

# Challenges in implementing new assessment methods of students' learning

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# Assessment

- Assessment of students learning is a fundamental function of higher education:
  - it is a means by which it assures academic standards
  - has a vital impact on
    - student behavior
    - staff time
    - university reputation and most of all,
    - students' future lives.

# Assessment in UMFTGM

- a curriculum reform process started in 2014 (priority of the current strategic plan)
- assessment of students' learning is an important part of this process
- the aim of my presentation is to highlight *why* and *how* UMFTGM implemented changes in the assessment of students' learning

# Assessment in UMFTGM

- traditionally, students assessment was made by oral examinations
- over the years
  - the number of students increased
  - there were complaints from the teachers and students
    - time consuming
    - grades - sometimes at the whim of the teacher
    - the objectivity of the examination was questionable
    - assessment of only a small part of the curricula
    - development of sophisticated methods of cheating
  - impossible to have a QC

# Assessment in UMF TGM

- the first step: by decision of the Administrative Board
  - MCQ testing became mandatory for the theoretical examination
  - combined with practical examination
- it was a hard political decision at the beginning of the former AB mandate
- it did not bring peace in the academic community which became divided into two:
  - for
  - against

# Assessment in UMF TGM

- we had to face a sort of rebellion or at least a lot of complaints in the:
  - Teachers council
  - Senate
  - different meetings
  - on the corridors

# Assessment in UMF TGM

- the main reasons
  - by MCQ teachers cannot test the medical thinking of the students or their ability to make connections
  - teachers no longer have the possibility to face the student
  - students cannot gain a medical or scientific language
  - teachers do not know how to prepare good MCQ

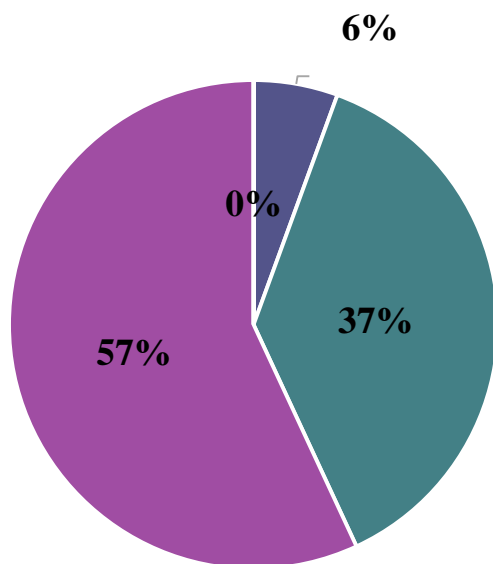
# Assessment in UMF TGM

- One year later – a survey on the satisfaction of the students on this assessment method was made
  - the report is on the UMF website – QA Department
  - 60-90% of students were involved
  - SWOT analysis was performed
    - very few strengths
    - a lot of weaknesses and treats
    - a lot of suggestions



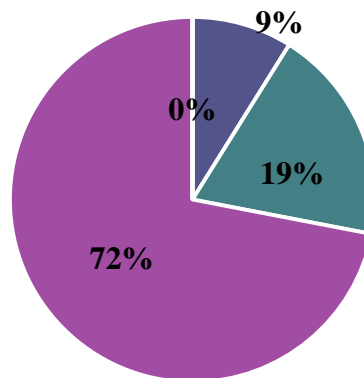
# The survey on students satisfaction - Which type of assessment do you think is more suitable?

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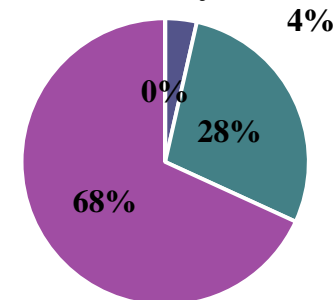
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- Exclusively written
- Oral and written

Faculty of Medicine



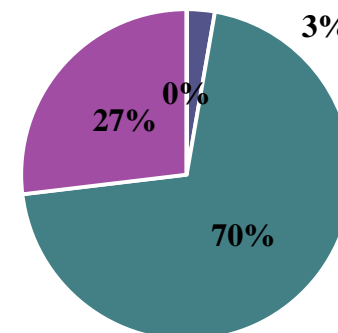
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Faculty of Dentistry



- Exclusively oral
- Exclusively written
- Oral and written

Faculty of Pharmacy



- Exclusively oral
- Exclusively written
- Oral and written

# Assessment in UMF TGM

- when analyzing the weaknesses
  - bad questions
  - bad organization/surveillance (in some departments)
  - great differences in the degree of difficulty of the questions between the series of study of the same subject
  - insufficient time – bad correlations between the number of questions and time
  - unknown assessment method
  - and so on..

