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Need Analysis on the Usage of Multimodal Reading Assessment Among Secondary School Teachers

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***Abstract*---**Strategically developed assessment rubrics are essential to ascertain fair and consistent assessment grading. Nevertheless, devising assessment rubrics poses certain drawbacks as scores that determine students' capability are awarded holistically. In order to assure that students' grades indeed reflect their current capability and to provide effective feedback on aspects that demand improvement, rubrics must accurately evaluate and measure the performances displayed by students. Hence, this study identified the suitability and acceptability of multimodal reading assessment upon assessing reading skills among secondary school students. This study, which involved English language teachers from several schools located across Negeri Sembilan, Malaysia, had adopted the survey research method to design a multimodal reading assessment rubric and to obtain teachers' views on multimodal reading and viewing (MMRV). The study outcomes signified that although the teachers acknowledged and were aware of the advantages of applying MMRV, the absence of such rubric that specifically assesses MMRV seemed to limit this practice in classroom. This study concludes that it is imperative to formulate a comprehensive MMRV-based rubric to enable teachers assess their students' reading skills in a more accurate manner.

***Keywords*---**multimodal, reading assessment, secondary school, strategically developed, teachers.

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Introduction

The development of assessment rubric is a strategic move to effectively perform the intended assessment. The use of rubric portrays a fair assessment process, wherein students are awarded grades they deserve (Tshering et al., 2018). Consistency is essential when teachers assess their students, in which outcomes derived from an assessment can be applied to enhance students' capability over time. The assessment process for varied tasks demands a range of resources as each task pose different challenges and drawbacks (Lee et al., 2018). Having that mentioned, this study probed into reading assessment rubric, which appears to be more intricate and differs from other assessment types. Upon assessing students' reading capability, teachers in the past merely used their best judgment and curriculum requirement as their sole guide (Brooks, 2002). As such, the analysis undertaken in this present study determined the suitability and the acceptance of multimodal reading assessment rubric to assess reading skills amongst secondary school students.

Method

The survey research method was adopted to design the multimodal reading assessment rubric (Wong et al., 2020). Selected respondents were required to complete the questionnaire that contained Likert-scale items and multiple choice questions (Mansor & Ibrahim, 2012; Mardiana-Jansar & Hanafiah, 2020). Some essential demographic information was gathered from the respondents. The respondents selected for this study comprised of secondary school English teachers across Negeri Sembilan. The convenience sampling technique was performed to carry out the survey due to convenience in gaining access to the sample (Kong et al., 2019). In total, 30 respondents sufficed for the analysis undertaken in this study (Symmank & Spethmann, 2018). Essentially, risk of outliers that could affect outcome reliability was absent in the analysis (Dutta, 2013). Therefore, the gathered survey responses reflected validity and reliability. The survey tool consisted of questions that retrieved the respondents' demographic information, their capability of using multimodal assessment, their view on multimodal reading and viewing (MMRV), their varied ways of applying MMRV in classrooms, their preparation for multimodal reading in classroom, as well as their opinion about rubric guideline to teach MMRV. Each question required the teachers to choose one answer that best reflected their opinion (Kehlet & Wilmore, 2002; Turk, 2014).

Findings

The outcomes derived from the statistical analysis are presented in two segments; demographic profile and descriptive statistics of the gathered responses (Petersen & Ostendorf, 2009; Marcotte & Hintze, 2009).

Demographic Information

Table 1 illustrates the results of age category among the respondents. Uneven distribution was noted for age category as the age groups of 20-29 and 40-49 deviated far from the remaining two categories.

Table 1
Age distribution among respondents

Age	Frequency	Percentage
20-29	2	6.7
30-39	11	36.7
40-49	4	13.3
50-59	13	43.3

As for the gender distribution of teachers, most of them had been female teachers. In light of convenient sampling approach, no factor could describe the wide disparity between male and female teachers. Table 2 portrays the results of gender distribution amongst the respondents.

Table 2
Gender distribution among respondents

Gender	Frequency	Percentage
Male	2	6.7
Female	28	93.3

Table 3 presents the highest academic qualification possessed by the respondents. Most of them (70.00%) had earned a degree, whereas the least (3.33%) held PhD qualification.

Table 3
Highest academic qualification among respondents

Academic qualification	Frequency	Percentage
Degree	21	70.0
Masters	8	26.7
PhD	1	3.3

The survey respondents were selected from various secondary schools located across Negeri Sembilan, as displayed in Figure 1. Since most schools represented a fraction of 3.33%, equal number of teachers had participated in the survey, except for five schools that contributed to higher fractions. More teachers participated from these schools because they were more accessible compared to the other samples (see Figure 1) (Smith & Smith, 2007; Carr & Pearson, 1999).

The capability of using multimodal reading and viewing (MMRV)

Table 1 presents the analysis summary that addresses three questions. In light of familiarity with MMRV, the mean value obtained was 3.47; signifying that most of the respondents chose 'neutral' and 'agree' as their responses. The frequency distribution verified that a majority of the teachers did agree that they were familiar with MMRV. Next, the mean value for awareness on MMRV was 3.5, which was higher than that for familiarity aspect. The frequency distribution revealed a definite answer, whereby most of the teachers agreed to the statement. As for the aspect of teachers' ability in fulfilling lesson objectives of MMRV, most

of them responded 'agree' and 'strongly agree'. This was reflected in the retrieved mean value of 4.10 with a majority percentage denoting the response 'agree'.

