ethiopia and Suriname data collection was done by conducting semi-structured interviews with internal and external assessors of the EDU Q-card. This was done by two pairs of Master students preparing their theses for the University of Amsterdam and Utrecht University (authors 3, 4, 5 and 6). In the context of Suriname, the researchers – two pairs were able to collect data from participatory observations as well. Before any research activity, informal and explicit consent has been asked from the research participants to ensure fairness and accountability between researcher and respondents. In Ethiopia, both people who were familiar and unfamiliar with the EDU Q-card were involved in the research. In Suriname, all stakeholders were informed on the EDU Q-card. The collected data is transcribed, analysed and labelled via the qualitative analysis method of Baar (2002) and Baarda, De Goede & Teunissen (2013).

In Suriname twenty-four semi-structured interviews and nineteen observations were carried out during meetings at six different schools, the office of Evangelische Broedergemeenten in Suriname (EBGS), the local implementing NGO and the Edukans office. In Ethiopia sixteen semi-structured interviews were held and two schools were visited. The interviewees in both countries included parents and community members, school inspectors, head teachers and teachers.

To assess the validity of the instrument, construct and consequential validity have been investigated. Construct validity can be understood as: “*The extent to which an assessment instrument actually elicits the construct*” (Messick, in Admiraal, Hoeksma, van de Kamp, & van Duin, 2011, p. 2). There are two major threats to construct validity that should be considered. These are (1) construct underrepresentation and (2) construct-irrelevant



variance. Construct underrepresentation refers to the assessment being too narrow and thus unsuccessful in including other very important dimensions that are embedded in the underlying theory. Whereas, construct-irrelevant variance occurs when an assessment is too broad, testing irrelevant aspects that are not embedded in the underlying theory of a test. With this study, EDU Q-card is tested to minimize these threats and ensure a robust assessment. Therefore, we investigated what is considered as the most important to enhance the quality of education by Ethiopian and Surinamese stakeholders. It is expected that all the highlighted concepts with regard to high-quality education is addressed in EDU Q-card.

Another key investigation focused on consequential validity which can be measured by the positive and negative social consequences as well as the intended and unintended consequences of an intervention (Admiraal, Hoeksma, van de Kamp, & van Duin, 2011). This can be further operationalised by fairness, meaningfulness and transparency. “The consequences of an assessment procedure should be the same for everyone (*i.e.*, fair); the assessment tasks should have noticeable value for those being assessed (*i.e.*, meaningful); and the assessment tasks should be formulated and communicated clearly (*i.e.*, transparent)” (Admiraal et al., 2011, p. 1025). By standardising the instrument, we aim that EDU Q-card will provide schools and education professionals a guidance and motivation in reaching continuous improvement of education quality.

RESULTS

1) Does the EDU Q-card assessment support the intended participatory approach?

Results have shown that a participatory approach is highly valued. A respondent from Ethiopia is quoted as follows:

"Quality of education is no compromise; it is the backbone of a country. So, every community should be devoted to ensure quality of education"

Indicating that community involvement is very important in order to improve the quality of education. The crucial role of the community involvement is substantiated by six other respondents. Furthermore, ten respondents stated that stakeholders must be involved in the process and nine of those emphasised that stakeholders' involvement improves quality education.

Other prominent concepts were self-reflection and determining improvement points. One respondent drew attention on it by saying

"Everybody must accept his weakness. Because knowing your weakness is filling the gaps for the future I think."

Self-reflection is necessary to detect and then improve weakness/gaps. Detecting weaknesses is considered as the first step for improvements. These two concepts were overwhelmingly mentioned by the respondents. All the stress in self-reflection and determining improvement points confirms that participatory approach is indeed playing a very crucial role in improving education quality. However, ten respondents also complained that there is no practice with self-reflection in Ethiopia and they have not enough experience with self-reflection. They often mentioned that

"This is not common to do. It is only when STAR-school is implemented that self-assessment starts".

Considering the high power-distance (hierarchy) culture in Ethiopia, the school management might be expected to act as the main decision maker. However, it is well proven that the school management should not be the only one that prioritises the problems and a broader participation approach should be followed by all stakeholders.

Respondents from Suriname remark that the participatory approach in which the EDU Q-card is embedded, including the opinions of all stakeholders into the process of educational improvement is new also in their context as well. The Surinamese respondents argued that this novel approach provides them insight into weaknesses that often all are off the radar, and valued its ability to increase transparency regarding the improvement process.

"Because when you are in an environment every day, you no longer see which things you should do differently. This really helped to set priorities regarding the points for improvement at the school and where I have to make my contribution first."

Every single Surinamese respondent stated that different opinions on schooling are valuable if the aim is to improve the quality of schooling. One respondent who is a teacher summarised the importance of participation as follows:

"Wonderful, wonderful, wonderful. Because you know it's a triangle. Parents, school, child. We need the parents. They can also have their say. We do not know. We can also make mistakes and we don't know. They are there for that."

Above all, it has been mentioned that this intervention is more than evaluation of learning outcomes from students and thus creates a more holistic view on the quality of education. It helps schools to work in one direction and to cooperate in a more effective way.

2) Is the EDU Q-card a valid tool in the cultural contexts of both countries?

First the results of the construct validity of the Ethiopian context are displayed followed by the results of the construct validity of the Surinamese context.

