



# Development of a postgraduate study course in immune modulation: Results of the IMCert piloting, self-assessed competencies pre post, written assessment and research proposal assessment

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## Background

IMCert is an approved proposal in the “Capacity building in the field of higher education” Erasmus plus. The aim was to develop a postgraduate study course in cooperation between Egypt, France, Germany and Greece. Before implementation of all nine modules of the certificate we piloted three of them.



Cairo University



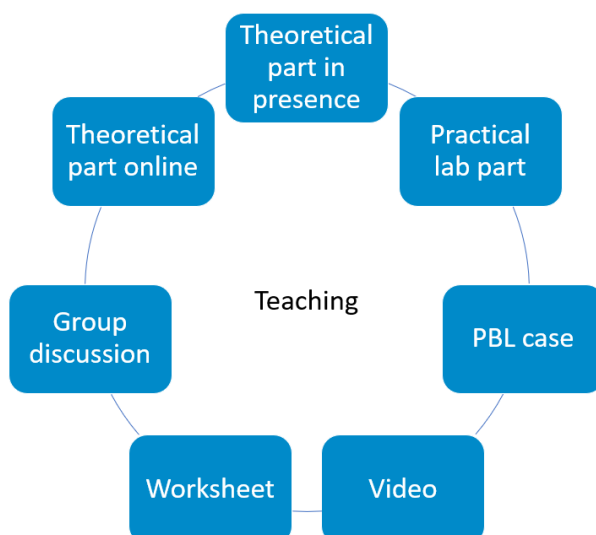
ASWAN UNIVERSITY



## Summary Of Work

44 participants from Egyptian universities (Al-Azhar, Cairo, Ain-Shams, Damanhour and Aswan University) attended the three Al-Azhar University' modules. Nine medical, 11 pharmaceutical and 24 natural sciences participants (18 males) were selected by questionnaire and expert interview from 1835 applicants.

Teaching theoretical and in presence, parts, PBL worksheets discussions. consisted of assessment proposal writing and presentation.



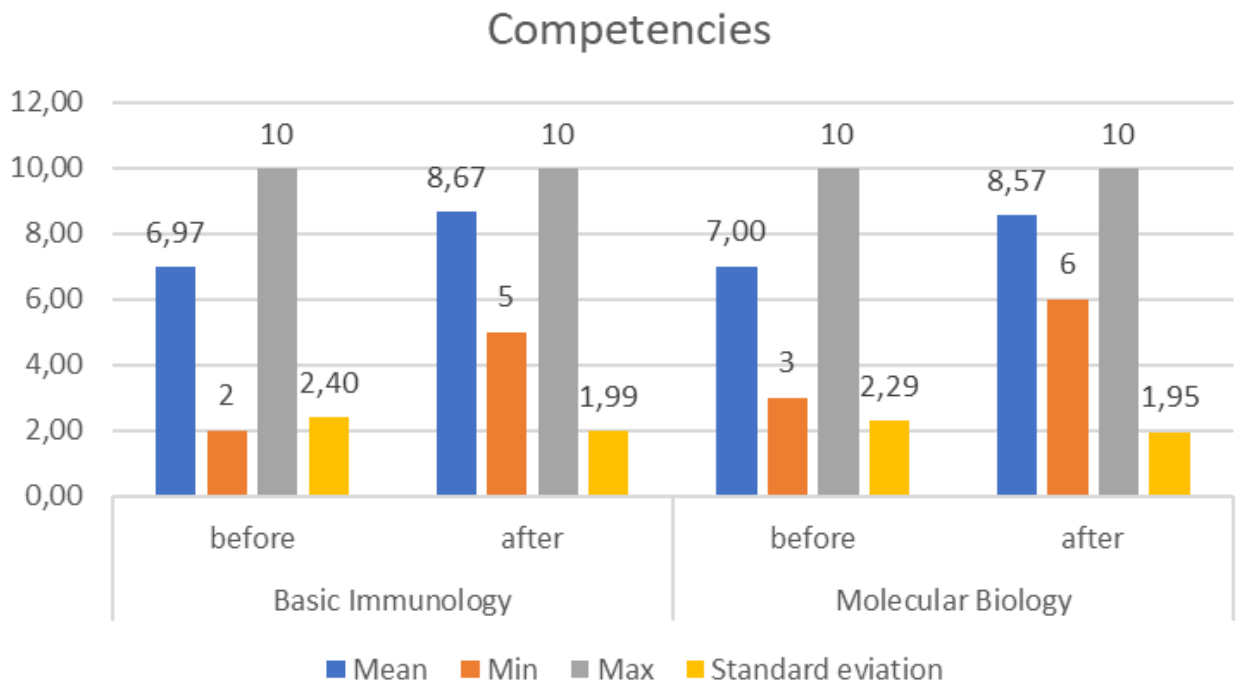
included parts online physical practical lab cases, videos, and group Assessment written and research

To assess the process of the piloting we used questionnaires for participants and teachers. We asked the participants how competent they felt before and after each module (1 not competent at all to 10 very competent).

