

AN ALTERNATIVE ASSESSMENT OF VALUES – GIVING STUDENTS A VOICE THROUGH SELF- AND PEER- ASSESSMENT

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ABSTRACT

Values define a person's character and shape the beliefs, attitudes and actions. Thus they form the core in preparing our pupils for life and work in the 21st century.

Typically, students' values are assessed by teachers based on rubrics. Biasness is present as there is only one assessment source. Thus, this alternative Value Assessment Model aims to assess our pupil's values objectively. The pupils self-assess and are assessed by their peers and teachers based on observable behavioural traits.

The data collected from the three sources were analysed and the results were used for both summative and formative purposes. For summative purpose, the school used the results to identify Edusave Character Award (ECHA) recipients and potential Student Leader, determine Conduct grade and ascertain Personal Qualities level. At the same time, it was used as one of Civic and Moral Education (CME) grading criteria. For formative purpose, the school used the results to identify pupils who had low scores to attend Self-Mastery for Success Workshops.

The school has implemented this alternative Value Assessment Model for 2 years. Feedback from teachers was positive. The self- and peer-assessment results were similar to teacher-assessment results, especially for those who had high or low scores.

KEYWORDS:

Self-assessment, Peer-assessment, Value Assessment Model, Alternative Assessment

INTRODUCTION

In Singapore, Ministry of Education (2010) implements a framework to enhance the development of 21st century competencies in the students. This underpins the holistic education that all the schools provide to better prepare the students to thrive in a fast-changing and highly-connected world driven by globalisation and technological advancements (Ministry of Education, 2010).

The framework is illustrated in Diagram 1. It simplifies the concept of how the desired student outcomes are achieved with 21st century competencies, social and emotional competencies, and core values (Ministry of Education, 2010).

Diagram 1



Ministry of Education (2010) desires to nurture each student to become a confident person, a self-directed learner, an active contributor and a concerned citizen so as to better prepare them to thrive in the future globalised world. As such, it is crucial for the students to be equipped with the 21st century competencies, namely civic literacy, global awareness and cross-cultural skills, critical and inventive thinking, and information and communication skills so that they are able to tap into the rich opportunities in the new digital age, while keeping a strong Singapore heartbeat (Ministry of Education, 2010). It is also necessary for the students to acquire the social and emotional competencies as they need these skills to recognise and manage their emotions, develop care and concern for others, make responsible decisions, establish positive relationships, and handle challenging situations effectively (Ministry of Education, 2010). The centre of the framework is the core values – respect, responsibility, integrity, care, resilience, harmony – as Ministry of Education (2010) strongly believes that knowledge and skills must be underpinned by values because they define a person’s character and shape a person’s beliefs, attitudes and actions.

To effectively implement the framework, Ministry of Education (2010) reviews and revises the national curricula, for example Physical Education, Art and Music Education, Co-Curricular Activities (CCAs) and Character and Citizenship Education. With these changes, the schools refine the teaching approaches and assessment methods (Ministry of Education, 2010). The key challenge faced by schools is how to assess the students' values more fairly and objectively.

Typically, student's values are assessed by teachers based on rubrics, which include a set of desired values and a range of standard. Although rubrics are used, the teacher-assessment of students' values still results in certain level of biasness. This is so because there is only one assessment source and teacher-assessment is based on perceptions.

One way to lower the level of biasness is to triangulate value assessment results. Self- and peer-assessments of value could be the two other sources of data used in the triangulation of value assessment results. Furthermore, the inclusion of self- and peer- assessments ensures that the assessment is aligned more closely to the conceptions of constructivist learning (Spiller, 2012). In addition, Boud and Falchikov (2006) stated that active participation by students in assessment design and making judgements is a more sustainable preparation for their future working life.

Self-assessment is a process whereby students reflect on and evaluate the quality of their work and learning, judge the degree to which they demonstrate explicitly the expected goals or criteria, identify strengths and weaknesses in their work, and improve accordingly (Andrade & Du, 2007). Students' involvement in monitoring and making judgements about their own learning is an integral part of learning process (Spiller, 2012). It is highlighted by Spiller (2012) that self-assessment encourages reflection on one's own learning, promotes learner responsibility and independence, encourages student ownership of the learning, deepens students' understanding of what constitutes quality outcomes of a desired goal and motivates further learning if a student is able to identify his/her learning progress. Furthermore, self-assessment helps "to prepare students not just to solve the problems we already know the answer to, but to solve problems we cannot at the moment even conceive" (Brew, 1995, p. 57).

