

Hybrid Method of Essay Writing in MCQs: Theory and Practice

André KABORÉ kaboreandre@hotmail.com

Université Joseph Ki-Zerbo, Burkina Faso

Résumé - Cette étude présente une théorie d'évaluation : la dissertation en QCM. Les items des QCM sont constitués de corrigés du sujet en plusieurs approches et séquencés en petites idées à utiliser pour la rédaction. La méthode est hybride, alliant la forme classique à celle en QCM. Elle se décline en sept étapes. Elle est une solution à la subjectivité de correction des évaluations des apprentissages et à la lenteur de la correction des copies surtout en contexte d'effectif pléthorique. Elle est en adéquation avec les objectifs de la dissertation tels qu'ils sont établis dans les curricula de l'enseignement. Son application pratique à l'épreuve d'anglais est concluante. Toutefois, la conception même du sujet QCM de ce format est dévoreuse en temps et exige de l'enseignant de faire preuve de compétence ou de travail de groupe.

Abstract - This study presents a theory of assessment: the essay in MCQs. The MCQ items consist of corrected subject, done in several approaches to the subject, and sequenced into small ideas to be used for writing the essay. The method is hybrid, combining the classic form of essay writing with that in MCQs. It is broken down into seven steps. It is a solution to the subjectivity in the correction of students' assessments and to the slowness of correcting copies, especially in the context of overcrowded classrooms. It is in line with the objectives of the dissertation as established in the teaching curricula. Its practical application to the English test is conclusive. However, the designing of the MCQ topic is time-consuming and requires skill from the teacher or team work.

Key words: Assessment, MCQ, essay, hybridity, AMC

INTRODUCTION

Subjectivity in grading assessments is an undeniable fact. Many teachers admit that the most difficult part of grading assessments is interpreting learners' work and assigning values to it. This cannot be done without subjectivity. It is to reduce this inescapable subjectivity that Denis Berthiaume, Jérôme David and Thomas David (2011) propose the use of criterion-referenced grids to better define assessment criteria and the indicators or levels of performance corresponding to the various criteria. However, they humbly acknowledge that the use of such grids cannot put an end to subjectivity; at most, it can only reduce it. Marc Romainville (2011), for his part, even wonders whether subjectivity is not consubstantial with any evaluative act. This subjectivity takes on greater importance in the context of overcrowded amphitheatres, that of Burkina Faso's universities for instance. Added to this problem is the slowness with which exam papers are corrected in the same context. So what can be done? This project for a hybrid method of evaluation by MCQ with computer-assisted correction comes as an answer to these weaknesses of the traditional evaluation system. The method aims to solve the problems of slowness and unfairness in the correction of papers, and to reduce subjectivity to its simplest expression, if it is at all consubstantial with the act of evaluation. Before presenting the method, which is intended to be innovative in this field, I shall first present the learner competencies or essay objectives as set out in teaching curricula, followed by the marking software. The practical application of the method to an English test will close our approach before concluding it.

1. Objectives of Assessments and Essay Writing in the Curricula

The assessments, of which the essay is one form, correspond to specific objectives described in the curricula of Burkina Faso's national education system. According to the curricula for the teaching-learning of philosophy, French, history-geography, and English in particular, the objectives are of three kinds: intellectual or cognitive, know-how and interpersonal skills. For example, "At the secondary level, the general objectives of teaching French are the reasoned practice of the language, the acquisition of methods of thinking and working, and access to other cultures". (French language Curricula). As to English, the objectives, at the secondary level, are to improve reading and speaking skills as well as to broaden pupils' minds and knowledge of the cultures of English speaking countries, through "the study of any document representative of English cultures and civilisations" (English language curricula). These different objectives are linked in such a way that the study of language and the practice of discourse contribute to the methodical formation of the mind and the person as a whole. As for philosophy, the curricula stipulate that, intellectually, the philosophy course aims to give the learner a technical vocabulary of philosophy, to help him or her understand philosophical authors and doctrines, and to help him or her analyze the current state of the fundamental problems facing humanity and the various proposed solutions to them. On a practical level, the philosophy course, like most other courses, aims to develop a certain number of skills, notably the ability to argue, i.e. to adopt a critical and objective approach to a problem, to find and develop arguments and evidence, and to organize them in order to defend a rational and reasonable solution.

