

Chapter13: Impact of E-Assessment Middle School Students' Learning – An Empirical study at USA Middle School Students

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Abstract: Justice and the feeling of being dealt with justly are not only an anxiety reliever but also a great motivator for all human beings. Students appear in exams to get assessed about their academic learnings and understanding of concepts. Traditionally, such assessments were made through hard paper – pen tests conducted under exam conditions. Carrying out such assessments electronically is a not very old trend and such tests are termed as e-assessment, electronic assessments and computer based tests/ exams etc. This paper studies impact of such tests on the academic learnings of middle school US students using scale used by (John Dermo, 2009). The main scale measured 6 dimensions using 30 indicators while this study is shrunked to only two dimensions of “Comfort in use” and “Learnings through e-tests” measured through 14 indicators. Results show a normal distribution of responses with little skewness both towards “Ease in usage” and “Learning”. No significance difference was found in the responses based on “Genders” Still the study suffers the limitation of sample size and sample frame. These must be increased and study conducted at different areas students to make it more generalizable.

Introduction

However, it is very difficult at least, if not impossible to maintain objectivity in the assessments as human beings are subject to likings and disliking. In educational institutions, assessment of the students is similarly very important as well as very difficult. So, different assessment tools are being used world over for assessment of **students** in class as well as on project assignments, presentations and discussions on projects tell the amount of efforts put in a project. For example, exams are used to assess the students' performances in the subjects. When paper-based exams and tests are used to assess the students' performance, we have different constraints because it becomes hectic for teacher to check so many papers also in paper-based exams students have to be in the exam hall to give the exam so in this era a new idea of Electronic Assessment is being introduced in which technology is being used for assessment. The stages in which technology-based assessment came in education can be considered in three distinct generations or phases (Dragow & Bennett, 2006)

The First Generation: In the first place, there is a need to design an infra-structure that can lay the **foundation** for testing under changed environment. Such a system is generally low cost, economical and less complexed and quite resembles to how traditional system assesses. Such systems are also very good at assessing the institutional needs of school accountability but has somewhat differences from the traditional “paper based assessment style”

The core of this framework building is the change from the old improvement and conveyance process into another, extensively extraordinary one. For such end clients as neighborhood institutions, that progress may include putting broadly in PC equipment (e.g.,

tablets, PCs, intermediary servers) and systems administration hardware, preparing innovation staff to set up and investigate the test conveyance programming, and preparing educators to oversee and delegate online assessments, incorporating how to manage innovation disappointment. For the advancement and conveyance office, thing creation, test

gathering, quality control, and security will require embracing new procedures, permitting programming, and retraining staff (Chandler, M.A, 2013, May 20).

The Second Generation: In second-age tests, subjective (however steady) change and proficiency improvement become the driving objectives. On a fundamental level, second-age tests utilize less customary thing designs (e.g., ones including mixed media upgrades, short developed reaction, static execution undertakings like articles) and may make introductory endeavors to gauge new builds, starting to change what is surveyed. These tests likewise endeavor to improve proficiency through means such as automatic item generation (Gierl, M.J & Haladyna, T.M, 2013) mechanized scoring (Shermis & J. Burstein , 2013). Likewise, the utilization of the Internet for a wide assortment of inward procedures for associations with test clients is also fairly required. In the light of its curiosity, the utilization of innovation in this age may now and then overshadow substantive contemplations. That is, new thing types might be joined as much since they are not the same as customary numerous decision inquiries. Robotized scoring may correspondingly be utilized on the grounds that it predicts the scores that operational human raters allocate, paying little respect to how it makes those expectations and of whether the substantive premise utilized by the displayed raters in making their decisions are comprehended.

In second generation tests, subjective and incremental change and effectiveness improvement become the driving force. Basically, second-age tests utilize less conventional thing groups such as ones including interactive media upgrades, short developed reaction and assignments like papers and may make starting endeavors to quantify new reasons starting to change what is evaluated. These tests likewise endeavor to improve productivity through means, for example, programmed things bringing innovation (Irvine, S.H & Kyllonen, P.C, 2010). Another important factor of all this is the mechanized scoring and use of internet for various other internal procedures that removes human elements (Shermis & J. Burstein , 2013)

The Third Generation: In the third generation, the reevaluation happening on various fronts at the same time. It is in this third generation that what was, from the outset, an advancement driven fundamentally by innovation ends up driven by substance (Bennett, R.E & Gitomer, D.H, 2009).

