

Alternatives in Assessment: Student-generated Videos and Online Written Case presentations in Medical English

Anișoara Pop

GE Palade University of Medicine, Pharmacy, Science, and Technology of Târgu Mureș, St. Gh.Marinescu no.50, ROMANIA
E-mail: anisoara.pop[at]umfst.ro

Abstract

Creation is the top level of intellectual skills in Bloom's taxonomy. It requires learners to move from gaining knowledge, through analysing and eventually synthesizing, to making judgments. Although rarely do we attain the formation of this top skill in formal English learning environments, it is attainable with advanced medical students and especially desirable as they have to demonstrate perspicacity in the medical practice as early as their first clinical year, representing a key life-time competence for the future physicians. This presentation will document and analyse two assessment alternatives targeting precisely professionally relevant oral and written Medical English (ME) creative language use within an asynchronously-connected Facebook group as part of the ME blended learning format with students of UMFST GE Palade of Targu Mures during the academic year 1917-1918. The research employed a descriptive method. I explore the use of student-generated videos (individual presentations recorded on mobile devices) and written case presentations (Padlet.com) as alternatives in formative assessment, underlining their specific added values for Medical English: deep learning as well as professionally-relevant, more authentic, autonomous, skill-integrative productions that capitalise on the students' ability to use and produce the language rather than demonstrate knowledge of the language (inherent in exercise solving and tests). Student satisfaction questionnaires demonstrate that student-generated videos and online written case presentations are relevant, complex, and memorable means of assessment of Medical English progress that can complement online tests/quizzes, especially for the current context of full online learning and assessment.

Keywords: student-generated videos, case presentations, Medical English

1 Creating a student-centred Blended and Facebook-integrated learning (BL-FB) in Medical English

The topic of student-generated videos (S-gV) as alternative assessment in English for Specific Purposes (ESP) is under-represented in research (Ozguc, 2016) and even more severely so are clinical case presentations (CC) for online Medical English learning and assessment (Guest, 2018). One study mentions that students of Spanish enjoyed creating videos which helped them learn Spanish better (Kannan & Munday, 2014) while another study proposes student created videos in economics as a tool for enhancing learning experience (Greene, 2012). A recent study (Hawley, 2018) considers that academic staff may be reluctant to transform their assessment practices without evidence of strong benefits for doing so and brings relevant best practices of student-generated videos that increased the students' competencies, communication skills, and collaboration. However, all these reviewed cases referred to collaborative video creation and consequently the collaborative group assessment posed further group-dynamic complications (Lavy, 2017).

The subjects of the current study were second-year students (N=116) engaged in Medical English blended learning that combined face-to-face classroom practices with Facebook-group asynchronous content delivery and activities (BL-FB) during two academic semesters (2017-2018). The BL-FB model was adopted for reasons of social media pervasiveness, ease of use for students (Pop, 2018), but also for context-specific considerations pertaining to working with large groups of students, the need for a more democratic approach that would actively engage all the students, and a more faithful, field-relevant evaluation. The BL-FB target was optimal integration of online content and collaboration to promote active learning extension beyond the two

hours/week of class practical activities, as well as inclusion of alternative evaluation (30%) as stipulated in the syllabus. Four FB assignments per semester (one per month) integrated the communicative ME skills contributing towards the formative alternative assessment, two of which (S-gV and CC presentations) form the object of the current research.

2 Alternative Assessment

In its traditional form, assessment as gathering of information about the learners' knowledge is performed through tests/quizzes, generally accepted as valid and reliable measurements of what students know. Testing is the traditional component that may, however, fail to assess deeper forms of learning (Kulieke et al., 1990). A test is a timed, single-occasion exercise, usually a mid-term or/and final/exam that measures student learning. While tests may be successful and reliable instruments that offer scoring on the task performance, other alternatives to evaluation of deeper learning exist that capture the students' ability to apply and work on their knowledge.