To achieve these noble objectives, assessment in the various fields and disciplines plays a key role in all curricula. In philosophy, for example, the curricula state that "evaluation is achieved through explanations or studies of texts followed by questions that carefully prepare the learner to identify the themes, problems and positions of the authors, to draw out the logical structures of the texts, the key



concepts and the arguments used by the authors to justify their positions". (Philosophy Curricula). These objectives, as expressed, can be achieved through multiple-choice questions that target the first two levels of Bloom's taxonomy, namely knowledge and understanding. Moreover, coherent argumentation plays a key role in assessment, according to the same philosophy curricula, which define the philosophical essay as "a form of assessment in which the candidate, by means of relevant and coherent argumentation, succeeds in resolving a problem contained in a subject." This definition of the essay is valid for the other fields and disciplines of social sciences and humanities, namely in English, philosophy being the mother of all sciences. For instance, one can read in the website of Sprachcaffe Séjours Linguistiques the following advice which summarize the objectives of the essay in English: "When writing an essay for your English course, you should always adopt a structured approach and use good English skills to present your arguments in a focused way." (Translation mine). It follows from these objectives of the essay, both in Philosophy and English, that coherent argumentation is the main skill sought in the learner's essay. It is on this important aspect that my hybrid MCQ dissertation method is based and developed.

The second aspect on which my method is based is the invitation expressed in philosophy curricula, to "rely on learners' productions to produce collective answer keys, prompting and accompanying their reflection" (Les instructions officielles de l'enseignement de la philosophie au secondaire au Burkina Faso). The hybrid method of MCQ essay is fundamentally based on the use of multiple-approach answer keys with decoys. It takes into account the two possibilities of metacognition and error pedagogy by relying on answer keys, thus demonstrating the ambition to achieve a certain form of universality in the essay. To remedy the problem of slow correction, especially in a context of overcrowded classrooms, computer-assisted correction is recommended. The experiment was carried out using AMC software, which is presented here for better understanding and use.

2. Presentation of MCQs in AMC

There are several MCQ design and automatic correction software packages on the Internet: quizcan.org, gratuiciel.com, auto-multiple-choice.net, etc. In Burkina Faso, a team is already hard at work to set up a Burkinabe software program more suited to the deployment of my hybrid method. For the time being, the work is done with AMC software, which is a free and open-source software developed by Alexis Bienvenüe, Anirvan Sarkar et al., from 2008 to 2021.



AMC stands for "Auto Multiple Choice". The AMC website presents it as a software package, a set of utilities for automatically creating, managing and correcting multiple-choice questions (MCQs). MCQs are prepared and formatted using LaTeX. Questions and answers are mixed, and the answer grids are separate. Only the answer grids are scanned for correction.

AMC offers several question types. Questions can be open-ended, single-answer, multiple-answer or numerical. Open-ended questions, until the current hybrid method was proposed, slowed down correction by forcing the teacher to read the answers and tick the box corresponding to the value of the content read to enable AMC to total up and generate the final mark automatically. AMC also allows you to randomly change the order of answers within each question, as well as the order of questions, so that each subject is presented differently. This makes it more difficult for students to cheat.

Once the exam has been administered, AMC automatically corrects the scanned papers, thanks to optical recognition of the boxes ticked by each student. Once corrected, the papers are automatically marked on the basis of the blacked-out answer boxes. For incorrectly blackened boxes, an assisted manual correction is also possible by clicking with the mouse on the incorrectly blackened boxes to confirm or invalidate. Candidates are asked to fill in the boxes correctly. The grading system can be default or set by the teacher according to his or her specific objectives, or in line with the objectives set out in the national education curricula. To test the method presented below, I used a double scale, awarding one point for all correct answers and deducting half a point for all wrong answers, to discourage any attempt at lottery. The software which is used to deploy the method is described below.

3. Introducing the Hybrid Method of MCQ Essay

The figure below provides a brief presentation of the method and its seven different stages, taking into account the six levels of Bloom's taxonomy.



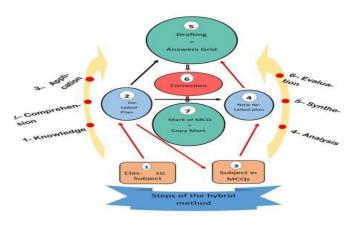


Figure 1.

The method is a hybrid system. It combines part of the traditional form of essay composition, or open-ended questions, with part in the form of MCQs, culminating in computer-assisted correction. In its hybridity, the method is enriched by the strengths and facilities of both modes of assessment and by technological advances.

The traditional or classic form of the method can be found in the choice of subject (1) and in the personal reflection carried out around the subject, which leads to the drafting of a detailed plan (2), then to an enriched detailed plan (4), to the final drafting (5) and finally to the transfer of the computer-generated mark to the handwritten copy (7bis). The novelty of the MCQ format lies first and foremost in the fact that the answers are broken down into items on the basis of ideas to be chosen. The different items altogether constitute the draft of the MCQ subject (3). This is followed by the filling-in of the answer grid (5bis), after the complete draft, which consists of pooling all the selected items, and finally by the correction (6) and marking (7), both computer-assisted using AMC software.

