Evaluation of an Online Course on Philosophy and Professional Ethics

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1. Learning Reflection

During this course I learned several concepts and practices about evaluation that will certainly be highly useful in my career in Distance Education and Education Technology.

Boulmetis and Dutwin (2005) claim that **efficiency** measures the relationship between costs and results, **effectiveness** measures the relationship between goals and results, while **impact** measures how a course has changed behavior in an extended period of time. From now on, I plan to use these three different concepts as basis for the evaluation of courses and programs.

Boulmetis and Dutwin (2005) also propose that evaluation should be embedded into a program since its beginning, forcing us to start designing evaluation when we start designing the program itself, and not only when the program is already designed or even working. My practice of designing courses and programs from now on should be driven by this idea.

The attention we should devote to the elaboration of a rubric is also something I will take for the rest of my career from this course. The experience of elaborating the rubric for this project, as in other moments of the course, were rich learning moments.

Kirkpatrick's model, discussed by Madaus and Kellaghan (2000), proposes four levels of evaluation, including particularly two that I found very useful and used in my final project rubric: reaction (satisfaction with the program) and behavior (transference to work or other situations).

Dick and Carey (1991) propose other criteria for an evaluation rubric, such as: clarity of instruction, impact on learner and viability, including sub-criteria such as level of vocabulary, complexity of sentences, introductions, transitions, examples, illustrations, relevance, satisfaction, motivation, time etc. I used all of these criteria in my final project, which were very useful for the evaluation, but these authors also propose other criteria that I plan to use on future evaluations.

Finally, something else that should affect my career forever are the different ways or phases of the evaluation of a course or program, as follows, discussed in several texts studied during this semester and used in my final project.

Initially, I used the **feedback of an expert** in Philosophy to review the course. This is a stage I would never want to bypass, in any evaluation.

I also used **one-to-one evaluations**, following the way students flow through the online course, navigate, click on items, have doubts, how long they spend on each item, when and where they stop etc. This was a rich experience, which I plan to use every time I perform an evaluation.

Finally, I also used a large number of evaluations performed at a distance, which can be somehow positioned between **small group** and **field** evaluations, as the course is designed to be taken at a distance and individually. In other situations, I hope I can follow both steps separately.

2. Executive Summary

This project evaluated an online course on Philosophy and Professional Ethics developed by a Brazilian University, Universidade Anhembi Morumbi. The course, divided in eight lessons or units, will be taken by Business undergraduate and graduate students starting February 2011.

The content of the course was developed last semester by the author of this project, in eight separate word files with several suggestions for the elaboration of an online lesson. These files were initially reviewed by the Distance Education Department of the University and the online tutor of the course, reworked by the author, and then sent to an external vendor, who transformed the eight lessons into eight online Flash versions. These eight multimedia units were then evaluated for this project using a combination of methods: (a) expert feedback (the tutor of the online course), (b) one-to-one evaluations (when the author followed how individual students flew through one chosen online lesson), and (c) around 200 evaluations by students performed at a distance, using a rubric developed in a Google Docs form, including several criteria with a grading scale ranging from 0 (zero) to 10 (ten), 4 (four) open questions, and some extra questions.

This evaluation process was part of a validation required by the university, when the author of the content of online courses needs to review the multimedia versions, so that mistakes are corrected and the material is then released to be used with students.

All this data was then downloaded as an Excel file, compiled and carefully analyzed. The results of the analysis indicated the most important critical points that could be modified and refined in the course in general, and in each of the eight units specifically. These results were then used as a basis for the validation feedback sent to the University, so that the vendor can make the necessary adjustments for a better course.

3. Purposes of the Evaluation

Purpose

The purpose of doing this particular evaluation was to validate the content of the online course Philosophy and Professional Ethics, developed by the author of this project for the Brazilian University Universidade Anhembi Morumbi, so that the vendor who transformed the content into multimedia could perform the necessary arrangements before the course is released to be used with students, in 2011.

Central Questions

Several central questions were asked and answered through the evaluation, among which the most important were:

1. How clear are the lessons?
2. How adequate is the content of the lessons?
3. How adequate is the design of the lessons and the whole course?
4. What other resources (audio, video, images, and games) can be added to improve the quality of the lessons?

