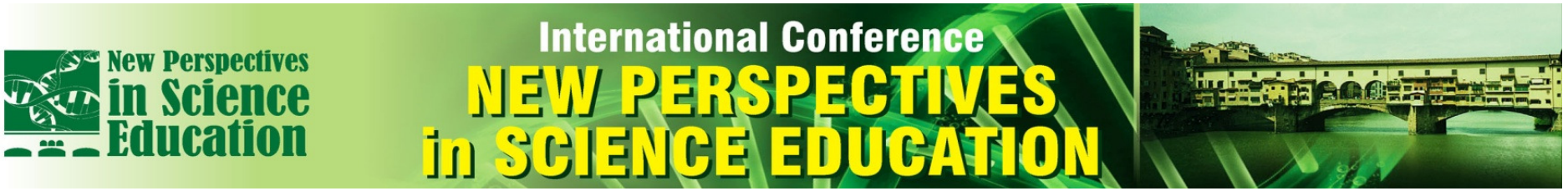


A Clear and Present Trust: Distance Learning Assessment and the Academia Perspective

Ana S. Moura

LAQV-REQUIMTE

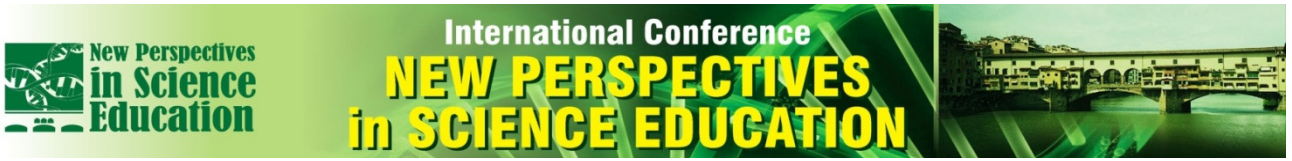
Universidade do Porto

Firenze, Italia: 22nd MARCH, 2019

New Perspectives in Science Education

Overview

- Academic diploma:
  - What does it stand for before society and the recipient?
    - Assessment => Trust
      - Employers
      - Colleagues
    - **[Trustworthy] Assessment = Prestige!**
      - Individual
      - Social



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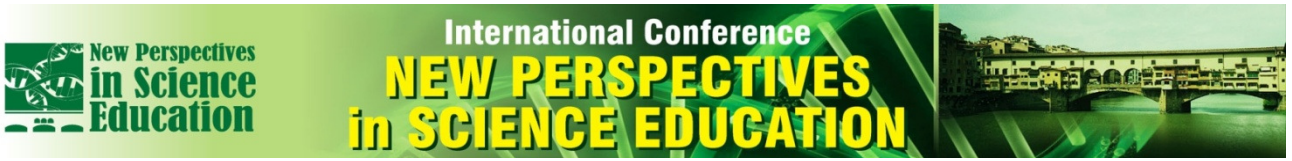

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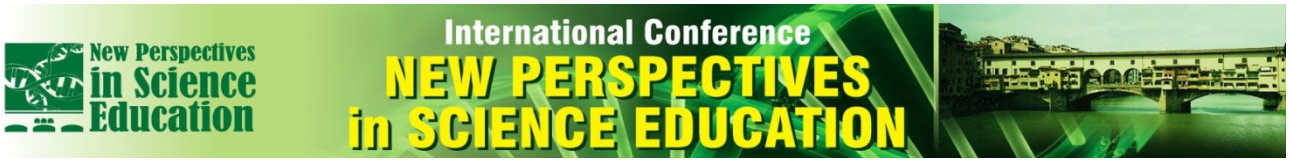

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Online grading methodologies:

do they receive the same trust from society and recipients?