Such assessments serve both institutional and solitary learning purposes. Second, they are organized from emotional norms and speculation based space models. Third, the assessments use complex generations and other astute execution endeavors that copy noteworthy features of certified conditions, grant progressively standard joint effort with PCs, and review new aptitudes in dynamically present day habits. Finally, the examinations are dynamically planned with direction, testing execution more than once after some time

Along these lines, in electronic evaluation, the data innovation is also being utilized in educational assessment. For instance, Online PC based tests are being led these days wherein we can give the online test to students just by sitting in our room on our bed. This means there is no test lobby or an exam hall with invigilators roaming around. In this way, it turns out to be

simple for both assessor and the students who can even sit at two different continents of the world and take a test.

Additionally, on such a chance we see that electronic assessment is helping the educators. This is how the Electronic assessment can decrease the burden of the educators at both ends i.e teaching and the students and also helps in better and more judicious assessment.

Literature Review:

In United States, the Virginia Department of Education and many of the local school of districts gradually made the needed infrastructure investments, making the program to develop from small pilot project in 2000 to about 2.7 million tests that makes almost 94% of the net number of tests (Chandler, M. A., 2013) this program made assessments that found were much closer in design, content and form to the paper method they replaced. However, once when the infrastructure looked as reliably in order and working place, it incorporated technological enhancement items and use of Internet for Internal operations, developing from first-generation starting point to the second-generation processes (Richmond, VA, 2012). A similar success was made with Graduate Record Examinations (GRE) and the General Test of Teaching English as a Foreign Language Internet-Based Test (TOEFL iBT), and the Graduate Management Admission exam (GMAT) (Attali, Y., 2011). Similarly, Essay Tasks were found workable with the automated assessment (Rudner, L.M, Garcia, V, & Welch,C, 2006).

(Millsap, C. M, 2000) was probably the first one who studied the effect of electronic tests towards students' scholarly accomplishments. In such manner, the investigation has included 227 students who go to 12 classes of the Apprentice Medical Specialist Resident Course. The study applied single direction ANOVA and t-test for investigating the information. From the findings, the investigation neglected to locate any noteworthy distinction between electronic test organization modes and scholarly accomplishment. (Hijazi, D., 2011) also did comparison of students' performance in English grammar using cell phone-based, computer-based and paper-based testing. He analyzed the utilization of PC based appraisal and paper-based evaluation system to assess the scholastic accomplishment of students in English syntax course. A sum of 209 male and female students in Jordanian colleges were chosen. The outcomes got utilizing two-way ANOVA and expressive measurements display the measurably critical contrasts in the PC based evaluation and scholastic accomplishment of students in English language.

The idea of assessment is an organized procedure to measure the process and then its results defining qualities, characteristics and various other issues. Here we document what is empirically observed through various tests. These tests may be in hard shape on papers where students write their answers or alternatively can be conducted on computers i.e e-assessment. Thus we collect information of students on a standard topic and numerically grade these. However, the purpose of assessment must be determined to use the suitable assessment design tools for collection of information on students' performance.

The APA i.e. American Psychological Association's issued a list of Guiding principles CBAs or the Tests based on Computers. They recommended that the scores should be measured equivalent, or equivalent, only if the rank orders of respondents closely show similar results to one another. These should also have a similar score distributions and if not so, these must be made are approximately the same, or have been made around the same by rescaling.

In another study, (Alzu'bi, M., 2015) examined the effect of electronic tests on students' accomplishment in an English course. Electronic test was evaluated on 58 students and when statistically analyzed, it was found that the scores of students were measurably critical on the academic progress. A viable measurable methodology displayed huge distinction between the gatherings of the electronic tests scores and inspiration scales among Jordanian students (Basaran, B., Yalman, M., & Gonen, S., 2016) demonstrated the significance of electronic evaluations or tests as far as employees. The examination has demonstrated that employees can obtain quick outcomes and improve instruction. From the point of view of students, it enable them to spare time and cost, permit adaptability, increment the dependability by alleviating the errors made by human, give satisfactory and quick input, and gather the reactions to the inquiries in the PC condition

Associated Trends and Skills Required with e-tests and their Development

The aptitudes and skills that must be considered are the students' past experience while dealing with computers, as the educational literature affirms that some of the students who were not earlier acquainted with the computers could not utilize it easily and subsequently it seriously influenced students' performance that was assessed in electronic tests. As indicated by (Abdelaziz, H. A, 2012) in his study, that the demeanors of certain understudies toward PC are especially negative. Conversely, there is a gathering of understudies who have PCs at home, and numerous examinations have demonstrated that nature with PCs assumes a significant job in execution.