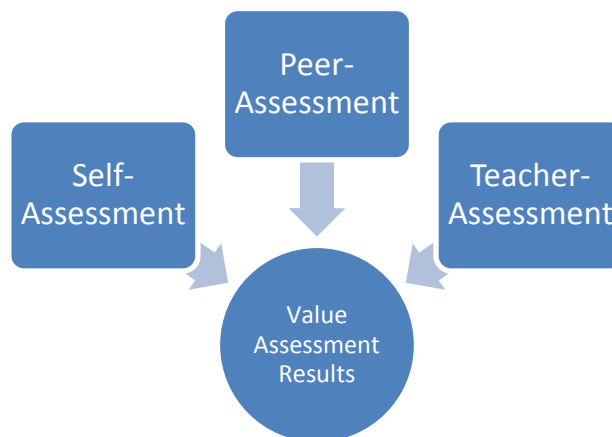
Peer-assessment is defined as "an arrangement for peers to consider the level, value, worth, quality or successfulness of the products or outcomes of learning of others of similar status" (Topping, 1998, p. 250). It also involves students in providing feedback to their peers on the quality of their work (Spiller, 2012). Through peer-assessment, the power imbalance between teachers and students will be lessened and the students' status in the learning process can be enhanced (Spiller, 2012). It is also believed that students who are "engaged in commentary on the work of others can heighten their own capacity for judgement and making intellectual choices" (Spiller, 2012, p. 11). Likewise, students who receive feedback from their peers can get a wider range of ideas about their work which are helpful in their improvement (Spiller, 2012). Additionally, peer-assessment could improve students' social and communications if

they are involved in both giving and receiving feedback (Topping, Smith, Swanson & Elliot, 2000). For example, students could improve negotiation and verbal communication skills, learn to give and accept criticism and evaluate suggestions objectively (Topping et al., 2000).

DESIGN AND METHOD

Our school conceptualised the Value Assessment Model, as illustrated in Diagram 2, in 2012. Since then, it was implemented at Primary 3, Primary 4, Primary 5 and Primary 6 levels at the end of Term 3. All students in the level were involved.

Diagram 2



The Values Assessment Model aims to assess the school’s core values in the students. The four school’s core values are: (1) Graciousness in conduct; (2) Responsibility in words and deeds; (3) Integrity to uphold; and (4) Perseverance for excellence. They are aligned to the national core values. Each school core value is defined by two observable behavioural traits, as shown in Table 1.

Table 1

School’s Core Value	Observable Behavioural Trait
Graciousness in conduct	A person who is gracious: <ul style="list-style-type: none"> • speaks politely, greets others and uses words like “excuse me”, “sorry”, “thank you” and “please”. • helps others.
Responsibility in words and deeds	A person who is responsible: <ul style="list-style-type: none"> • says and does the right thing, and apologises if wrong. • completes and submits school assignments on time.
Integrity to uphold	A person who has integrity: <ul style="list-style-type: none"> • admits his/her mistakes. • tells the truth.
Perseverance for excellence	A person who perseveres: <ul style="list-style-type: none"> • does not give up easily. • is willing to work hard.

The assessment began with peer-assessment and self-assessment. Each student assessed every individual member in the form class based on the observable behavioural traits using a 5-point Likert scale. The sample is shown in diagram 3.

Diagram 3

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Statements for Core Values – Graciousness in conduct

Name : _____ Class : 3CH

Answer the following about your friends demonstrating the school’s core values. Shade the box to indicate your responses for Q1 & Q2 for all your classmates.

SA – Strongly Agree, A – Agree, N – Neutral, D-Disagree, SD-Strongly Disagree

Index	A person who is gracious	1 speaks politely; greets others and uses words like “excuse me”, “sorry”, “thank you” and “please”					2 helps others				
		SA	A	N	D	SD	SA	A	N	D	SD
1		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

The peer-assessment data was then collated and the average score of each school’s core value was calculated. The total score was the summation of the average score of all the school core values, as shown in Table 2 (sample).