Preliminary Phase:

- **All fields** of expertise

Present Phase:

- **Specific** areas of expertise

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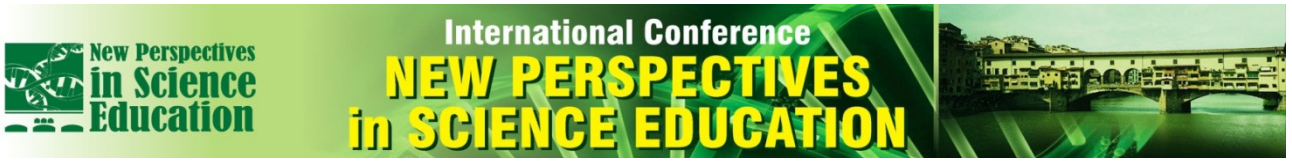

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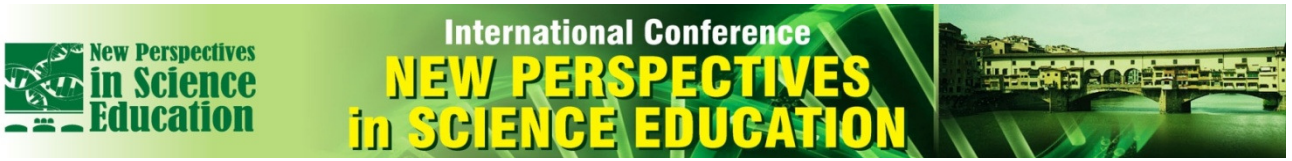

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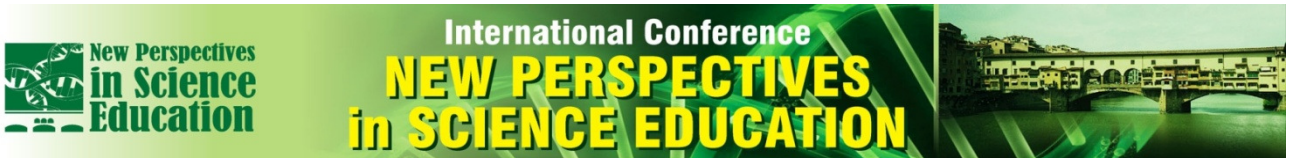
- How professors from the Medical and Biomedical fields perceive inclusion of online methods on Academia;
  - Online grading methodologies *versus* soft skills assessment;
  - Online grading methodologies *versus* practical hard skills;
  - Academic disposition to include online grading methodologies on orthodox courses.
- Why Medical and Biomedical professors?
  - Two fields that affect deeply and intimately everyone and upon which the trust of society and employers is more bestowed.



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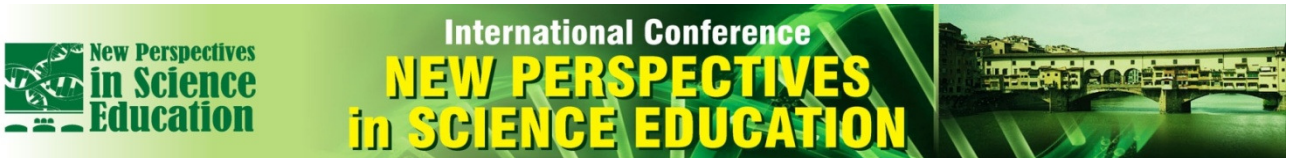

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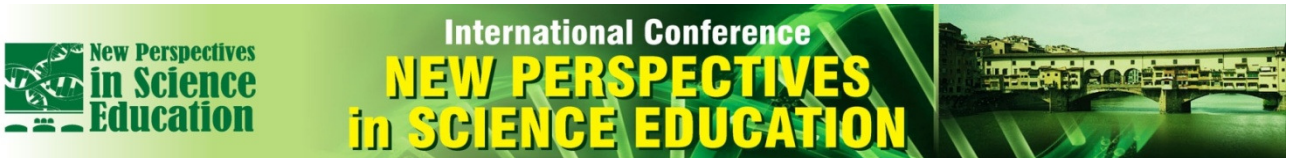