In Ethiopia the EDU Q-card is found to be relevant for the Ethiopian context. An education specialist stressed that the five pillars of the EDU Q-card combined would bring sustainable quality education and in case of a successful implementation of all

“ Because when you are in an environment every day, you no longer see which things you should do differently. This really helped to set priorities regarding the points for improvement at the school and where I have to make my contribution first.”

pillars of the EDU Q-card, a country can improve the quality of its education.

“If we are good enough in implementing those items, as they are, we can bring the quality we need. If we implement correctly, those items as they are, it’s not difficult ... it is possible for this country to improve the quality.”

EDU Q-card also received some criticism emphasizing a lack of certain concepts which are believed to play an important role in Ethiopian education. The government and its education policies, the role of ICT, a focus on the English language proficiency of teachers and students, and the results of the students were of the featured concepts that found to be missing in the instrument.

On the other hand, in Suriname, the most common reasons why education is considered to be important, are: (1) stimulating children to reach far, (2) good citizenship, (3) for children to value their relationship to Christianity and the norms and values the bible teaches them, (4) how to be tolerant and respectful towards others regardless of their ethnical background, religion or gender. From

all these listed reasons, the first two are especially considered to be most valued in Suriname.

“The most important thing is that our children become a fully-fledged citizens. That is our goal. They must have a basis. We send them to school for this reason. I want from my child to help bring the country forward. Not just getting a diploma”.

All the insight gathered in two countries demonstrate that the profoundly valued domains of high-quality education overlap with EDU Q-card's pillars to a great extent. Active learning, differentiated teaching and qualified teachers, good leadership and cooperation within schools which are addressed in pillar 2 (learning), pillar 3 (teaching), and pillar 4 (school management) respectively, are considered as of the most important domains.

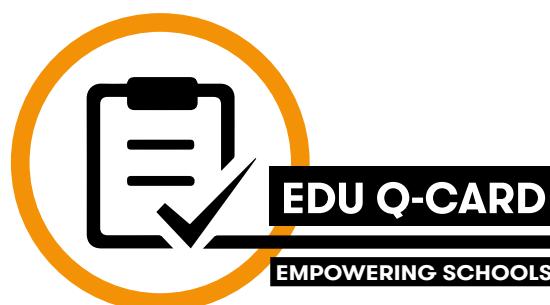
CONCLUSIONS, DISCUSSION AND RECOMMENDATIONS

From the results of the two studies carried out in two country contexts, it can be concluded that the EDU Q-card creates more public participation in quality assessment of schools. It is a motivator for action by students, parents, community and teachers alike. By defining realistic action points all stakeholders work together to reach sustainable quality improvements. Although this has not been the focus on this study, and therefore needs to be addressed in further research, this is expected to contribute to create impact in terms of improved learning outcomes, higher transition to follow-up education and decreased drop-out.

The five domains for education – defined by EDUstars school model; Learning environment, Participatory and active learning, Structured Teaching / effective instruction, Educational School Leadership, Parent and community involvement – appear to be valid across cultures.

In order to realise this potential some challenges should be addressed by investing in preparation and training of the stakeholders. In both the Ethiopian and Surinamese context, EDU Q-card is found to support a bottom-up approach for school assessment and quality improvement. Although challenges arose due to lack of experience with the participatory approach, the value and importance that the users associated with the EDU Q-card indicate a large potential to achieve the intended effects. The respondents were willing to implement the EDU Q-card and to use the assessment results to reach the overarching goal of improving the quality of education. In both countries, the stakeholders reviewed the tool and strongly believed that its bottom-up approach is meaningful in improving quality of education. In conclusion, to achieve the intended consequence of the tool, better understanding of its participatory method to implement it successfully in these contexts is needed.

In both the Ethiopian and Surinam context the five





pillars were considered to be important aspects of quality education. This implies that the concept of quality education as it is based on the STAR-model of Edukans and applied in the EDU Q-card assessment, is in line with the perceptions of Ethiopian and Surinamese stakeholders. Since the respondents' perceptions on quality education align with the conceptualization of the EDU Q-card users, we could conclude that the EDU Q-card successfully measures its construct of education quality.

However, it should be noted that there were several aspects mentioned to be missing in the EDU Q-card especially in the Ethiopian context. Therefore, it is recommended for Edukans to make the EDU Q-card more adjustable to different cultures and education systems.

It is recommendable to design and carry out activities aimed to increase awareness and knowledge in all stakeholders to play their role effectively. This can be done through distribution of materials and offering appropriate guidance – also for the internal assessors – e.g. through training. Since the use of the tablet is also seen as an obstacle, demonstration and practicing the use need more attention. As for external assessors, they need more experience in facilitating a participatory group discussion. This could be addressed through training in which they can practice applying skills

such as leading reflective discussion and creating a safe space for everyone involved to speak and be heard. Teach inspectors how to trigger the dialogue between the stakeholders. Creating a safe space can help people, especially in hierarchical organizations, with 'less power' to speak up to people with 'more power' and at the same time help people with 'more power' to listen to people with 'less power' (Estrella et al., 2006).

All in all, the motivating power of the EDU Q-card assessment stands out. Parents, teachers and learners themselves are eager to work together to realise improvements in their school. A major contributing factor is that EDU Q-card makes improvement points accepted, actionable and concrete. The five domains for education (Learning environment, Participatory and Active learning, Structured Teaching / effective instruction, School Leadership, Parent and community involvement) provide a strong structure to work towards sustainable improvement.

COUNTRIES WORLDWIDE USING THE EDU Q-CARD



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