Literature also show at times that the results of Computer Based Tests and the Hard Paper Based Tests do not give same scores. However, it may be due to many extraneous variables those could not be controlled during experiment.

Similarity questions additionally emerge when we consider different PC platforms, which may differ physically from school to schools and class to class and also from difference in students. These all factors may then collectively make big differences and results may look even opposite at times (F. Drasgow & J. B. Olson-Buchanan, 1999).

However, while these analyses have commonly bolstered similarity, the examinations they inspected regularly utilized numerous decision tests; utilized little, unrepresentative students' tests; In such like cases, the literature guides not only to consider the ranking order but must also look for the mean score differences.

Anxiety for using Computers

Computer users at times face a disturbing association of anxiety while using computers in exam. Literature on the subject reveal some correlation between the two factors and show that the test anxiety is relaxed and reduced while employing computers in exam i.e. using e-assessment for education and academic purposes. Here the trend in using computers otherwise in routine life or not creates a feeling of anxiety amongst students. Trend of computers has come up as a more all-inclusive psychological idea and concept of mixtures of feelings and beliefs, whereas anxiety has been described as an emotional response negatively believed to deal with computers. (Amer, A. N. A. S., 2008).

Ability to revise the Answers in E-Exams

There is always a time when students need to revise their answers in exams. A second thought however, in the e-assessments, a student is generally not allowed to do so. Our item at serial 6

measured students' response over this aspect. The respondents were asked to give their views about reviewing and revising the answers in e-tests. Literature evidently reveal an inability to change and revise the answers in electronic exams causes a negative effect on students' results. At the same time it negatively impacts on the time taken in exams. So, the students appearing in e-assessments favored reviewable and revisable e-tests (Simonson, M. R., Maurer, M., Montag-Torardi, M., & Whitaker, M., 1987)

Literature also relates anxiety of electronic testing by students with achieving results in exams i.e. the academic achievements. This was done by allowing students to appear either in a computer based exam or a pen-paper test. When employing either type of test, the empirical results showed correlation of the type of test with the average academic achievement of the students (Khuraibah, I.M.S, 2015).

One of the widely referred research studies is the one done by NAEP, the National Assessment of Educational Progress. It used samples from the whole US who were asked to appear in tests those were at the same Item level and used the same format of MCQs, Short response questions and technology enhanced essay type items. The results were interestingly analyzed for differences between the groups as well as the differences amongst intra groups.

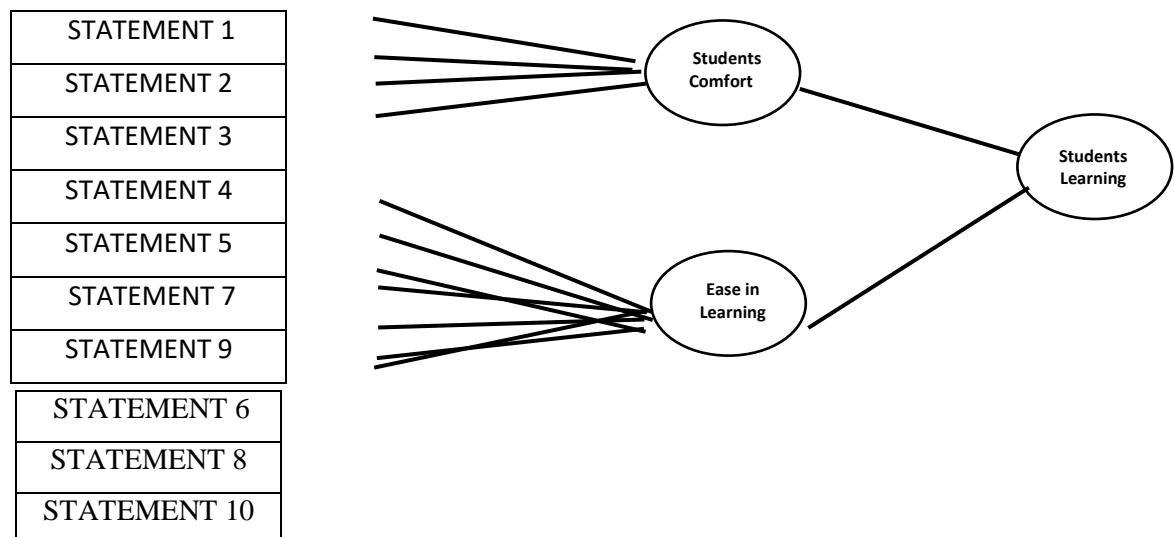
But the most interesting thing is that a lot of literature is available showing that much research has been carried about the instructors' and teachers' attitudes towards e-assessment at higher education level (Bull & McKenna, 2004) but little could be found at lower levels of education. So, this paper is focused to find US middle school students attitudes towards e-assessment.