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- Preliminary overall field survey:
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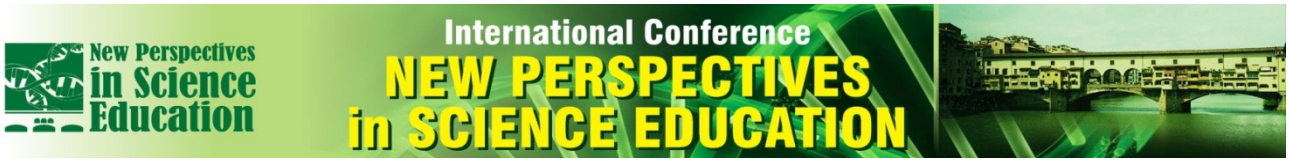
- New field-oriented survey:
  - *Medical/Biomedical Education and Distance* Learning
    - Google Surveys (2018)
    - Institutional emails of Medical and Biomedical professors of several Higher Education institutions(indication of academic intermediates)
  - Three main sections:
    - Personal and professional details:
    - Online assessment of soft and hard skills
    - Academia online grading inclusion 'comfort zone'



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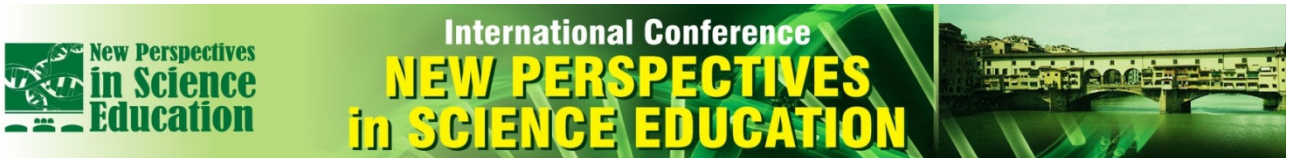

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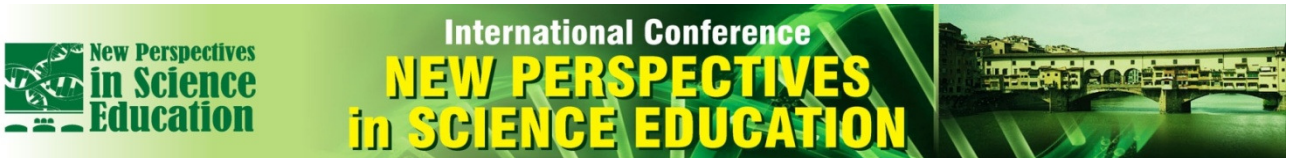

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  - Academic reluctance in answering the survey
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    - Need to have space for more extensive answers
  - Second research stage:
    - Personal interviews
      - Same questionnaire
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Results (Part 1 & 2)

- Two subsections:
  - **Part 1**
    - **Inquiry results: biomedicine *versus* medicine points of view**
  - **Part 2**
    - **Interviews: analysis *per* professional experience**

Results (Part 1): Inquiry

Sample Personal Details

M 61,5%; F 38,5% <- Gender

30-39 years 23,1% 40-49 years 38,5%
50-59 years 15,4% 60-69 years 23,1% <- Age

Portugal 69,2% Brazil 7,7%
France 7,7% Angola 7,7%
Switzerland 7,7% <- Country of origin

Portugese 92,3%
Brazil 7,7% <- Citizenship

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- **11 - 20** 46,2%
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- **0 -5** 30,8%