The assignment is administered in two stages, but the candidate composes in three. First, the classic subject is administered. The candidate will then read the subject without the MCQs. He or she will then reflect on it and draw up a detailed outline of his or her ideas. This is the first stage in the candidate's composition. Next, the assessment supervisors (in the case of face-to-face assessment) will administer the sheets containing the MCQs, on which ideas are formulated which, according to the marking teacher, may or may not reflect the candidate's understanding of the subject. With this new supply of ideas, candidates are invited to enrich their detailed plan based solely on the ideas in the items. He or she will read all the items from beginning to end, ticking off those that correspond to his or her understanding of the subject as he or she goes along, and will draw up a new detailed plan with the new ideas from the MCQs. He will then write his essay in its classic form, putting all the selected items together and rereading it to make sure that his or her ideas are coherently argued, before proceeding to carefully fill in the appropriate boxes on the answer grid to form his essay in MCQ format. The two essay formats are equivalent and interchangeable, hence the use of the equal (=) sign in steps 5 and 7 in the diagram above. Correcting one is then equivalent to correcting the other, and the mark for one corresponds to the mark for the other. The correction is therefore unique and computer-assisted.

The set of items is a breakdown of several essays. The question underlying each set of MCQ is: which of the following items contains the idea corresponding to your understanding of the subject? Each item contains one or two sentences, which the learner must choose according to his or her understanding of the subject in order to build up the body of the essay in a logical and coherent way. The proposals take into account several possible approaches to the subject, in order to best respect the nature of the open question or essay. The items are not intended to identify all possible bad essays, but only to provide the best possible approaches to the subject, or at least two or three of the best possible approaches to the subject. The competent candidate who fails to find his or her initial approach could at least recognize another valid approach, while the incompetent candidate could turn in a blank sheet or develop his or her incompetence by combining the various choices offered, at his or her peril, given that the wrong choices are penalized according to the scale adopted. He or she may also logically follow one of the multiple off-topic choices proposed as plausible. But it should be noted that while the items do not take into account every possible bad essay, they do offer inspiration for ideas that would not be contained in the candidate's detailed plan, forcing the latter to modify his initial plan if necessary. In this sense, it's like the assessor in an oral exam asking a question to bring the candidate back on topic. On the other hand, given that "he/she who can do more can do less", the highly intelligent candidate who fails to find his or her illumination in what is proposed may recognize as valid one of the best proposals given.

This hybrid system has the advantage of taking into account the reflective nature of the open-ended subject to which category the essay belongs. It is usually the failure to take account this aspect of personal reflection on the subject that makes many Burkinabe Humanities teachers resistant to using MCQs. The personal reflection that takes place in the subject preparation phase continues in the reasoned choice of MCQs and the complete drafting of the set of choices, both of which are made on the basis of one's personal understanding of the subject. Without this very important phase of reflection on the subject, in the absence of the MCQs, and the essay, the assignment could turn into an identification of the logical structure and coherence of several bits of sentences to weave and



constitute a coherent text. But even in this case, there is still a personal reflection in the sense that the candidate makes his or her own a reflection led by his or her teacher, a reflection that cannot be found by simple lottery.

The method is very different from choosing between four or five essays that are submitted to read and choose from. In the proposed system, candidates participate in the construction of their essays, starting with ideas (formatted in sentences) rather than words (using the dictionary) as in the classic system. They do not choose a "ready-made" essay that suits them, but build their own essay from the ideas expressed in the words of others, namely their teacher. Grammatical errors are taken into account in the formulation of items, and constitute decoys. Items containing such errors are considered and sanctioned as wrong answers. The candidate who chooses them reveals his or her level of mastery of the language. The teacher will therefore ensure that there are no grammatical errors other than the decoys.

The well-written essay is handed in at the same time as the answer grid. This is because writing facilitates learning and memorization, and removes any temptation to lottery. The fact of choosing and copying what is formulated is formative and instructive. In this way, the system enables formative as well as summative assessment. The written copy can be used for future reference, especially when accompanied by the mark on the corrected answer grid. With the corrected answer grid, the candidate could personally improve his or her essay writing skills by following the correct boxes given by the computer-assisted correction. The method is thus hybrid from start to finish. Application to the 2019 Baccalaureate D English exam in Burkina Faso will remove any remaining grey areas remaining in the explanation of the method.

4. Applying the Method to an English Test

To test the effectiveness of the method, I experimented it in five Humanities disciplines: philosophy, French, history, geography and English. But only the English experiment will be given.

The English subject is an old one from the 2019 Burkinabe baccalaureate exam session, with all its text comprehension questions and "Guided Essay" questions. Christian Paulin Zouré, Salam Zorom and Tendouindé Bruno Nikiema (2020, p. 56) have produced an answer key in the Annales Anglais Terminales séries C et D published by the Ministère de l'Education nationale, de l'Alphabétisation et de la Promotion des Langues nationales in 2020. I have divided this answer key into several sequences of items, modifying them where necessary to achieve the willed coherent argumentation. I have also proposed a different model of answer key and two decoys for designing the MCQ subject. The classic subject can be

found in Appendix 1, the MCQ subject in Appendix 2 and the four proposals in Appendix 3.