These questions were broken into several subcriteria, as part of the Google Docs form designed for the evaluation.

Impact

The evaluation is part of a validation process, which aims to improve the quality and appropriateness of the course for the future students. So, at the end of the chain, the students who will be taking the course, starting next semester, will be mostly impacted by the results of the evaluation.

In the middle of the chain is the Distance Education Department of the University, which requires the evaluation from the author of the content, and is responsible for administrating the delivery the course.

The tutor of the course, which develops questions to be asked to the students and grade these activities, will also be impacted by the improvements in the course.

The third party vendor, which has developed the multimedia lessons, will also be impacted because they will have to re-work the material depending on the results of the evaluation.

Finally, the author of the content will also be impacted, because he will have to review all the material, based on the results of the evaluation, and rethink several issues regarding the course. And, at the end, will have the opportunity to access an improved online course.

4. Background Information

Origin

Universidade Anhembi Morumbi is a Brazilian University that offers hundreds of online courses to graduate and undergraduate students. A Philosophy course has been taught online for thousands of different students for years, but now it will be offered only for Business students. This required a revision of the course, to tailor it to this audience. Besides that, the University recognized that the course needed to be upgraded, including more interaction and use of technology.

The author of this Project teaches at the University, is also the author of a textbook called *Philosophy and Ethics in Administration*, and is known and respected in the field of Distance Education. This led to an invitation to write the content for the new online course Philosophy and Business Ethics.

After the content was produced and transformed in multimedia, there is a procedure by which the author validates the online course. This evaluation project, though, was designed as part of the validation process.

Standards/Goals

The content for the course was designed as final project for EdTech 503, Instructional Design, Spring 2010.

The stated general learning goal was:

> **Given a business and administration situation, the learner will be able to apply philosophical and/or ethical concepts and reasoning to support his decision making process.**

That is to say, learners will supposedly act professionally as business and administration professionals. In a general sense, the learning is thought to be transferred to situations where the learner must make a decision as a manager, supporting his decision.

Content and Learning Objectives were organized taking into consideration the number of 8 lessons by which the course should be divided, and applying the Elaboration Model by Reigeluth (Smith & Ragan, 2005). These objectives are listed below:

Unit 1: General Concepts
- Learners can define philosophy with his own words
- Learners can define ethics with his own words
- Learners can list the main philosophers in Ancient, Medieval, and Modern Philosophy
- Learners can describe the main philosophical movements in Ancient, Medieval, and Modern Philosophy

- Learners can demonstrate the capacity of looking into a problem from more than one perspective
- Learners can identify an invalid reasoning
- Learners can apply alternative decision making techniques besides reason, as intuition and abduction, to a problem

Unit 2: Applying Philosophy of Language
- Learners can apply philosophy of language concepts to solve conflicts
- Learners can apply philosophy of language concepts to improve business communication and negotiation in foreign languages
- Learners can differentiate the way people communicate and behave face to face and virtually
- Learners can describe information overload
- Learners can apply the concepts of constant flow to solve problems

Unit 3: Leadership
- Learners can describe and identify different leadership styles
- Learners can apply the concept of interaction in business
- Learners can apply Mary Parker's Follett idea of situation law in conducting meetings
- Learners can differentiate the concepts of philosophy, mission, and vision in corporations

Unit 4: Business Responsibility
- Learners can define the concept of stakeholders
- Learners will behave following a communitarian ethics
- Learners can differentiate liberalism and socialism
- Learners can define Kant's ethics law
- Learners will behave using Kant's ethics law
- Learners will be sensitive to huge differences in salaries and wealth distribution

Unit 5: State
- Learners can summarize at least three political theories that justify the power of State

Unit 6: Intellectual Property
- Learners will behave according to intellectual property laws

Unit 7: Codes of Ethics
- Learners can describe the function of Codes of Ethics
- Learners can differentiate the existentialist concept of personal responsibility from the concept of unconscious acts

Unit 8: Environmental Ethics
a. Learners will make decisions taking into consideration environmental ethics issues

Previous Programs

The Philosophy online course that is being used for years by the University concentrated a lot on Ancient Philosophy and had a very low level of interactivity, besides the fact that it was not designed for the current audience, Business students. There was an explicit intention of the Department to bypass these limitations.