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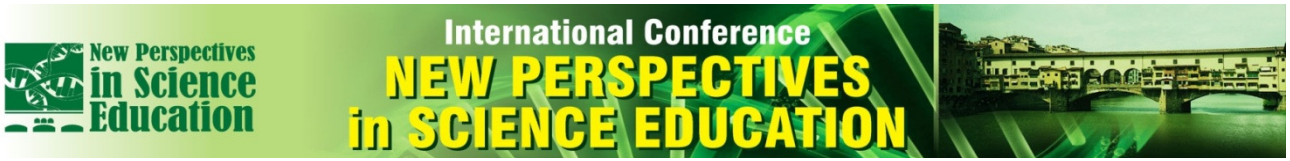
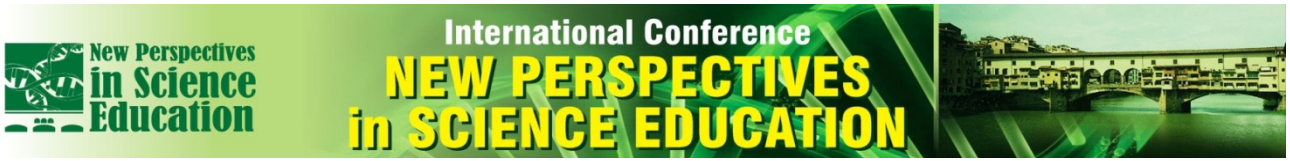


Results (Part 1): Inquiry

Field of Expertise

• Biochemistry	7,7%	B
• Medical Physics	12,4%	B
• Biomedicine	7,7%	B
• Pathology	15,4%	M
• Rheumathology	15,4%	M
• General Practice/Familiar med	7,7%	M
• Other	30,8%	

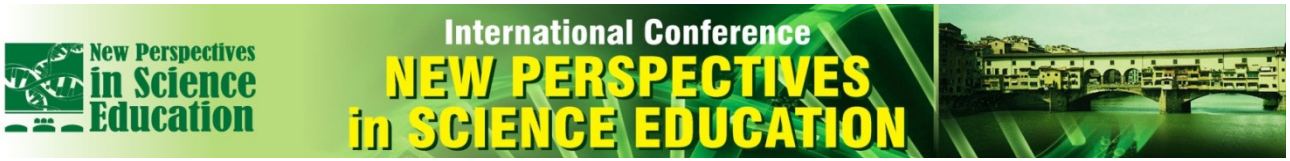


Results (Part 1): Inquiry

- Online courses and type of online grading methodologies inclusion:
  - (A) Peer-review essays 7,7%
  - (B) Peer-review tasks 7,7%
  - **(C) Multiple-choice quizzes 38,5%**
  - Combination of (A)+(B) 15,4%
  - Combination of (B)+(C) 15,4%
  - Combination of (A)+(B)+(C) 53,8%
  - None is adequate 7,7%
  - Other 7,7%

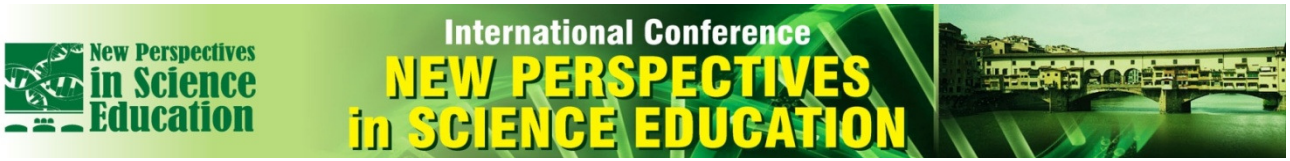
Results (Part 1): Inquiry

- Adequacy for (specific) soft skills:
  - Communication 61,5%
  - Commitment 46,2%
  - Stress management 30,8%
  - Problem-solving 76,9%
  - Autonomy 46,2%
- Most important soft skill: Communication
- Least important soft skill: Stress management



Results (Part 1): Inquiry

- Adequacy for (specific) hard skills:
  - Pharmacology 69,2%
  - Anatomy 61,5%
  - Psychology 23,1%
  - History of Medicine 69,2%
  - Surgery 15,4%
- Most important hard skill: Surgery
- Least important hard skill: History of Medicine



Results (Part 1): Inquiry

- Reasons for these choices:
  - Reasonably adequate, either online or not
    - Soft Skills 46,2%
    - Hard skills 46,2%
- Hipothetical question:
  - If there was more familiarity with the methodologies outside online context, would they be more accepted as online trustworthy grading methods?

