CBM (confidence-based marking) offers an alternative grading for learning tests: individuals’ personal self-efficacy (or self-confidence) is challenged at weighing each multiple choice item. The learners’ grades are adjusted based on the correctness/incorrectness of their answer in connection with their declared self-confidence (high, middle, low). Very soon authors realize a formation potential in it (Gardner-Medwin, 2007).

The final grading scheme transcends the traditional 0-10 grading schemes, and so learners need to rethink in re-interpreting their result, which has potentially a formatve (metacognitive, and hence metacognitive) effect.

**Purposes**

- To carry out a formative use of CBM to consistently foster reflective self-assessment and metacognition.
- To master for Secondary Teachers Education at the Universitat de Barcelona, a 1-year program. Compulsory module of teacher training in didactics and instructional design (3 months in 29 sessions).

**Instructional design**

- Students respond to 10-CBM items starting each topic (of three). Each test tackles general and usual misconceptions resolving the program's contents. After responding to the CBM-test, they receive direct result with an interpretation guide and a reflective open-answer questionnaire to foster metacognitive reflection.

**Measuring instruments**

- Students receive a general CBM-interpretation guide starting the module, plus automatic feedback after responding each test, with their CBM-result.
- The interpretation guide models likely results following CBM-algorithm in terms of “levels of desirable performance.”
- Students voluntarily respond a reflective questionnaire after responding CBM-tests.

**Supplementary instruments**

- To evaluate the formative experience with CBM.
- Methods: Mixed methodology, with quantitative and qualitative data.
- Data: Profiles, CBM results, CBM single responses, reflective open answers (voluntary).

**Questions for guided reflection**

- How do you feel about the result? (M.C. answer)
- Does it meet your expectations? Is it below? Above? (M.C. answer)
- Why do you think this result came about? (free answer)
- What can you do to improve? (free answer)

**Results**

- CBM results, Total sample.
- CBM results, Total sample, CBM results patterns.
- CBM results, Total sample, CBM results patterns per curriculum area.
- CBM results, Total sample, CBM results patterns per gender.
- CBM results, Total sample, CBM results patterns per sex.
- CBM results, Total sample, CBM results patterns per sex.

**Conclusions**

1. We found no differences in CBM results in terms of particular area. Students’ disciplinary background does not affect.
2. We found no differences in as self-confidence in terms of particular area. Students’ disciplinary background does not affect.
3. We found differences in CBM results in terms of sex. Women get significantly better results (after two previous trials and after significantly fewer errors in final trial).
4. We found no differences in self-confidence in terms of sex. Women (male-gendered) get significantly better self-confidence by the third attempt.

These results are all positive as much as they offer new directions of research and instructional design for improving performance practices not only in teacher education but also in all educational levels. The presented method offers evidence on gender differences (Gardner-Medwin, 2006). However, we retain obvious general trends of differences and hints to the interest of considering particular instructional strategies to:

1. Support women in their loss of self-competence and confidence.

Qualitative results of students’ guide to the use of CBM can be examined. In coherence with these first findings of qualitative data, we need to explore further gender differences and other contextual conditions such as to promote reflective thought to access the learner reflective modes approach (Schon, McKeachie, Doll).