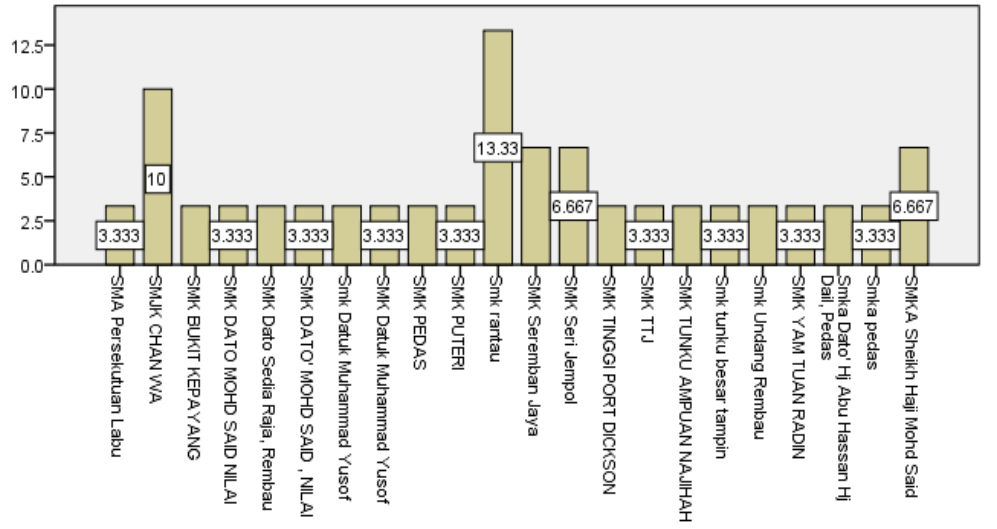

Figure 1. Fraction of respondents from selected secondary schools

Table 4
Capability of using MMRV

Question	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Mean
Familiarity	-	16.7%	23.3%	56.7%	3.3%	3.47
Awareness	-	10.0%	33.3%	53.3%	3.3%	3.50
Ability	-	-	6.7%	76.7%	16.7%	4.10

View on Multimodal Reading and Viewing (MMRV) Benefit

The respondents' opinion on MMRV benefit was compared with that of conventional reading, in which the outcomes are tabulated in Table 2. The mean value obtained was 3.70 as half of the respondents displayed agreement to the statement. This exemplified that the teachers did find MMRV more beneficial than the conventional reading approach (Campbell, 2003; Unianu, 2012).

Different MMRV approaches used

Table 5 displays the different MMRV approaches used by the respondents. In total, 60% of them claimed that they sometimes used visual effect. As indicated in the mean value of 3.5, the responses were mostly 'sometimes' and 'frequently'. Meanwhile, more teachers had opted for gestures frequently than using visual elements frequently, as signified by the mean value of 3.93 obtained for gestures element. On the other hand, only 53.3% of the respondents used the sound effect approach with a mean value of 3.63; implying that slightly more than half of the teachers made use of the sound aspect sometimes and frequently (Sabilah, 2016; Delgado et al., 2019).

The mean value of 3.00 for continuity approach (see Table 6) denoted that this particular approach was only used sometimes. Nonetheless, the approach of camera distance in MMRV was not commonly applied, when compared to the abovementioned four approaches, as indicated by its mean score of mere 2.63. Hence, camera distance was either seldom or sometimes used, as the frequency distribution for this element was only 33.3%. Similar to camera distance, spatial effect was not favoured by the respondents with a mean value of 2.90 (below 3.00). Most of the teachers omitted the spatial effect element, while 36.7% and 30.0% sometimes and frequently, respectively, applied this approach. This led to a mean score of 3.00.

Table 5
Opinion on MMRV compared to conventional reading method

Question	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Mean
MMRV is more beneficial	3.3%	-	33.3%	50.0%	13.3%	3.70

Table 6
Different MMRV elements used by the respondents

Question	Never	Seldom	Sometimes	Frequently	Always	Mean
Visual elements	-	-	60.0%	30.0%	10.0%	3.50
Gestures	-	-	33.3%	40.0%	26.7%	3.93
Sound effect	-	6.7%	40.0%	36.7%	16.7%	3.63
Continuity	-	23.3%	53.3%	23.3%	-	3.00
Camera distance	13.3%	33.3%	33.3%	16.7%	3.3%	2.63
Spatial aspect	6.7%	26.7%	36.7%	30.0%	-	2.90

Preparation involved prior to using MMRV

Two items were embedded into the survey to assess the preparation undertaken by the respondents prior to using MMRV in classroom. The outcomes are presented in Table 4. Based on the responses obtained for the guidelines that the teachers adhered to in using MMRV, most of them (63.3%) had referred to the curriculum, while the remaining 36.7% taught MMRV without any guideline. As for the item related to the need to teach the students MMRV, mostly had responded 'sometimes' and 'frequently' with 40% frequency distribution each and a mean score of 3.13 (Egorychev et al., 2021; Villa & Tulod, 2021).

Opinion on the need for rubric Guideline

The results for the last item in the survey are tabulated in Table 5. The mean score of 4.10 indicated that most of the respondents had agreed (50%) and strongly agreed (30%) that a rubric guideline should be incorporated to better comprehend MMRV. Meanwhile, the remaining 20% were neutral concerning the

need for formulating a rubric guideline to teach MMRV (Vocroix, 2021; Rinartha & Suryasa, 2017).

Conclusion

In conclusion, the teachers displayed the capability of using rubric to assess MMRV, mainly because a majority of them were indeed aware of the benefits and have been applying some of the MMRV approaches. Nevertheless, the absence of a specific rubric for MMRV assessment may have limited more teachers from incorporating the varied MMRV approaches in their classrooms. More importantly, as some teachers did not adhere to any particular guideline to teach MMRV, devising a comprehensive rubric is bound to benefit teachers in accurately assessing the students' reading capability. Therefore, a formal rubric needs to be developed for accurate reading assessment (Bond et al., 2007; Laidra et al., 2007).

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