Table 2

		Graciousness		Responsibility		Integrity		Perseverance			
Class	Name	Avg G	Rank	Avg R	Rank	Avg I	Rank	Avg P	Rank	Total	Rank
CH		4.458	1	4.707	1	4.400	2	4.567	2	18.132	1
CH		4.314	3	4.655	2	4.419	1	4.427	5	17.815	2
CH		4.360	2	4.399	9	4.047	15	4.655	1	17.461	3
CH		4.259	7	4.518	4	4.267	5	4.415	6	17.459	4
CH		4.267	6	4.474	6	4.221	7	4.440	4	17.403	5
CH		4.163	12	4.560	3	4.360	3	4.295	11	17.378	6
CH		4.279	4	4.471	7	4.035	16	4.512	3	17.297	7
CH		4.202	8	4.489	5	4.294	4	4.229	15	17.215	8

The peer-assessment results were then triangulated with self-assessment results. After that, the level teachers and Mother Tongue Language teachers looked through the results and provided their assessment inputs to endorse the score and ranking.

Once the results were endorsed, they were used for both summative and formative purposes.

For summative purpose, the school used the results to identity Edusave Character Award (ECHA) recipients for “demonstrating exemplary character and outstanding personal

qualities through their behaviour and actions” (Ministry of Education, 2014). The Leadership department also used the results to identify potential student leaders since the results indicated if a pupil, in the eyes of his/her peers and teachers, is a good role model of school’s core value. Form teachers made use of the results to determine “Conduct” grade and ascertain “Personal Qualities” level. At the same time, The Civic and Moral Education (CME) teachers made reference to the results and included it as one of CME grading criteria.

Tables 3 and 4 shows how the results were being used in determining “Conduct” grade, “Personal Qualities” level and CME grade.

Table 3

Total Score of all Values	Conduct	CME
0.0 – 9.9	Fair	C
10.0 – 13.9	Good	C
14.0 – 15.9	Very Good	B
16.0 – 20.0	Excellent	A

Table 4

Average Score of each Value	Personal Qualities
0.0 – 2.9	Demonstrate to Some Extent
3.0 – 3.4	Demonstrate Adequately
3.5 – 3.9	Demonstrate Strongly
4.0 – 5.0	Demonstrate Very Strongly

For formative purpose, the Character and Citizenship Education (CCE) department organised a 6-Session “Self-Mastery for Success” Workshops for students who scored less than 3 in “Graciousness in conduct”. Each session is 1 hour 30 minutes long. The main objective of this intervention is to improve the students’ social interactions with others. Through the workshops, the students learn social skills to engage others and build positive relationships with people around them.

FINDINGS

After the implementation of the Value Assessment Model for 2 years, the school conducted qualitative survey with the teachers. 17 of them responded and their feedback was positive.

The survey showed that the Value Assessment Model is believed to be a systematic and valid methodology and the results are objective, reliable and fair. In the school, the students not only interact with their teachers, they also mingle and interact with their peers (Teacher M). Their interactions with their peers thus could provide a reliable source of value assessment results (Teacher M) as students express genuinely how they feel about their peers (Teacher O). Since this model involves self-, peer- and teacher-assessment, the results from the 3 sources could be triangulated (Teacher B) to provide a more accurate and reliable results. Importantly, the peer-assessment results are similar to teacher-assessment results (Teachers D and K) are quite spot-on (Teacher F).

As a whole, the teachers felt that the value assessment results have been put in good use, in both summative and formative purposes. Because the results are triangulated, they are more

accurate and reliable to identify ECHA recipients and potential Student Leader, determine Conduct grade and ascertain Personal Qualities level. Similarly, the results are being used by the CME teachers as one of the criteria in assessing students' CME grade (Teacher K). The same reason was given by Teacher K that the students spent more time interacting with their peers than with the CME teachers and thus their views about their peers could be included in the value assessment. In the aspect of formative purpose, the assessment results allow the teachers to identify the specific area for improvement for students who needs the help in the betterment of their values (Teacher A). It is important to provide the necessary support to the students, in terms of value intervention programme, so that they are inculcated with positive values (Teacher B).

Other than all the intended purposes, the value assessment results are also being used by the teachers for other purposes. Teacher A stated that the results allow him/her to pre-empt problematic or difficult behaviour in class. Teacher B used the results to understand the students under his/her charge and thus he/she could provide timely and appropriately support to the students in terms of value inculcation. Teacher D used the results with confidentiality to conference with parents professionally so that they receive a holistic report about their child's development.