People Involved

The previous course was designed by the current tutor of the course, who was also responsible for reviewing, as expert, the course being evaluated by this project. It was also developed by a vendor into multimedia and coordinated by the Distance Education Department of the University.

Characteristics

Learners of the course are undergraduate business students at Universidade Anhembi Morumbi, a Brazilian University. The same course will be taken by two different groups of students:

a) Students of 100% online courses. Age average 33 years old.
b) Students of face to face programs, who will take this course (and some others) online, at the 3rd semester of different areas: Business and Administration, Marketing, International Relations, and International Business. Age average 19 years old.

Authors, ideas and philosophical movements are presented in the course as scaffold for the reasoning and decision making the learners will have to generate to solve proposed business and administration problems.

Declarative knowledge and concept learning, as well as attitude learning, as a structured system of values, are used in different lessons as the support for decision making in business and administration scenarios, in the sense of identifying a philosophical or ethical problem and creating concepts. So, the major instructional strategy used by the course is cognitive.

5. Description of Evaluation Design

The expert evaluation was open and free. She received the 8 units (but in Word files, that is to say, before being transformed into multimedia) and emailed back her comments.

Two students were followed in one-to-one evaluations in a computer laboratory while they flowed through the online lessons. The evaluator mainly observed their interaction with the material, paying special attention to: how long they took to complete each unit, where they had doubts, items that were supposed to be clicked and explored but were not, where they stopped or came back to etc.

The most important instrument of the evaluation, the rubric, did not use a specific evaluation model. It actually used elements from the *discrepancy model*, as its main objectives were to evaluate the multimedia version of the course in relation to standards previewed on its design. The evaluation was mainly looking for these points of discrepancy, as well to discrepancies on the average evaluation of the lessons by the students. But the rubric also borrowed ideas from the *goal-based model*, as it intended to evaluate the stated general goal for the course and some of the stated objectives of each unit.

The rubric questions were mainly based on Dick and Carey's (1991) criteria, including also elements from Kirkpatrick's model (Madaus & Kellaghan, 2000) and other models and texts with suggestions for designing rubrics. The suggestions of these models were chosen and adapted according to the standards and goals of the online course being evaluated.

The rubrics is divided in four main parts. The first three parts (clarity, content, and design) have scale questions (raging from 0 – inadequate to 10 – adequate) and end with a final open paragraph question. The fourth part has distinct and unique questions (commented below).

Follows the questions and the description support for each one (the Google Docs Form in Portuguese is available at http://ow.ly/3lZAA).

Clarity
    a. Objectives of the Unit (first section of the lesson)
    b. Reasoning (section that appears after the Goals of the Unit and presents a case)
    c. Guidelines (general guidelines on how to explore the lesson)
    d. Organization (general organization of the lesson: beginning, middle, end, conclusion, etc.)
    e. Transitions (changes from one theme to another, from one section to another, etc.)
    f. Vocabulary Level (difficulty, unfamiliar words and without explanation etc.)
    g. Complexity of Sentences (level of complexity during reading)
    h. Examples (used to illustrate concepts during the lesson)
    i. Illustrations and Images (enrich the text?)
    j. Length of the lesson (the time you took to complete the lesson)
    k. Clarity – general comment (general comment on the clarity of the lesson, taking into consideration the evaluated items and other points you consider important.)

Content

    a. Difficulty (level of difficulty of the concepts presented)
    b. Motivation (level of motivation generated by contact with the material for you to continue following the lesson)
    c. Relevance (importance of the concepts presented)
    d. Application (can the concepts presented in the lesson be applied to your day-to-day personal life, study and professional activities?)
    e. Content - general comment (general comment about the lesson content, taking into consideration the evaluated items and other points you consider important.)

Design

    a. Design (the overall design of the lesson)
    b. Navigation (navigating the lesson is simple, easy etc.)
    c. Interactivity (degree of interaction with the material and content)
    d. Pleasure (the pleasure you had taking the lesson)
    e. Design - general comment (general comment about the design of the lesson, taking into consideration the evaluated items and other points you consider important.)