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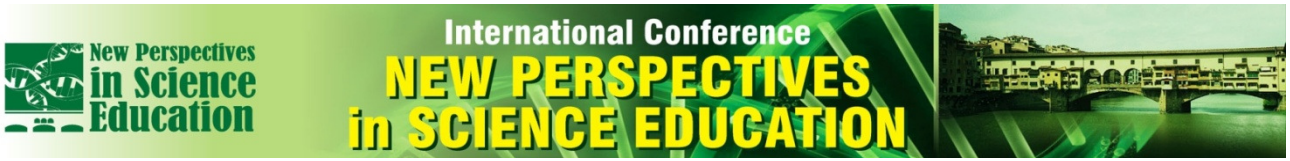
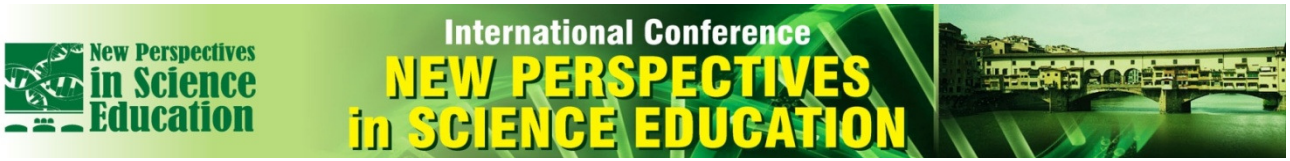


Results (Part 1): Inquiry

- Maximum % of final grade for online grading methodologies
  - Peer-review essays (up to 25%) 46,2 %
  - Multiple choice quizzes (up to 30%) 53,8 %
  - Peer-review tasks (up to 25%) 46,2 %
- Reasons for these choices:
  - Maintains overall quality while major percentage is non-online grading 61,2%
  - Minimizes student fraud 38,5%
  - Personal skills are not well evaluated 23,1%



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Results (Part 1): Inquiry

- Final question:
  - **Would you include distance learning online grading methods on your non-online courses?**
    - Yes 69,2%
      - » Combination of (A)+(B)+(C) 53,8%
      - » Maintains overall quality while major percentage is non-online grading 61,2%
    - No 20,8%

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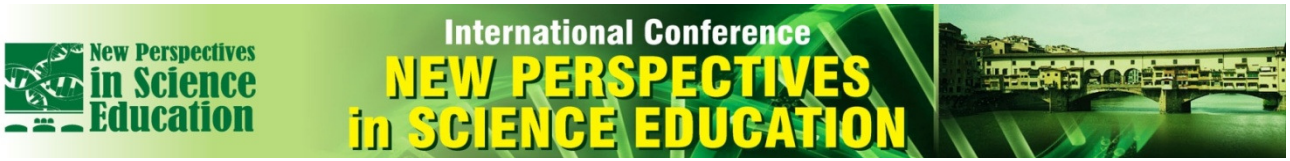
Results (Part 2): Interviews

Interviewed Academics *per* teaching experience: overall perspective regarding online grading methodologies and their inclusion on orthodox courses

Guest junior lecturer	Professor with aggregation	Retired Professor
Programs and grading methods should be more versatile;	The inclusion should depend on the course unit, number of enrolled students and scholarly success	It is inevitable, at the present moment
Theoretical units would not need much adjustment, only experimental (hands-on) units	n/a	Online grading is not feasible for Rheumatology (and other units)



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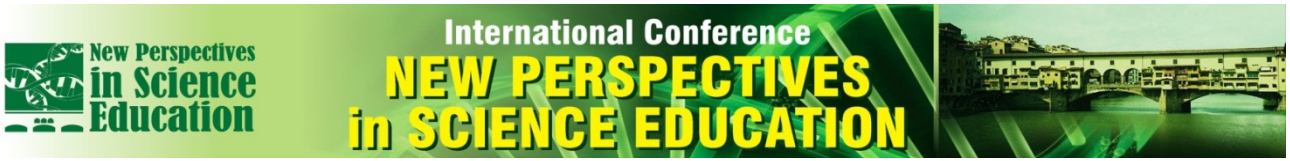