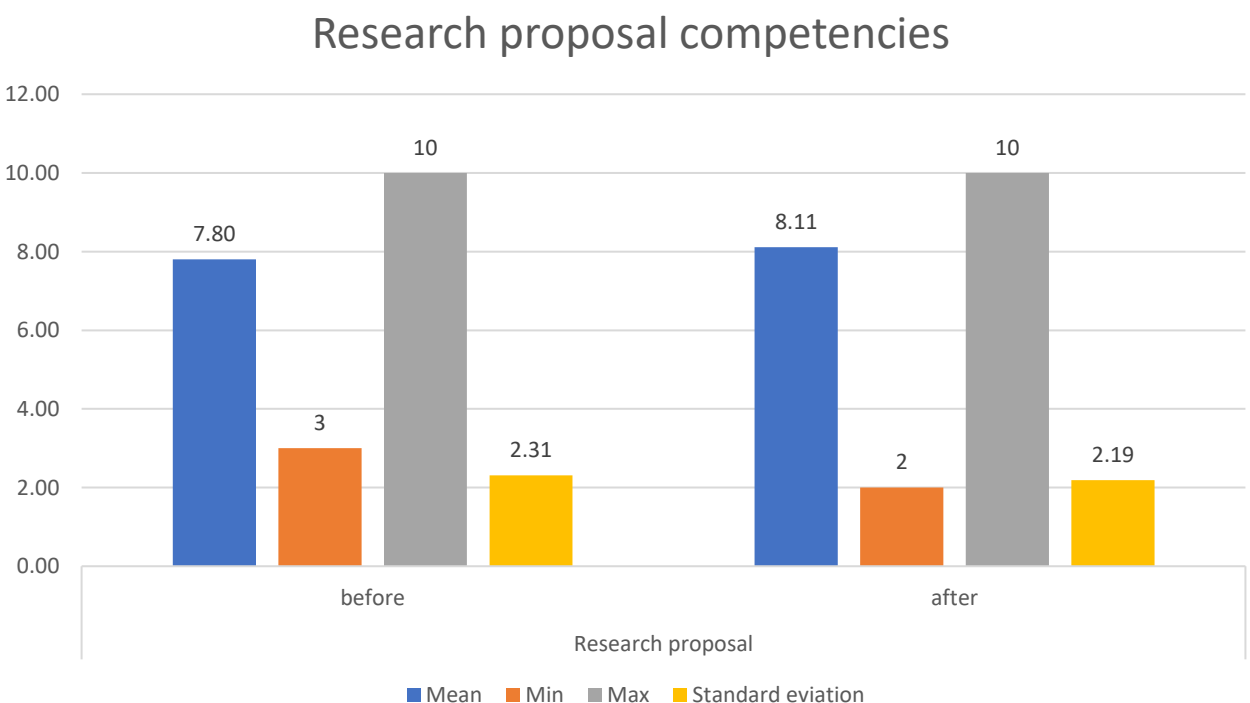
# Summary Of Results

In written assessment of the three modules 49 to 75 per cent were answered correctly by the participants.

Participants rated their competency in basic immunology with 6.97 (SD 2.4; mean  $\pm$  SD) before and 8.67 (SD 1.99) after the module. Molecular biology was rated 7 (SD 2.29) before and 8.57 (SD 1,95) afterwards.



Four of five in teams produced research proposals were very mature.



Public health competency was rated 7.8 (SD 2.31) before and 8.11 (SD 2.19) after.

## Discussion and Conclusion

Piloting newly developed curricula before implementing is very important. Participants' feedback was very good, praising teachers' expertise. Practical parts need more subgrouping and more teachers to optimize the hands-on learners' success.

Optimal teaching methods and assessments together with constructive alignment resulted in increasing participants' competencies.



Students of the pilot phase of IMCert

## Take-home Message

Implementation is starting in September 2023. We will be continuously evaluating and optimizing.



Staff educators of the pilot phase of IMCert



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IMCert

Immune Modulation Certificate For Post  
Graduate Students Enabled by Blended  
Learning