The term *alternative assessment* (Huerta Macias, 1995; Nasab, 2015) including the use of journals, logs, self-evaluation, and teacher observations as „an alternative to standardised testing” appears in the literature alongside *alternative in assessment* (Brown & Hudson, 1998), the latter with reference to personal-response assessments (portfolios, conference, self- or peer-assessments) versus two traditional assessment types: a) selected response assessments (matching, True/False, multiple choice), and b) constructed response assessment (short answer, fill in, performance assessment). To these, the term *alternative approach to assessment* was proposed by McNamara (2006, cited by Derakhshan, 2011). *Alternatives in assessment* (AA) has been adopted in this paper to include student-generated videos and online clinical case presentations (CC) as alternatives to ME tests and exams. I **hypothesize** that by complementing tests/quizzes with AA, I provide a more authentic evaluation of what the students have actually learned by looking at their application of the acquired knowledge, allowing for reflection and problem solving i.e. applied proficiency, rather than assessing knowledge by providing answers to specific questions, inherent in tests/exams (Rousseau, 2018). While there is expressed concern about the validity and reliability of alternative assessment (Bachman, 2002), I entertain that an approach that blends tests with performance-based applications in a continuum is likely to cover more assessment principles of practicality, complexity (S-gV), interaction, and authenticity (CC presentations), engaging a broader range of language abilities, which is of utmost significance for the future medical practitioners.

2.1 Elements of FB assignments for alternatives in assessment (AA)

The assessment criteria in our ME context consisted of 70% (mid-term written test and final oral exam) and 30% - the alternative assessment and included formative data on:

- 1) *Overall ME goal*: mastering oral interactions in professional settings with physicians and patients. The primary goal was to improve Medical English in two contexts: reporting information to specialists (employing the so-called Med-speak) versus giving explanations and instructions to patients (using simple, jargon-free language);
- 2) *Specific objectives* (criteria): a) to be able to report information and make effective and concise oral and written clinical case presentations; b) to consolidate medical terminology on system-related diseases and give clear explanations and instructions to patients about their conditions; c) to use medical jargon and abbreviations/acronyms adequately;
- 3) *Key elements of AA pedagogy*: natural/spontaneous presentations, active, autonomous learning as a process with peer/teacher feedback, making judgments, and reflecting;
- 4) *Reliable evaluation and systematic peer feedback*: a 5-point Rating sheet for S-gV and CC presentations that considered: a) task completion, pronunciation, and delivery, ranging from 5

(excellent) to 1 (poor); b) peer feedback in terms of: content, presentation skills, and takeaway message.

2.2 Performance-based AA 1 – Student-generated videos (S-gV)

Videos have a larger prominence in current language learning than ever before especially due to the proliferation of sophisticated smartphones that allow easy and fast recording and distribution of content. If video productions are uploaded on an asynchronous-communication platform such as FB, they allow remediation and asynchronous communication including reflection and teacher- and peer-feedback. Exploration of voice and video recordings shifts the student's role from consumer to creator of content in a student-centred autonomous learning medium – a pedagogy that leads to the consolidation of speaking in authentic situations and which further attracts student engagement, higher motivation, creativity in content delivery, but also collaboration and peer-assessment. Despite all these, video creation for assessment remains an innovative emerging form of AA (Hawley, 2018). In this paper, **videos** are defined as short recordings (1-2min) of individual student presentations via a mobile phone (with both audio and video).

2.3 Engaging students through video creation - Results

Students created four two-minute video monologues in order to document their knowledge and ability to apply: reporting conditions to peers, explaining and advising patients (a), reflecting on medical practice (b), employing jargon-free language and maintaining rapport (c), and reflecting on their own first medical experiences (d). In each of the four video types below, students gathered materials, synthesized so as not to exceed the time limit and recorded several times until they achieved a natural speaking flow, adequate tone, modulation and rhythm to conform to the assignment requirements:

- a) **Tutorial videos** - *A neurological disease: Reporting to physicians versus talking to patients*. Students chose a neurological condition and the target listener (physician versus patient) and employed either the medical jargon or the simple, jargon-free, language to patients, respectively, demonstrating deep understanding of the disease (etiology, investigations, therapy). Results_a: 85 videoclips
- b) **Opinion videos** - *Reflections on disease and pain in a child*. Students had to talk to a child and his/her parents (in hospital or area) to find out about their ordeal of disease and pain, and then report their findings: history of the disease, child's attitude to pain and condition, parents' attitude to their child's disease, their own personal reflections. Written peer feedback on content and presentation together with takeaway message was also required. Results_b: 108 videos

Peer feedback e.g.:

From my colleague's presentation I've learned two main things: First of all, hospitals are not a priority for our government to be supported with medication for patients and they do not create a friendly environment for kids. Secondly, I've learned that asthma can be a severe illness if the patient is not careful with his medication; the patient needs special intervention and body positions for breathing in cases of emergency. The presentation was captivating, with clear explanations, adequate vocabulary, correct pronunciation (PCM).