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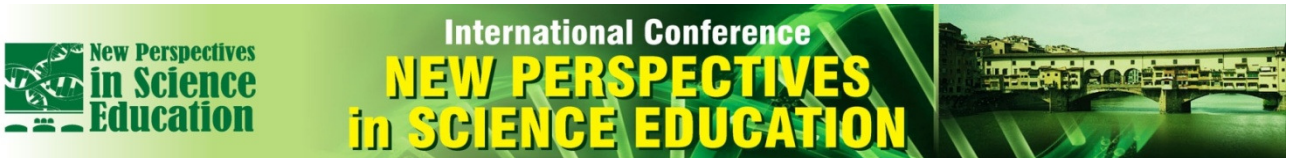

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Interviewed Academics *per* teaching experience: courses, soft skills, and online grading necessity (or adequacy)		
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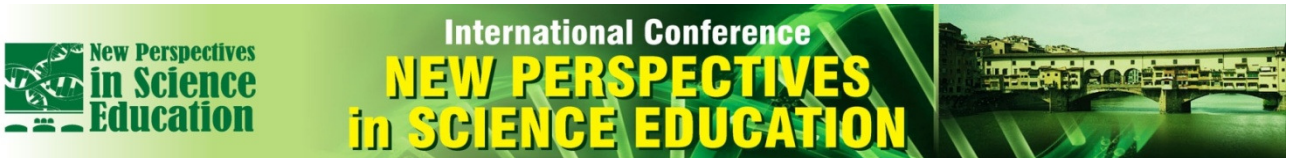
Some soft skills can only be evaluated online (forum debates). Online and face to face soft skill grading should be complementary	Forum debate; Accountability and enthusiasm on tasks; More active role on the learning process	Soft skills cannot be evaluated in such a "remote" manner



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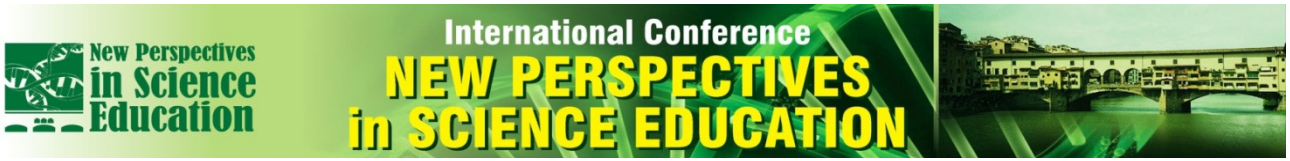

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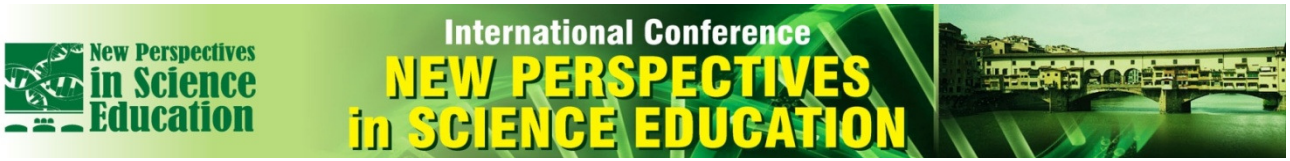

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Interviewed Academics *per* teaching experience: perspective on online grading reliability and which must be studied before implementing them

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if the evaluated skills and methodologies become more versatile, the question will be redundant	n/a	Personal interaction is different. Possibility: through remote video camera
Assess countermeasures against exam fraud; assure internet access despite socioeconomic conditions; student circadian rhythms (could be personalized)	Assess the danger of poorer student/teacher and student/student relationship; Estrangement student/Institution; If the students rhythm are respected; student overload;	n/a