Others

    a. This lesson looks more like:
        * a traditional class
        * a journey

    b. At the end of lesson, you felt:
        * Dissatisfied
        * Indifferent
        * Satisfied

    c. The lesson was:
        * Uninteresting
        * More or less interesting
        * Very interesting

    d. What resources do you consider necessary to enrich the lesson (here you can choose more than one option):
        * Images
        * Audio
        * Videos
        * Games

    e. Final Comments (final comment about the lesson you have evaluated, completing its evaluation.)

According to Madaus and Kellaghan (2000), depending on the metaphor that we use to describe education, the way we think about evaluation changes radically. They propose the metaphor of "schooling as travel", which includes the following ideas: the curriculum is a root over which students travel; each traveler will be affected differently by the journey; no effort is made to anticipate the exact nature of the effect on the traveler, but a great effort is made to plot the route so that the journey will be as rich, as fascinating, and as memorable as possible. Although the course was designed with goals and objectives in mind (already mentioned), this was the metaphor on the basis of the design of

the online course, supported by the theory of Digital-Game Based Learning (Papert, 1998; Gordon & Zemke, 2000; Zemke & Allison, 2002). This justifies items such as pleasure, interactivity, the lesson as a journey, satisfaction, and interest, included in the rubric.

The two students followed in a one-to-one basis are studying Engineering. The expert is the online author and tutor of the current Philosophy course.

The questions of the rubric were answered at a distance 185 times. Each student had the option of choosing the unit he or she wanted to evaluate, so some units had more evaluations than others. Some students evaluated more than one unit, but usually the choice was for only one. The evaluations received through the rubric are divided in: 123 Engineering students, 46 Fashion Business students, 20 Game Design students, and 16 students and professionals from other areas (usually distance education).

Fashion Business students are a reliable sample for the evaluation, because they are taking a course in Business. Engineering students were chosen because, although not taking a course in Business, will usually work in business-like situations. Game Design students had studied Digital-Game Based Learning, so were chosen taking into consideration this special look at the material. All of these students were students of the author of the content of the course and evaluator, and the evaluation was developed as a final activity for their courses in this semester.

All the students had already taken an online course at Universidade Anhembi Morumbi, so they were used to the design of the courses, which follow a similar pattern. The evaluations were made in real life situations, that is to say, at a distance, when the students had to follow the lessons (as they do in other online courses at the University) and answer the questions online.

The Google Docs sheet was downloaded as an Excel file and then analyzed in several ways. There was no attempt to differentiate the evaluations through the course the students were taking, mainly because of lack of time, although this could have resulted in interesting conclusions.

Data collected was compiled and analyzed generally per question asked, and also separated unit by unit. The analysis looked mainly for results that were below the average, either in general terms, and specifically for each unit. These results were compared to the comments on the open questions, the notes taken on the one-to-one evaluations, and the expert feedback, and then formed a basis for the review of the course, unit by unit.
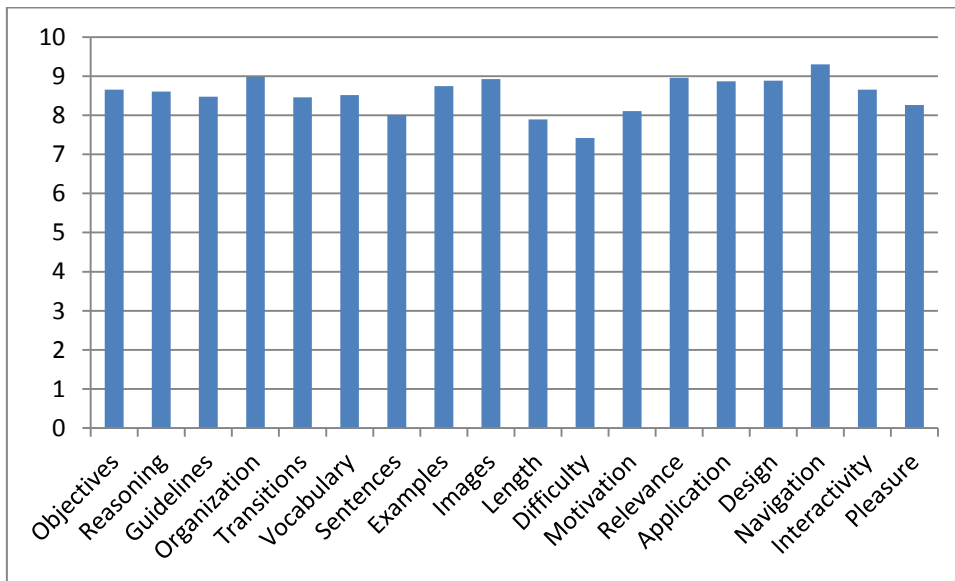
6. Results