Research Questions:

This paper focuses to answer following research questions.

- Q-1: Are students comfortable with doing assessments on computers?
- Q-2: Do they consider that e-assessment will positively contribute to their learning?
- Q-3: Is there any effect of gender over the comfort and learning through e-assessment?

Research model



STATEMENT 11
STATEMENT 12
STATEMENT 13
STATEMENT 14

Methodology

Student Perceptions of e-Assessment Questionnaire (SPEAQ) was used to get US middle standard student's views on e-assessment and its impact on their learnings.

The research context:

The research was carried out at two of the schools selected at convenience by the researcher. Students were asked to give their views on a questionnaire (appendix-A). The SPEAQ covered the research questions stated in the introduction. This may probably best described as 'Pseudo-Qualitative' when we use Likert Scale to convert attitudes and feelings into numbers. This is how we convert the 'Human Emotions' to numeric and then use this numerical data for decision making through research. (Cohen, L, Manion, L, & Morrison, K, 2003). This is what make the research pragmatic (Biesta, G & Burbules, N. C, 2003)

As analysts in education, we need to find out commonly held convictions, and we need the information as fast and inexpensively as possible. This is particularly valid in the zone of instructive technology, if an excessive amount of time is spent here on the exploration, the technology can take all processes advance, rendering the findings obsolete before they are even distributed (Stephens, D. & Mascia, J., 1995)

However, we should stay mindful of the confinements of such a pragmatic approach. We should recognize that the information we are gathering are not hard scientific certainties and that feelings are not effectively communicated in a quantifiable structure. So, we must take extraordinary care when concluding inferences from these information. The researchers also remained conscious as viewed by (Verma, G.K. & Mallick, K., 1999) not to let the personal assumptions to bias the analysis and results. This becomes extra challenging when the content is real subjective in nature.

The questionnaire was filled anonymously and mainly comprised of two groups: first, the demographic information that was restricted to only the gender of respondents as they were almost of the same age. The other part was based on various factual statements; some of those were even the negative in nature i.e. the response to these questions was reverse in nature. Such questions keep the respondents alert and avoid casual response from them (Fernando, E., Victor, M., & Gurrero, 2009). The respondents were required to give their agreement to the statements on 5-Point Likert Scale (Strongly disagree – Disagree – Neutral – Agree - Strongly Agree)

The responses of agreement or disagreement to the statements formed the central slice of the research data.

A lot of caution was taken during questionnaire design. Efforts were made to avoid double-barreled questions, leading questions, ambiguous and puzzling statements. However, some of

the reverse (negative) questions were included as discussed in the preceding paragraph. Experts advices were also sought to make the questionnaire visually professional and appealing in appearance. Respondents were informed that their responses and comments would help in making right decisions in institutions (Oppenheim, A.N, 2000)

Data analysis and findings

The questionnaire was served to 172 students of 4 middle schools sampled at convenience. However, students were randomly selected to respond to the questionnaire. Random sampling has the advantage that each member of the sampling frame has equal and more than zero chance

for being selected as sample. The useable returned questioners were 130 out of 172 making a return rate of 75.6 % Middle School US Students. The sample comprised almost twice the numbers of male (68.46%) than female (31.54%) students, that certainly does approximately show the gender balance in the schools where students have e-assessment.

Findings

The respondents came from four different middle schools, with mostly the same age. The overall response on the two dimensions was shaped by merging the 14-points rating gauge on a 5-point Likert Scale as discussed above. The qualitative response in the form of Strongly Disagree to Strongly Agree was de-coded to Quantitative nature weighing from 1 (Strongly Disagree) to 5 (Strongly Agree). The response has also been coded considering the nature of statements i.e. the negative statements have been coded in reverse manner making 5 (Strongly Disagree) to 1 (Strongly Agree). However, in both the cases Neutral response (i.e. neither positive, nor Negative) remained at code 3.