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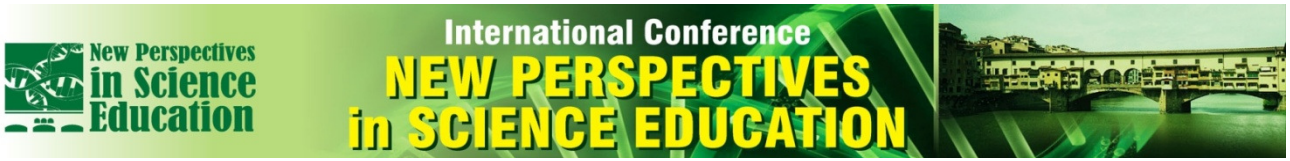
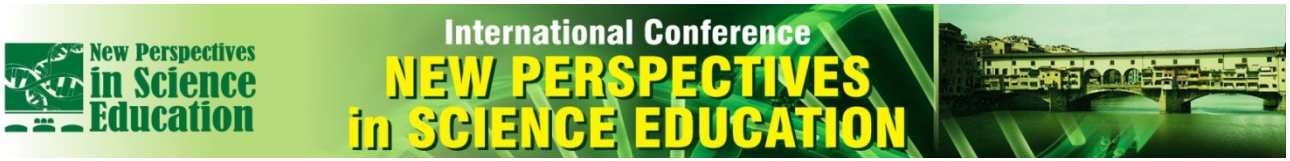
Assess countermeasures against exam fraud; assure internet access despite socioeconomic conditions; student circadian rhythms (could be personalized)	Assess the danger of poorer student/teacher and student/student relationship; Estrangement student/Institution; If the students rhythm's are respected; student overload;	n/a



Conclusions & Future Perspectives

- There is reasonable disposition to include online grading methodologies on orthodox Medical and Biomedical courses as long as two cumulative aspects are taken into consideration:
  - (1) the maximum percentage of online grading does not exceed 25% of final evaluation;
  - (2) the course presents a more 'hard skill' nature, *i.e.*, a more quantifiable essence.



Conclusions & Future Perspectives

- Other aspects to be contemplated on future research:
  - The human interaction of the pedagogical process:
    - Equity on the student development process;
    - Trust of the academic body regarding online grading implementation.
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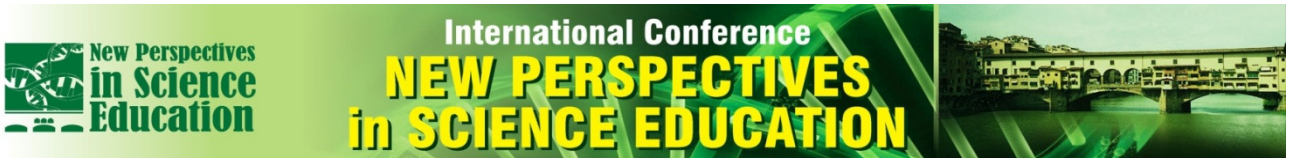

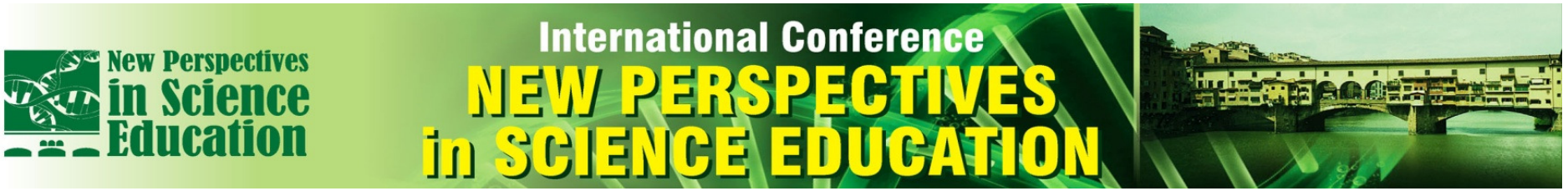

A Clear and Present Trust: Distance Learning Assessment and the Academia Perspective

Thank you for listening!

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