The general evaluation of the course, taking into consideration the scale questions (0 to 10) was 8,54. Broken into the three major criteria, the results were:

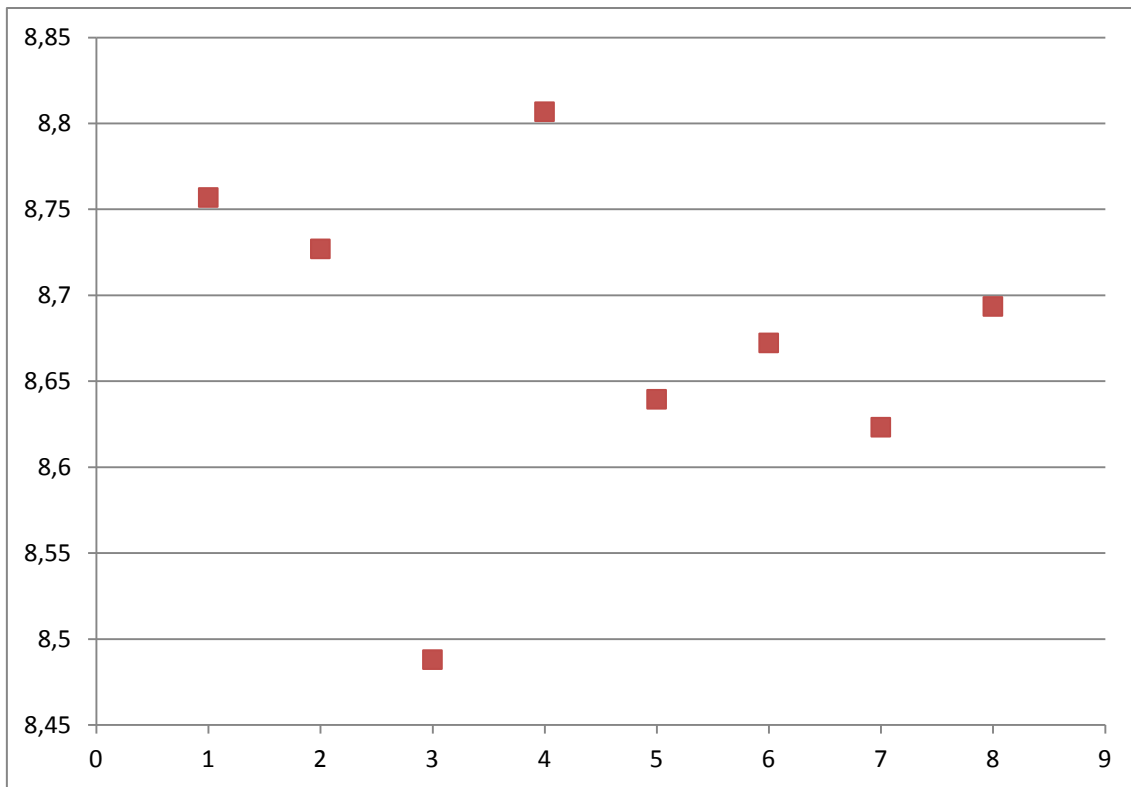|	
Clarity	8,53
Content	8,34
Design	8,98

Table 1: Criteria Grades

Graph 1 shows the grades broken into singular questions:

Graph 1: General Grades on each criterion

Only 2 item received a grade lower than 8: Difficulty (7,42) and Length (7,89).

Graph 2 shows the results broken into a global grade for each unit:

Graph 2: Global grades per unit

Table 2 shows items evaluated below the average in specific units:

Transitions	Unit 3	7,57
Vocabulary	Unit 5	6,38
Complexity	Unit 5	6,38
Length	Unit 7	5,90
Relevance	Unit 3	7,86
Application	Unit 5	7,25
Pleasure	Unit 3	7,43

Table 2: Items below the average

40% of the students considered the lesson a journey, while 60% considered it like a traditional class.