Dimension	N	Mean	SD	Median	Skewness	Kolmogorov –Smirnov test	Significance (2-tailed)	Cronbach's alpha
Comfort	130	3.172	1.038	3.2	-0.124	0.803	0.541	0.807
Learning	130	3.363	0.903	3.4	-0.318	1.114	0.167	0.826

Separate Indicators Rating

If we consider the separate indicators, the total of 14 indicators on 5-Point Likert Scale, 10 indicators out of the 14 were given positive response with a mean more than 3.0 (mean > 3.0) and four got a negative response with mean less than 3.0 (mean < 3.0).

In the event that we put aside all mean appraisals inside a scope of 2.75 and 3.25 as “Neutral” reactions, there was in certainty just one significant understudy worry about e-evaluation: ie, students’ stress is more due to being unable to maintain continuous concentration. This was probably not fair to be tested under a condition when it is difficult to maintain concentration. A (mean rating = 2.66) for this is obviously a point of concern both for students as well as for the evaluators and examiners. Contrary to this one, there were numerous positive reactions from students.

Teaching and learning: The students were of the view that e-evaluation was actually a positive attribute towards learning. The concept was also checked through a “Reverse Question” where students ‘ response to if e-assessment is a gimmick was asked. The response was little to the level of (3.45). However, yet an additional incentive to learning through e-assessment at the level (3.28) was also encouraging to find.

The response on the question about feedback also confirmed bias of majority of respondents in favour of the statement. This had a mean 0.41 to the positive side of (mean 3.0) i.e. at the level of 3.41

Effect of Demographics – “Gender”

Gender difference at times impact the relationship of some of the factors while studying. Literature on the subject of our study reveal that females are extra worried than the males while using computers. The study also shows that they (the females) are less anxious than males while using computers in application and training (Abdelhamid, I. S., 2002)

Our Research Questions also additionally manage how observations are influenced by sexual orientation of respondents (students). We tried to separate the responses utilizing the survey statistics information against “Gender” factor. Since this isn't exploratory research, and it is difficult to control the extraneous variables effects of factors like “Gender”. So although, causality may not be established, some relationship and significant association could be found. This is exactly what (Oppenheim, A.N, 2000) also recommends.

While examining the gender differences in relation to the two dimensions. The Mann–Whitney U-test is recommended for a nonparametric data by (Greasley, P., 2008). The normality statistical analysis confirmed that in some cases the Kolmogorov–Smirnov was significant for males while in others it was significant for the females. In all the cases the significance level was maintained at 0.05 i.e. at 95% probability chance. We can thus inference from this that Males and Females do not show any significant difference in their responses to the e-assessment.

Since this review was about collecting students’ response in the shape of agreement level to the given statements, the response was actually qualitative and subjective but not any hard and objective facts, so, it may be contended that all the information accumulated in this survey are subjective in nature. However, on the grounds that a large portion of the information revealed in the above areas depended on examined measurements from Likert scales, they may best be alluded to as pseudo-subjective or even quantitative in nature. In such like cases, there is a risk involved in dealing qualitative data as pseudo qualitative or actually dealing in quantitative way. Therefore, an effort was made to get a “One sentence statement on perception about e-assessment from the respondents. This gave an opportunity to the respondents to word out their subjective view about e-assessment. Some of the such perceptions are listed below; It may be noted that any process of coding, making nodes etc out of statements recorded there in qualitatively for further analysis are beyond the scope of this paper, so these subjective qualitative responses are merely added to give out a more clear and general opinion of the respondents.

- E-assessment not only assesses us but does expand knowledge.
- Exams in other subject can also be changed to E-exams
- I was not happy with e-tests until I was good at computers
- It is easy and convenient to appear in online tests

- I consider online quizzes as helpful provided they are not too much tricky
- Only straightforward questions in e-tests are comfortably tackled
- E-assessments are quick and easy
- Why not to do away with hard paper exams, e-tests are better
- I cannot have continuous concentration on computer screen

Implications and conclusions

No study is ever complete unless its implications are fully studied and results are fully analyzed to draw some concrete conclusions from it. This paper investigates the impact of e-assessment on the middle school students. In order to be brief but at the same time to cover the requisite details, we have curtailed it to only two aspects i.e. comfortability of students and assistance in learning. Underlying the same, there may be many other assumptions also which have not been included for the sake of brevity. However, we are cautious of the fact that if such like dimensions are not included at all so, these may induce some overwhelming negative and non-factual effects in the study, Therefore, in spite of being a quantitative study we have provided an opportunity to the respondents to include their subjective comments at the end of the questionnaire.