# Assessment in UMF TGM

- it was time for changes
- Curricular reform process was started:
  - a new administrative structure was created: the CEIPSCU office
    - responsible for the curricular reform
    - coordinated by the Vice-rector for teaching affairs
  - involvement of International experts in Medical Education
  - important political decisions were engaged (Rectors' support) included in a NEW REGULATION
    - approved by the Senate
    - implemented 2016-2017 – **pilot disciplines**

# Assessment in UMF TGM

- goals
  - to make the learning process continuous
  - to make a uniform assessment on the same subject, for all the students, regardless of the series or the language of study (RO, HU, ENG)
  - to make better questions
  - to make the marking method transparent
  - to avoid cheating
- counseling and training for the teachers was provided by international experts (TBL, CBL, MCQ)

# Assessment of practical/laboratory activities

- in non-clinical disciplines
  - definite criteria for students admission to the practical activities/examination
    - a written prelab report - mandatory for the admission to the practical activity
  - practical activities are marked weekly on a regular basis
    - to provide meaningful feedback to students about their performance
    - part of the final grade

# Assessment of practical activities

- Clinical disciplines
  - fulfillment of specific practical skills became mandatory to be admitted to the final examination
    - clearly specified for each discipline
    - included in a lock book
  - continuous evaluation (grades) during the semester
    - case presentations
    - simulation center
      - skills
      - standardized patient
  - included in the final grade

# Theoretical examination

- MCQ testing
  - a training for writing better MCQ was provided for all teachers
  - standardized for all the students regardless of the series they attend
  - peer reviewed - inside and outside the discipline
  - introduction of 2 TBL sessions/semester – included in the final grade
  - CEIPSCU office – responsible for
    - collecting
    - analyzing the results
    - making recommendations

# Results

- data from the pilot disciplines were collected after the winter examination session
  - name of the teacher
  - number of questions
  - working time
  - final grade calculation mode (% theoretical+%TBL +% practical)
- analysis of the results:
  - percentage of students who passed
  - average grade – standard deviation
  - tables/histograms – dispersion grade
  - p value between different series