The first four questions in the classic subject are at the level of comprehension according to Bloom's taxonomy, and can therefore easily be done by MCQ. Question 3 is multiple-response, as is question 4, which has been duplicated in three. The essay starts with question 7 and runs to the end. It is designed to be multiple-response, as it contains two possible good essays, but each candidate should write one coherent essay. Each copy will be double marked according to the two possible essay approaches, and the best mark of the two will be retained.

After trialing the method with three teacher-researchers at Joseph Ki-Zerbo University, and then with three English teachers from three different schools, I tested it with 300 Joseph Ki-Zerbo University students who took their Leaving Certificate in 2022 and are enrolled in the first year of English. The papers were scanned and corrected on the same day, and the results given on the same day, much to the pleasant surprise of the students. This solved the problem of lengthy marking times, as well as the issue of subjectivity, in that all the papers were treated in the same way, without the ad hoc moods and temperaments of the markers. The class average was 10 for the first approach and 11 for the second. Marks ranged from 5 to 18 out of 20, in the French marking system. Similar experiments were carried out in two other secondary schools. Looking at the marks, the teachers attest that the performance reflects the real level of the students in the classic assessment method, but with more objectivity as a bonus. The method has proved its worth and is therefore recommendable.

CONCLUSION AND RECOMMENDATIONS.

At the end of the experimentation with the method, the results are conclusive. Some say that it is an attempt to mathematize the essay. They unanimously recognize that the great advantage of this system is the objectivity of the correction and grading of the papers. With the hybrid method, the number of markers for open-ended questions is reduced to the number of approaches to the subject that are suggested, two or three at most. The results obtained are constant from one copy to the next, and constant over time for the same approach. It provides fast, effective feedback, encouraging learners' self-regulation, while the objectivity of the correction gives the learner a greater sense of justice. The learner feels "mathematically secure" and can no longer discuss the final mark obtained once the scale is known beforehand.

Another advantage of the system is that it also enables formative assessment. Candidates learn good sentence formulations. Model answers or approaches to the subject are a source of practicing the essay exercise.



However, the method requires a great deal of work on the part of the teacher. The long time spent on conventional essay papers correction is used more intensively in the design and formalization of the MCQ subject in AMC format. The designing of MCQs requires a colossal amount of work based on the collection of frequent errors encountered by pupils/students. It therefore requires the teacher to be skilled in the content of his or her course, and to have pedagogical experience. It is therefore advisable to test the first draft of MCQs with "test groups" of pupils or students before administering them as an assessment tool.

To make the work of designing MCQs lighter and more efficient, it is recommended that the teacher enlist the help of other teachers, in other words, work in a group of teachers. A group of four teachers on average, two of whom draft two possible approaches to the essay and two of whom focus on possible off-topic or decoys, is highly recommended.

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APPENDICES

Appendix 1: Subject of the English Test

A DROUGHT FIGHTING TECHNIQUE

Yacouba Sawadogo is known as "the man who stopped the desert". Starting around 1980 during a phase of severe drought, he has successfully created an almost 40-hectare forest on formerly barren and abandoned land. Today, it has more than 60 species of trees and bushes and is arguably one of the most diverse forests planted and managed by a farmer in the Sahel.

Sawadogo's remarkable success builds on experimenting with traditional planting pits for soil, water and biomass retention ("zaï" in local language). He has continued innovating the technique over the years, increasing crop yields and successfully planting trees. Sawadogo has always been eager to share his knowledge, and has received thousands of visitors from the region and beyond. By organising trainings, he has empowered farmers to regenerate their land. As a result, tens of thousands of hectares of severely degraded land have been restored to productivity in Burkina Faso and Niger.

Those who adopt Sawadogo's techniques often become food secure, as "zaï" helps to conserve rainwater and improve soil fertility. This allows farmers to produce crops even in years of drought. Trees planted together with the crops serve to enrich the soil, produce fodder for livestock and create business opportunities like bee keeping. This helps farmers adapt to climate change, reduce rural poverty and prevent local resource and water related conflicts. Together with other farmer-managed natural regeneration techniques, "zaï" could become an important tool to counter forced migration and build peace.

By Africa - on the Rise - Sep 27, 2018.

Vocabulary: to be eager to: to be enthusiastic about

Guided commentary

1) What method does Yacouba Sawadogo use to turn the desert into forest, according to the text? (2 points)

2) What does Sawadogo's method consist in, referring to the text? (3 points)

3) Find in the text at least two ways through which Yacouba Sawadogo promotes his method (4 points)

4) Basing on the text, give five benefits of Sawadogo's system (5 points)

Short essay (6 points): In your opinion, how can "zaï" help reduce migration? (about 80 words)

Appendix 2: English Comprehension and Essay Test in MCQ Format for AMC (The settings for French in the AMC have been used in this test).