It was found that the, the study results generally indicate the distribution of attitudes in a normal range where major number of students awarded feedback scores more than 3.0 thus indicating a slightly positive emotional state towards e-assessment, especially when we consider their expectations. Still, we do recognize that a small minority did not feel easy with the e-assessments but since majority gives a positive response of comfort and easy in handling, e-assessment at least at middle schools level seems a students' favorite.

This research study also looked into if students consider e-assessment as positively contributing to their learning process or otherwise. If all other factors support e-assessment and mere this alone dimension was reacted as negative, it would have raised very serious question marks about the use of e-assessment in schools. However, it was luckily not the case and the students reacted mostly in positively way to it. The results of this study reveal a normal range of attitudes distribution towards "learning" with a very small majority of respondents getting scores more than 3.0, thus indicating a slight positive tilt of students towards e-assessment. We must also consider, that with both the indicators coming out in a positive way, the respondent students are mostly happy and comfortable with e-assessment and willing and ready be assessed through computers during exams at the middle schools level.

One of the major concerns students showed was that e-assessment did not actually assess structured exam paper. Contrarily, it randomly selects questions from the item (Questions) banks. clearly there is a serious perception amongst students that such style and manner of making exam papers is unfair and we need to somehow take measures and steps to guarantee the quality of the Questions item banks. It also implies that there is a need to do item analysis to confirm the same difficulty level questions in the bank. This is certainly a good practice, but our study findings on mere this one aspect alone do indicate a serious risk of facing challenges by the students when appearing in e-exams in future.

This study also looked for difference in attitudes towards e-assessment considering the gender difference. Although, no preconceived notions or hypotheses on how these gender groups may respond, but we actually approached to answer the research questions with an open-mind.

While analyzing the gender difference in attitudes towards e-assessment, we found very interesting results, showing that the gender did not affect the level of comfort or learning through e-assessment. Thus there seems no difference considering the gender of respondents. However, while analyzing the individual items, it was found that male students were more comfortable than the females in using computers as the male students were happier in appearing in exams those were conducted electronically.

Limitations of the study

Extent of Subjectivity of Responses

We must be cautious of the studies carried out using such pragmatic style where the data is not based on “Hard Scientific Facts” and the responses are actually not in a purely subjective form. Here the responses are confined and limited to only what is being asked. So, there is a need to exercise great care while drawing conclusions from such data (Mitchell, P. D, 1997). Therefore, it cannot be established that the study has uncovered some universal truths and can be conveniently generalized based on the studied facts here. These are merely tentative generalizations based on the context of this study alone.

Sample Frame and the Sample Size

The limited sample size and the sample frame was mainly due to the time constrains. So in order to make the results more generalizable, these must be enhanced in further studies.

Time line

The cross-sectional nature of study recommends conducting the similar studies in pre-post experiment way repeated over longer periods of time. Thus, longitudinal effects will bring better facts finding impact and therefore more generalization of the studied concepts.

Appendix-A

Hi, This is an anonymous feed-back to E-Assessment and is asked from you as part of academic research by students of Education Technology. You have to just mark the respective box as you agree or disagree to the statement. This feed-back cannot be used against the respondents at any forum and at any level. Thank you for your time and support.

Don't want to disclose Female Gender: (Tick any) Male

Q. No	Question Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
C1	I expect computers to be used as part of assessment at schools	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
C2	Using a computer adds to the stress of exams	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
C3	I'd feel more comfortable if the exam was on paper, not online	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
C4	I find it hard to concentrate on the questions when doing an online exam.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
C5	I'd rather do exams on a computer than on paper, because I am used to working online	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

L6	Online assessment denies the comfort of revising answers when attempted once thus badly impacts results.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
C7	My subjects are too complex to be dealt with by on line multiple-choice questions.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
L8	Marking is more accurate, because computers don't suffer from human error.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
C9	The technology used in online assessments is unreliable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
L10	The potential for immediate feedback with E-Exams could help me learn.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
L11	Online assessment can do things paper-based exams can't	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
L12	Online assessment can add value to my learning.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
L13	Online assessment is just a gimmick that does not really benefit learning.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
L14	Online assessment randomly uses questions bank that harms learning	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please give your feelings about e-assessment in just one sentence: _____

Extracted from “John Dermo. (2009). e-Assessment and the student learning experience: A survey of student perceptions of e-assessment . *British Journal of Educational Technology Vol 40 No 2* , 203–214 .” (John Dermo, 2009)

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