CONCLUSION

Though the Value Assessment Model receives positive feedback from the teachers and it has so far serves its intended purposes effectively, limitations still exist.

Firstly, there are only two observable behavioural traits for each value. Having just two traits is intentional so that it could reduce the assessment burden of the students, bearing in mind their concentration span. However, it may also lower the reliability of the assessment results.

Three of the eight observable behavioural traits contain more than one construct and thus lower the validity of the construct. For example, the trait, a person who is responsible says and does the right thing, and apologises if wrong, is a synthesis of three possible constructs which will complicate the students' judgement in their assessment.

In the Value Assessment Model, the peer-assessment results are first triangulated with the self-assessment results, then validated and endorsed by the teachers. There is a gap in this triangulation process. The purposes of self-assessment and teacher-assessment are not clearly defined. Thus the results from these two sources are not being used to achieve the intended outcome. The teacher-assessment results should be included in the calculation of the final assessment results, which will be then compared against the self-assessment results to have a more holistic view.

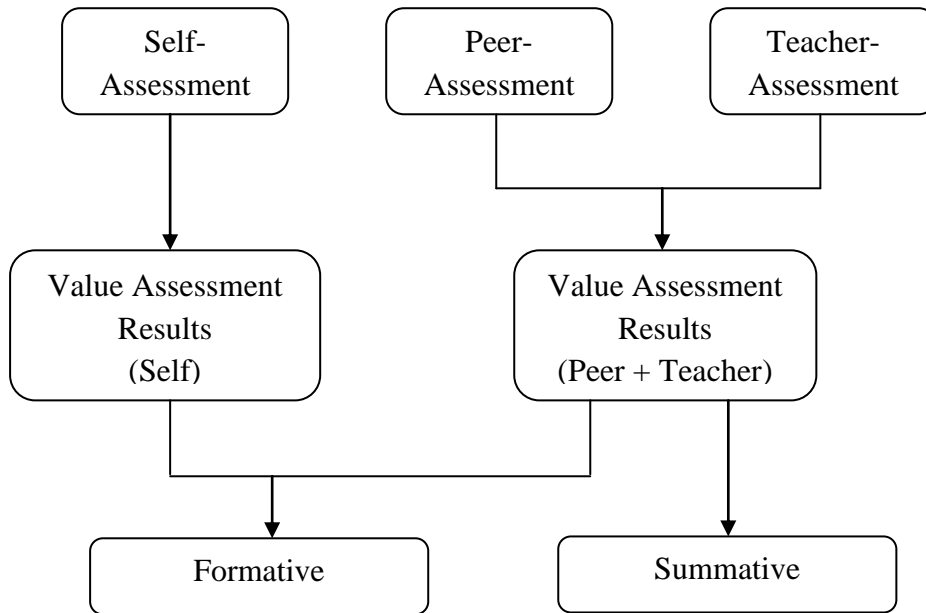
Another limitation of this model is the maturity of the students in assessing their peers objectively. A primary 3 child, who is nine years old, may not have the maturity to objectively assess his/her peers. At the same time, they may lack the concentration to assess all his/her classmates in a sitting.

These limitations suggest some future plans for the Value Assessment Model. There is a need to strike a balance between the number of traits for each value and assessment burden of the

students. In order to increase the reliability of the assessment results, the number of traits should be increased too. One possible future plan is that the number of traits could be increased to three for primary 4 students and to four for primary 5 and 6 students. Another future plan is to relook the three traits that have more than one construct. Each trait should have just one construct so that there is validity.

Last but not least, the conceptual understanding of the Value Assessment Model will be redefined as illustrated in Diagram 4.

Diagram 4



The proposed Value Assessment Model will still have self-, peer- and teacher-assessments. Peer-assessment will involve all classmates in the form class whereas teacher-assessment will involve three different teachers who have interaction with the students. The data from peer- and teacher-assessments will be included in the calculation of Value Assessment Results (Peer + Teacher), to be used for the summative purposes like selection of ECHA awardees, Conduct grade and Personal Qualities level. The Value Assessment Results (Peer + Teacher) will be compared against Value Assessment Results (Self) for formative purposes. For example, there will be Self-Mastery for Success workshop students who scored less than 3 for each value and teachers could make use of the results to discuss with the students to design their individual action plan.

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