 $\documentclass[a4paper]{article}$ $\usepackage[utf8x]{inputenc}$ \usepackage[T1]{fontenc} \usepackage{multicol} \usepackage[francais,bloc,ordre,ensemble]{automultiplechoice} \begin{document} \def\AMCformQuestion#1{\vspace{\AMCformVSpace}\par {\sc Question #1 \element{general}{ $begin{question}{01-Q1} bareme{b=1, m=-0.5}$ Question 1: What method does Yacouba Sawadogo use to turn the desert into forest according to the text? \begin{reponses} \mauvaise{According to the text, Yacouba Sawadogo uses a method to turn the desert into forest.} \bonne{According to the text, Yacouba Sawadogo uses the "zaï" method to fight against desertification.} \mauvaise{According to the text, Yacouba Sawadogo uses an old method to play in the desert.} \mauvaise{According to the text, Yacouba Sawadogo uses the "zaï" method to study his lessons in the desert.} \mauvaise{According to the text, Yacouba Sawadogo uses the "zaï" method to live in the desert.} \end{reponses} \end{question} } \element{general}{ Question 2: What does Sawadogo's method consist in, referring to the text? \begin{reponses} \mauvaise{Sawadogo's method consists in modern planting holes for soil, water and biomass retention. } \mauvaise{Sawadogo's method consists in traditionally planting trees and watering them.



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\mauvaise{Sawadogo's method consists in modern digging of holes for
soil, water and biomass retention.}
     \bonne{Sawadogo's method consists in traditionally digging holes for
soil, water and biomass retention. }
     \mauvaise{Sawadogo's method is "zaï".}
\end{reponses}
  \end{question}
ł
\element{general}{
  begin{questionmult}{03-Q3} bareme{b=1, m=-0.5}
Question 3: Find in the text at least two ways through which Yacouba
Sawadogo promotes his method.
   \begin{reponses}
     \mauvaise{Yacouba Sawadogo did not trained farmers, which has
empowered them to give a new life to their lands.}
     \bonne{Yacouba Sawadogo promotes his method by sharing his
experience with others.}
     \mauvaise{Yacouba Sawadogo promotes his method by writing about it.}
     \bonne{ Yacouba Sawadogo promotes his method by training many
farmers in Zai, which has empowered them to give a new life to their lands.}
     \mauvaise{Yacouba Sawadogo promotes his method by writing about it.}
   \end{reponses}
  \end{questionmult}
}
\element{general}{
  begin{questionmult}{04-Q4} bareme{b=1, m=-0.5}
Question 4: Basing on the text, give two benefits of Sawadogo's system.
   \begin{reponses}
     \bonne{One benefit of Sawadogo's system is the increase of crop yields.}
     \mauvaise{One benefit of Sawadogo's system is but the decrease of food
security.
     \bonne{One benefit of Sawadogo's system is the regeneration of barren
lands.
     \mauvaise{One benefit of Sawadogo's system is the increase of poverty in
rural areas.}
   \mauvaise{One benefit of Sawadogo's system is the destruction of crops.}
   \end{reponses}
  \end{questionmult}
\element{general}{
  begin{guestionmult}{05-Q4} bareme{b=1, m=-0.5}
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Question 5: Basing on the text, give two benefits of Sawadogo's system. \begin{reponses}

\mauvaise{One benefit of Sawadogo's system is the decrease of crop production.}

\bonne{One benefit of Sawadogo's system is the insurance of food security.}

\bonne{One benefit of Sawadogo's system is the reduction of rural poverty.}

\mauvaise{One benefit of Sawadogo's system is the lack of resilience to climate change.}

\mauvaise{One benefit of Sawadogo's system is the production of climate change.}

\end{reponses}

\end{questionmult}

\element{general}{

 $\begin{guestionmult}{06-Q4} bareme{b=1, m=-0.5}$

Question 6: Basing on the text, give two benefits of Sawadogo's system.

\begin{reponses}

\bonne{Another benefit of Sawadogo's system is the contribution to farmers' resilience to climate change.}

\mauvaise{Another benefit of Sawadogo's system is that it contributes immensely to climate change.}

\bonne{Another benefit of Sawadogo's system is the reduction of conflicts related to resources and water.}

\mauvaise{Another benefit of Sawadogo's system is that it creates conflicts between farmers and shepherds.}

\mauvaise{Another benefit of Sawadogo's system is the provocation of conflicts related to resources and water.}

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\end{reponses}
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\end{questionmult}

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}
\element{general}{
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\begin{questionmult}{07-Es} \bareme{b=1, m=-0.5}

Question 7 : Essay : In your opinion, how can "Zai" help reduce migration? \begin{reponses}

\mauvaise{In my opinion, "Zai" cannot help reduce migration.}

\bonne{In my opinion, "Zai" can contribute to reducing migration in improving land and reducing poverty.}