## Final grade calculation mode :

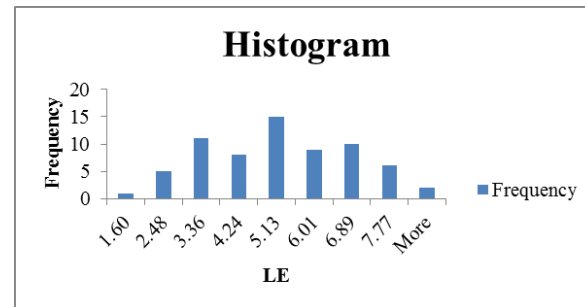
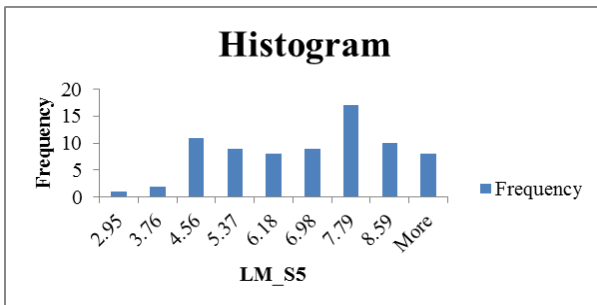
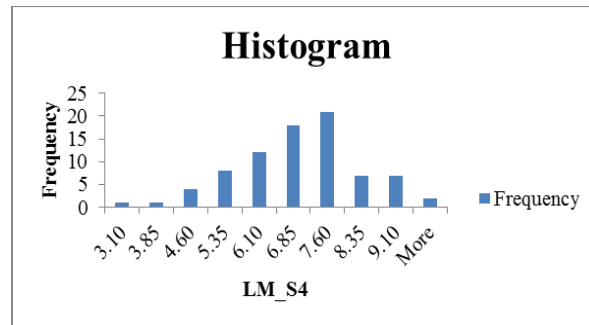
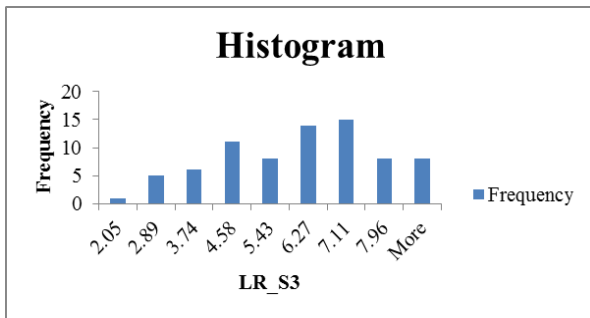
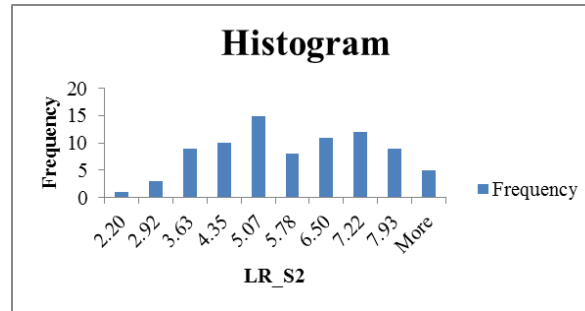
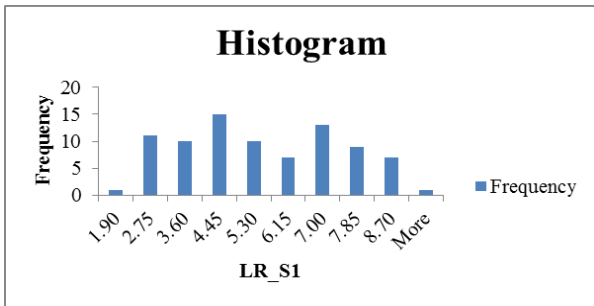
MCQ x 60% + TBL x 10% + Practical x 20% + grade of practical during the semester x 10%

Language	Serie	Teachers name	Nr. of questions	Time	Date	% of Pass
LR	1	Prof.Dr. A.Borda	60	90 min	1/16/2017	54%
LR	2	Prof.Dr.A. Borda	60	90 min	1/16/2017	63%
LR	3	Conf.Dr.A.Loghin	60	90 min	1/16/2017	61%
LM	4	Şef lucr.Marcu S	60	90 min	1/16/2017	90%
LM	5	Şef lucr.Marcu S	60	90 min	1/16/2017	76%
LE		Prof.Dr. A.Borda	60	90 min	1/17/2017	38%

## Analysis of the MCQ test results:

Year II	Average+ standard deviation	CV	Distribution
<b>S1</b>	5.1294±1.9682	38,37%, big data dispersion	Non-Gaussiana
<b>S2</b>	5.5±1.6329	29,68%, medium data dispersion	Gaussiana
<b>S3</b>	5.5448±1.7819	32,13%, big data dispersion	Gaussiana
<b>S4</b>	6.6615±1.3631	20,46%, medium data dispersion	Gaussiana
<b>S5</b>	6.4611±1.6680	25,81%, medium data dispersion	Non-Gaussiana
<b>LE</b>	5.7345±1.7854	37,71%, big data dispersion	Gaussiana

	p value
<b>S1/S2</b>	0.1608
<b>S1/S3</b>	0.1792
<b>S2/S3</b>	0.8680
<b>S4/S5</b>	0.6497
<b>LE/LR</b>	0.0103
<b>LE/LM</b>	<0.0001
<b>LR/LM</b>	<0.0001



# Results

- the results were included in a report with
  - comments
  - recommendations
  - highlighting the positive/negative aspects
- each pilot discipline received his own report
  - discussed in a department meeting with the CEIPSCU members

# Results

- this report gave an overview on the examination system in different disciplines at UMFTGM
- allowed identification of strengths/weaknesses
  - (“good teachers” – 100% pass - “bad teachers” – 10% pass)
  - very variable marking methods, great mark dispersion, etc...
- will permitted to take action for improvement

# Conclusion - Assessment in UMF TgM

- the assessment policy in HE is of great importance
- as assessment shapes what and how students study  
(students do not learn what we expect, but what we inspect)