- c) **Narrative videos** – *Reflections on doctor-patient communication: How vocabulary affects patient outcomes*. The assignment integrated watching several videoclips with reading articles on the role of vocabulary, rapport, and interruptions in clinical interactions. Results_c: 67 videos.
- d) **Reflection videos** – *Reflections on my learning*. Students offered details on what they had learnt, stressing the importance and impact of their learning rather than just giving factual information, including challenges. Results_d: 106 reflection videos, explaining the process

of deep learning. Apart from developing the language of metacognition, reflection videos offered insights into aspects that did not surface in formative assessment i.e.: what worked and what failed.

2.3.1. Discussion: Degree of engagement with video

Quantitatively, the 366 videoclips (a, b, c, d above) with an average of 2.12 min length/video meant an extension of the ME practice with about 776.75 min/year (i.e. 13 hours), without taking into consideration the preparation, re-recordings, and listening to peers. More than half of the students created all of the videos while 95.10% of them created two: one tutorial/opinion and one reflection video.

Asynchronous speaking allowed students to work on pronunciation and fluency, especially lexis, demonstrating greater self-regulation. Along with managing content, many students edited their videos while others resorted to design creativity such as introductory effects and advertising.

Other *strengths* of S-gV in AA: a) students could make choices of topic and created content that was listened to by their colleagues; b) students were connected and offered constructive feedback, thus promoting a culture of positivity and support, essential in their future careers; c) video recordings were more emotionally resonant than a test and their presentations had high quality; d) there was breadth of content, added variety and attractiveness (high number of visualisations); e) students could reflect on their own speaking (especially pronunciation of medical terms), thus applying critical thinking. However, besides challenges associated with video recording/voice quality, time investment, and task difficulty on the one hand, the S-gV posed an emotional obstacle for some students who felt uncomfortable about video recording.

2.4 Performance-based AA 2 – Padlet Online Case presentations

Making presentations is a key skill for the medical profession (Pascan, 2018). Giving oral, rapidly moving clinical case presentations during ward rounds is similarly basic for hospital environments, a type of reporting which is then documented in writing and transmitted to other physicians. Clinical case presentations represent one written genre of the medical discourse that follows a ritualised format. It is a highly condensed medical record that follows the so-called SOAP framework: the patient's complaints (Subjective), the doctor's observation of the patient's condition (Objective), assessment (A), and plan (P). In its written variant, CC presentations are terse, usually one-slide elliptical forms of expression which exploit depersonalisation, omission of terms, and a plethora of medical abbreviations that students need to understand and use. This canonical structure is part of every clinician's repertoire, which benefits the physicians' understanding of complex cases. However, when asked to SOAP a patient, medical students often struggle with what is expected of them. That is why it is highly recommended that students should be taught the accepted CC presentation style early in their clinical experience and Guest (2018) pleads for including CCs in the Medical English curriculum teaching and practice.

The FB-BL clinical case presentation assignment required students to take notes on a patient they would meet during their internship/practice and then SOAP him/her in the form of a *Padlet* (*padlet.com*) online slide, employing adequate language and resorting to relevant media, wherever the case (see Fig. 1 and 2 below).

Padlet is an extremely valuable tool at the teacher's hand allowing notifications, sharing and embedding, filtering, and, what is mostly relevant for the presenter, insertion of test results as different media (e.g. image – X-ray, EKG). Having all the 116 case presentations in one place and the students' possibility of re-editing contributions are further values for the process of formative assessment but also for the students' ME learning of tricky vocabulary spelling and abbreviations.

Apart from the online written CC presentation the AA included the face-to-face BL-FB component: the oral presentation of the case in class as part of the final oral exam (delivery, use of abbreviations), which remains outside the scope of this paper.