\bonne{In my opinion, "Zai" can contribute to reducing migration in two ways.}



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\mauvaise{In my opinion, "Zai" can help increase migration in many
ways.}
     \mauvaise{In my opinion, "Zai" is a method that is better than migration.}
    \end{reponses}
  \end{questionmult}
\element{general}{
  begin{questionmult}{08-Es} bareme{b=1, m=-0.5}
Question 8 : Essay
   \begin{reponses}
     \mauvaise{The first reason is that migration is something that is
necessary.
     \bonne{The first way is through improving land in rural areas.}
     \bonne{First, the practice of "Zai" can maintain people in their area
through land regeneration.}
     \mauvaise{People like moving from one place to another, from villages to
towns for example.}
     \mauvaise{The second way is through reducing poverty in rural areas.}
    \end{reponses}
  \end{questionmult}
}
\element{general}{
  \begin{questionmult}{09-Es} \bareme{b=1, m=-0.5}
Question 9 : Essay
   \begin{reponses}
     \mauvaise{None of the sentences below}
     \bonne{With reforestation, the different crises related to water and
pasturage would be less frequent.}
     \bonne{Land regeneration, thus, contributes to fighting against rural
exodus for example.}
     \mauvaise{One can hardly understand why people are like migration. }
     \mauvaise{People like moving from one place to another, from villages to
towns for example.}
   \end{reponses}
  \end{questionmult}
\element{general}{
  \begin{questionmult}{10-Es} \bareme{b=1, m=-0.5}
Question 10: Essay
   \begin{reponses}
     \bonne{Reforestation will also help people live together peacefully.}
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\mauvaise{This phenomenon is known as rural exodus.}
     \bonne{People of all age and ethnic groups can remain in villages and
live together peacefully.
     \mauvaise{Migration is something attractive, especially to young people.}
     \mauvaise{None of the sentences above.}
    \end{reponses}
  \end{questionmult}
}
\element{general}{
  \begin{question}{11-Es} \bareme{b=1, m=-0.5}
Question 11: Essay
   \begin{reponses}
     \mauvaise{None of the sentences below}
     \bonne{Fulani shepherds will cohabit with Moosi farmers without
conflict.
     \mauvaise{The second reason is that migration help people discover new
realities of life and meet other people.}
     \mauvaise{For example, Fulani cattle breeders will hardly cohabit with
Moosi farmers without conflict.}
     \mauvaise{Young adventurous people are not afraid of migration at all.}
    \end{reponses}
 \end{question}
}
\element{general}{
  \begin{questionmult}{12-Es} \bareme{b=1, m=-0.5}
Question 12 : Essay
   \begin{reponses}
     \mauvaise{None of the sentences below.}
     \bonne{The second way is through reducing poverty in rural areas.}
     \bonne{ Second, "Zai" permits the farmers to increase their crop yield. }
     \mauvaise{It will contribute to developing the field of tourism and the
strengthening of intertribal relationships.}
     \mauvaise{They prefer to die in the process of migration than to stay in
villages, using the "zai" method.}
    \end{reponses}
  \end{questionmult}
ł
\element{general}{
  \begin{questionmult}{13-Es} \bareme{b=1, m=-0.5}
Question 13 : Essay
   \begin{reponses}
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\mauvaise{Some work as housekeepers, carpenters and stonemasons and
are paid for it.}
    \bonne{Poverty is reduced through the increase of crop yield.}
     \bonne{It also helps them improve their income. }
     \mauvaise{Such experiences will develop mind openness and tolerance.}
     \mauvaise{None of the sentences above.}
   \end{reponses}
  \end{questionmult}
\element{general}{
  \begin{questionmult}{14-Es} \bareme{b=1, m=-0.5}
Question 14 : Essay
   \begin{reponses}
      \mauvaise{Thus, with their salaries migrants can meet their basic needs
such as buying clothes and medicine.}
     \mauvaise{Thus, migration has many benefits for the migrants
themselves as well as for their parents.}
     \bonne{Thus, with the money, farmers can meet their basic needs such as
buying clothes and medicine.}
     \bonne{Linked to the increase in crop production is the improvement of
income with the selling of products.}
     \mauvaise{None of the sentences above.}
   \end{reponses}
  \end{questionmult}
\element{general}{
  begin{questionmult}{15-Es} bareme{b=1, m=-0.5}
Question 15 : Essay
   \begin{reponses}
     \mauvaise{None of the sentences below.}
     \bonne{Consequently, they will not have to migrate for financial reasons.}
     \bonne{Thus, with the money gained, farmers can improve their living
conditions.
     \mauvaise{Consequently, they do not regret having migrated for
financial reasons.}
     \mauvaise{Consequently, it should be encouraged and promoted.}
   \end{reponses}
  \end{questionmult}
\element{general}{
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\begin{question}{facilite}\QuestionIndicative
bareme{auto=0,v=-1,e=-2}
QUESTION NON NOTÉE D'AUTO-ÉVALUATION DE L'ÉPREUVE. \\Vous
espérez obtenir quel pourcentage de bonne réponse à cette évaluation ?
\begin{reponseshoriz}[0]
bonne{<20\%}
\bonne{20-40\%}
bonne{40-60 \%}
bonne{60-80 \%}
bonne{>80\%}
\end{reponseshoriz}
\end{question}
ł
\end{tabular}
%%% debut de l'en-tête des copies :
\noindent{\bf 2023 \hfill Année Universitaire 2022-2023}
vspace^{.5cm}
\begin{minipage}{.9\linewidth}
 \centering\large\bf Épreuve d'anglais \\Université UJKZ \\ Tous niveaux
\end{minipage}
\begin{flushleft}\em
Durée : 01h30mn.
 >>>>>> AUCUN DOCUMENT AUTORISÉ<<<<<<\\
Les réponses sont à donner \textbf{EXCLUSIVEMENT sur la grille de
réponse} après avoir réfléchi et traité le sujet pendant une heure.
Les questions marquées d'un trèfle sont à choix multiples, sauf de 7 à 15.
Sujet: Texte en anglais suivi de questions.
\end{flushleft}
\space{1ex}
%%% fin de l'en-tête
\restituegroupe{general}
\clearpage
\AMCdebutFormulaire
%%% début de l'en-tête de la feuille de réponses
{\large\bf GRILLE DE RÉPONSES :}
\hfill \champnom{\fbox{
   \begin{minipage}{.6\linewidth}
     NOM, Prénom(s), n° matricule :
     vspace^{1.8cm}
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\end{minipage}