The majority of the students (89%) were satisfied at the end of the lesson.

70% of the students considered the lesson very interesting, while 29% considered it more or less interesting.

Table 3 indicates the percentage of students that suggested including specific resources in the course:

Videos	64%
Images	63%
Audio	48%
Games	19%

Table 3: Resources do be added

7. Discussion of the Results

The global average grade of the course (8,54) was a positive surprise. Considering that the course is still in the validation phase, as it had only followed a content-multimedia path, the result was encouraging.

As philosophy is an abstract discipline, and business a practical one, the challenge of the main goal of the course – applying what was learned to a business situation – seems to have been achieved taking into consideration the grades given to Relevance (8,96) and Application (8,67). This was a very positive and unexpected result.

Considering the three major criteria used in the rubrics, it was clear that Content (8,34) presented more problems to students than Design (8,98). This helped to call even more attention to single items that had general lower grades: Difficulty (7,42), Length (7,89), and Complexity of Sentences (8,00). **These were chosen as general drives for the review and validation of the whole course.**

Although design was well evaluated, several comments (on the open written questions and the one-to-one evaluations) indicated specific points where design must be corrected (when things are not working the way they should) or improved.

Besides that, Motivation (8,11) and Pleasure (8,26), combined with the fact that 60% considered the lesson similar to a traditional class, instead of a journey, showed that one of the aims of the content was not reached, that is to say, to produce a game-like designed online course. At the same time, few students (19%) suggested adding games to the course. So a second drive chosen to review the courses was **to infuse more game design elements (not games) into the course**. Videos and images, and when convenient audio, will be suggested as resources to some of the lessons, as one of the strategies to improve motivation and pleasure.

Besides these general drives, the results (plus the expert, one-to-one and written feedbacks) were broken into each unit, suggesting the following drives for review and validation:

Unit 1 – reduce difficulty.

Unit 2 – add videos and games; reduce length.

Unit 3 – review transitions; improve relevance and pleasure; transform the lesson more into a journey.

Unit 4 – transform the lesson more into a journey; several content suggestions from the expert;

Unit 5 – reduce complexity of vocabulary and sentences; improve application and reduce generality (content suggestion by the expert); add images.

Unit 6 – add images and videos; reduce difficulty.

Unit 7 - transform the lesson more into a journey; reduce length and repetition; add videos and games; improve motivation.

Unit 8 - transform the lesson more into a journey; add videos; reduce difficulty; improve motivation; interesting suggestions by the expert.

8. Conclusions & Recommendations

Immediate Conclusions

- we should always embed evaluation in the design of a course since the beginning;
- a rubric filled up through the internet is a powerful resource for evaluation;

Long-Range Planning

- an evaluation needs to be performed when the tutor produces the questions that will be used to assess students, in each unit; this needs to be done both to evaluate the appropriateness of the questions as to assess the learning by the students;

Evaluation Insights

- a similar evaluation should have been performed when the content word files were produced (only the expert and the Distance Education Department of the university reviewed, in general terms, the files);
- I should pay more attention when elaborating questions for a rubric (the answers for the length question, for instance, were not clear if were referring to a large or reduced lesson);
- time should be planned and reserved for one-to-one evaluations.

9. References

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10.   Appendices

Online Course Links

The eight units in multimedia form (in Portuguese) can be accessed at:

01 Philosophy and Ethics http://ow.ly/3ecSD

02 History of Philosophy http://ow.ly/3ecUg

03 Philosophy of Language http://ow.ly/3ecVO

04 Leadership http://ow.ly/3ednm

05 Political Philosophy http://ow.ly/3edFK

06 Social Responsibility http://ow.ly/3edpV

07 Intellectual Property in the Information Age http://ow.ly/3edqS

08 Professional Ethics and Codes of Ethics http://ow.ly/3eds8

Rubric

The rubric (in Portuguese) can be found at:

http://ow.ly/3etEB

Universidade Anhembi Morumbi

This is the site of the University for which the course was developed:

http://portal.anhembi.br/index.html