Mrs. Grey, 42, secretary

GO: progressive physical weakness, increased appetite, pain in the subpubic region, increased frequency of defecation, tremor, heat intolerance, weight loss
PM: thyroid swelling 3 months back, hypertension and irregular heartbeat
SH: married, mother of 2 children, mixed diet, non smoker, no addiction, no alcohol consumption
FH: mother suffered from Graves disease; father had minor cardiac problems
SE: butterfly shaped swelling on the middle part of the neck; protruding eyes; BP: 140/82
 Pulse: 90bpm
 Ht: high T4 and TSH levels
DIAGNOSIS: hyperthyroidism

Fig. 1. CC1: Hyperthyroidism



Mr. Gallagher, 31 years, actor

CO: abdominal pain
SH: married with 3 children
 6 cigs/day, 30 units alcohol/week
PM: nil relevant
FH: father a&w; mother - psychic disturbances
SE: TH1, temperature 39 C
 P: 90/min
 BP: 140/90
CXR: distended colon
Diagnosis: toxic megacolon

Fig. 2. CC2. Toxic megacolon

3 Students' perception of FB-BL alternative assessment

A 10-item Google Form questionnaire designed for evaluating students' satisfaction with FB-learning administered at the end of the academic year, included questions that also targeted evaluation of students' satisfaction with the assessment alternatives, i.e. creation of videos and written case presentations.

Of the 89 respondents, 95.5% were satisfied (38.2%) and extremely satisfied (57.3%) with their FB-BL English learning and 86.4% found the activities relevant and helpful for their Medical English progress. The most relevant AA assignment was the clinical case presentation (32.6%) followed by giving bad news (31.5%) and defective doctor-patient communication (25.8%), whereas the most interesting were in order: case presentations (43.2%), giving bad news (28.4%), and reflection on learning (18.2%).

Content analysis of the questionnaire responses enabled isolation of several themes:

1) Increased motivation and engagement as students learnt from peers' models, e.g.:

Those assignments were very nice to do especially the reflection and case presentations because you can also read what other students wrote. I didn't fancy that much the speaking one because you had to record yourself with video, even though I must admit it was a very important, relevant topic (CN).

2) Relevance for the medical career, e.g.:

*Because there were so different topics and so **practical** that they **will** really **help us in the future**. Honestly, since we started university, and by this, I mean the first year, nobody ever told us precisely **how we should behave when communicating with a patient**. By watching models and thinking about cases we met in our practice I realised that I can make progress to improve my communication in order to have a "healthy" relationship with the patient (E.K).*

3) With adequate support, video creation was an enjoyable activity, e.g.:

*Recording my speaking with videos gave me the possibility of thinking more, before talking in front of the camera. This work is not spontaneous but I enjoyed it a lot, and even if at the beginning I was a little reticent, I would be very enthusiastic if we could continue working like this. In my opinion, FB activities helped us to develop and maintain a certain **level of interest** regarding the class activities. Combining these two types of activities is, probably, one of the best ways of transforming the course into a real and productive process of learning this (PL).*

4) Asynchronous work allowed drafting and successive revision stages, which facilitated deeper learning, e.g.:

I like doing the writing tasks on the FB group, because this way I can form and re-write my answer, making it more understandable, paying a little bit more attention to my grammar as well (RN).

5) A negative qualitative feedback: higher-anxiety and lower comfort level in video recording as alternative in assessment. Nevertheless, if some students felt nervous recording their first video, later, they became more confident and proud of their results.

Conclusion

If tests and exams are valid and relevant measurements of student progress - the scientific component in assessment - performance-based alternative assessments offer the bigger, more complex picture of what students can or cannot do with the language in more authentic, complex, and professionally-relevant contexts (i.e. the creative part in assessment). As demonstrated herein, alternatives in assessment captured what students learnt, applied, observed, and commented, which are important elements of progress and actual professional English. Through videos and case presentations, students were creators rather than mere consumers, made judgements and choices, they actually lived the language rather than applied it.

Video (S-gV) as AA was a highly engaging, time and effort consuming strategy that also contributed to the formation of medical competences: making judgments, peer-adapted oral presentations, reporting to patients, and reflecting.

On the other hand, **clinical case presentations** (CC) helped students to enhance their diagnostic reasoning and reporting skills and thus contributed to the formation of another key competence required for lifelong medical practice (Dell, 2012).

To conclude, this continuum blend of traditional testing and performance-based applications besides covering more assessment principles (practicality, complexity, interaction, relevance) renders a more faithful image of the students' real abilities that matter most for their future careers. Likewise, alternatives in assessment are feasible for the current context of online learning.

Finally, as the distribution of students' feedback illustrates, if assessment is to take into consideration the students' satisfaction with their learning in terms of perceived relevance, authenticity, autonomy, student choice, and interestingness of tasks, alternatives in assessment should be considered.

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