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Sujet: Texte en anglais suivi de questions au verso.\\
\begin{center}
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\bf\em Remplir la grille de réponse au stylo/marqueur bleu ou noir. Le remplissage consiste à noircir la ou les cases appropriée(s). Il s'agit d'identifier l'une ou les deux bonnes dissertations proposées en noircissant une lettre par question correspondant à votre compréhension du sujet. Le barème double est appliqué. Pour les questions 7 à 15; l'étudiant doit noircir une seule case par question correspondant à son "essay" sans pénalité. \end{center}

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%%\rotatebox{90}{N° carte d'étudiant (ÉTUDIANTS)}
%%\noindent\AMCcode{etudiant}{8}\hspace*{\fill}
\%%includegraphics[width=.9\linewidth]{cases}
%%% fin de l'en-tête de la feuille de réponses
\begin{multicols}{2}
\formulaire
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\clearpage
}
\end{document}
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Appendix 3: The 4 Proposals used for designing the English MCQ Subject in AMC

English copy 1

Question 1: What method does Yacouba Sawadogo use to turn the desert into forest according to the text?

According to the text, Yacouba Sawadogo uses the "zaï" method to fight against desertification.

Question 2: What does Sawadogo's method consist in, referring to the text? Sawadogo's method consists in traditionally digging holes for soil, water and biomass retention.

Question 3: Find in the text at least two ways through which Yacouba Sawadogo promotes his method.

Yacouba Sawadogo promotes his method by sharing his experience with others. He also promotes his method by training many farmers in Zai, which has empowered them to give a new life to their lands. Question 4: Basing on the text, give two benefits of Sawadogo's system.

One benefit of Sawadogo's system is the increase of crop yields. Another benefit of Sawadogo's system is the regeneration of barren lands.

Question 5: Basing on the text, give two benefits of Sawadogo's system.

One benefit of Sawadogo's system is the insurance of food security. Another benefit of Sawadogo's system is the reduction of rural poverty.

Question 6: Basing on the text, give two benefits of Sawadogo's system.

One benefit of Sawadogo's system is the contribution to farmers' resilience to climate change.

Still another benefit of Sawadogo's system is the reduction of conflicts related to resources and water.

Question 7: Essay: In your opinion, how can "Zai" help reduce migration?

In my opinion, "Zai" can contribute to reducing migration in improving land and reducing poverty. First, the practice of "Zai" can maintain people in their area through land regeneration. With reforestation, the different crises related to water and pasturage would be less frequent. Reforestation will also help people live together peacefully. Fulani shepherds will cohabit with Moosi farmers without conflict. Second, "Zaï" permits the farmers to increase their crop yield. It also helps them improve their income. Poverty is reduced through the increase of crop yield. Thus, with the money, farmers can meet their basic needs such as buying clothes and medicine. Consequently, they will not have to migrate for financial reasons.

English copy 2

Question 1: What method does Yacouba Sawadogo use to turn the desert into forest according to the text?

According to the text, Yacouba Sawadogo uses the "zaï" method to fight against desertification.

Question 2: What does Sawadogo's method consist in, referring to the text? Sawadogo's method consists in traditionally digging holes for soil, water and biomass retention.



Question 3: Find in the text at least two ways through which Yacouba Sawadogo promotes his method.

Yacouba Sawadogo promotes his method by sharing his experience with others. He also promotes his method by training many farmers in Zai, which has empowered them to give a new life to their lands.

Question 4: Basing on the text, give two benefits of Sawadogo's system.

One benefit of Sawadogo's system is the increase of crop yields. Another benefit of Sawadogo's system is the regeneration of barren lands.

Question 5: Basing on the text, give two benefits of Sawadogo's system.

One benefit of Sawadogo's system is the insurance of food security. Another benefit of Sawadogo's system is the reduction of rural poverty.

Question 6: Basing on the text, give two benefits of Sawadogo's system.

One benefit of Sawadogo's system is the contribution to farmers' resilience to climate change.

Still another benefit of Sawadogo's system is the reduction of conflicts related to resources and water.

Question 7: Essay: In your opinion, how can "Zai" help reduce migration?

In my opinion, "Zai" can contribute to reducing migration in two ways. The first way is through improving land in rural areas. Land regeneration, thus, contributes to fighting against rural exodus for example. People of all age and ethnic groups can remain in villages and live together peacefully. For example, Fulani cattle breeders will cohabit with Moosi farmers without conflict. The second way is through reducing poverty in rural areas. Linked to the increase in crop production is the improvement of income with the selling of products. Thus, with the money gained, farmers can improve their living conditions.

English copy 3

Question 1: What method does Yacouba Sawadogo use to turn the desert into forest according to the text?

According to the text, Yacouba Sawadogo uses a method to turn the desert into forest.

Question 2: What does Sawadogo's method consist in, referring to the text?

Sawadogo's method consists in modern planting holes for soil, water and biomass retention.

Question 3: Find in the text at least two ways through which Yacouba Sawadogo promotes his method.

Yacouba Sawadogo did not train farmers, which has empowered them to give a new life to their lands.

He promotes his method by writing about it.

Question 4: Basing on the text, give two benefits of Sawadogo's system. One benefit of Sawadogo's system is but the decrease of food security. Another benefit of Sawadogo's system is the increase of poverty in rural areas.

Question 5: Basing on the text, give two benefits of Sawadogo's system. One benefit of Sawadogo's system is the decrease of crop production. Another benefit of Sawadogo's system is the lack of resilience to climate change.

Question 6: Basing on the text, give two benefits of Sawadogo's system. Another benefit of Sawadogo's system is that it contributes immensely to climate change. Still another benefit of Sawadogo's system is that it creates conflicts between farmers and shepherds.

Question 7 : Essay : In your opinion, how can "Zai" help reduce migration?

In my opinion, "Zai" cannot help reduce migration. The first reason is that migration is something that is necessary. One can hardly understand why people are like migration. Migration is something attractive, especially to young people. The second reason is that migration help people discover new realities of life and meet other people. It will contribute to developing the field of tourism and the strengthening of intertribal relationships. Some work as housekeepers, carpenters and stonemasons and are paid for it. Thus, with their salaries, migrants can meet their basic needs such as buying clothes and medicine.Consequently, they do not regret having migrated for financial reasons.

English copy 4

Question 1: What method does Yacouba Sawadogo use to turn the desert into forest according to the text?

According to the text, Yacouba Sawadogo uses the "zaï" method to live in the desert

Question 2: What does Sawadogo's method consist in, referring to the text?



Sawadogo's method is "zaï".

Question 3: Find in the text at least two ways through which Yacouba Sawadogo promotes his method.

Yacouba Sawadogo did not train farmers, which has empowered them to give a new life to their lands.

He also promotes his method by writing about it

Question 4: Basing on the text, give two benefits of Sawadogo's system. One benefit of Sawadogo's system is the increase of poverty in rural areas. Another benefit of Sawadogo's system is the destruction of crops.

Question 5: Basing on the text, give two benefits of Sawadogo's system. One benefit of Sawadogo's system is the lack of resilience to climate change. Another benefit of Sawadogo's system is the production of climate change.

Question 6: Basing on the text, give two benefits of Sawadogo's system. Another benefit of Sawadogo's system is that it creates conflicts between farmers and shepherds. Still another benefit of Sawadogo's system is the provocation of conflicts related to resources and water.

Question 7: Essay: In your opinion, how can "Zai" help reduce migration?

In my opinion, "Zai" can help increase migration in many ways. The second way is through reducing poverty in rural areas. People like moving from one place to another, from villages to towns for example. Migration is something attractive, especially to young people. The second reason is that migration help people discover new realities of life and meet other people. They prefer to die in the process of migration than to stay in villages, using the "zai" method. Such experiences will develop mind openness and tolerance. Thus, migration has many benefits for the migrants themselves as well as for their parents. Consequently, it should be encouraged and promoted.