

European Orthoptic Education Survey

Facilitating lifelong learning

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There is no actual or potential conflict of interest in relation to this presentation.

Disclosure statement

- The results to be presented were analysed based on:
 - the replies from the on-line questionnaire,
 - website information (degrees and schools) and,
 - European documents.

Orthoptic Education Survey – Methods

ORTHOPTIC EDUCATION SURVEY – 2016

Program and Institution

The following questions are related with the initial/main Orthoptic Education Program, in your institution (pre-qualification), which enables future students to practice as Orthoptists.

The following questions are also related with the Institution where the initial Orthoptic Education Program is taught.

Please indicate the name of your Country

Your answer _____

Name of your Institution (Name of the school)

Your answer _____

Duration of the Programme in years

Your answer _____

Orthoptic Education Survey – Methods

- An electronic version of the questionnaire was completed with all the inputs from the group representatives at the **annual meeting** of the group in Lisbon (18th March 2016).
- This was done through a focus group, a qualitative technique, applied to obtain the perception of an expert panel (n=13) about education in Orthoptics.
- **Nine educational institutions** were invited to complete the questionnaire between May and September 2016.
- All data was uploaded to IBM SPSS Statistics Version 22. Descriptive statistics is reported.

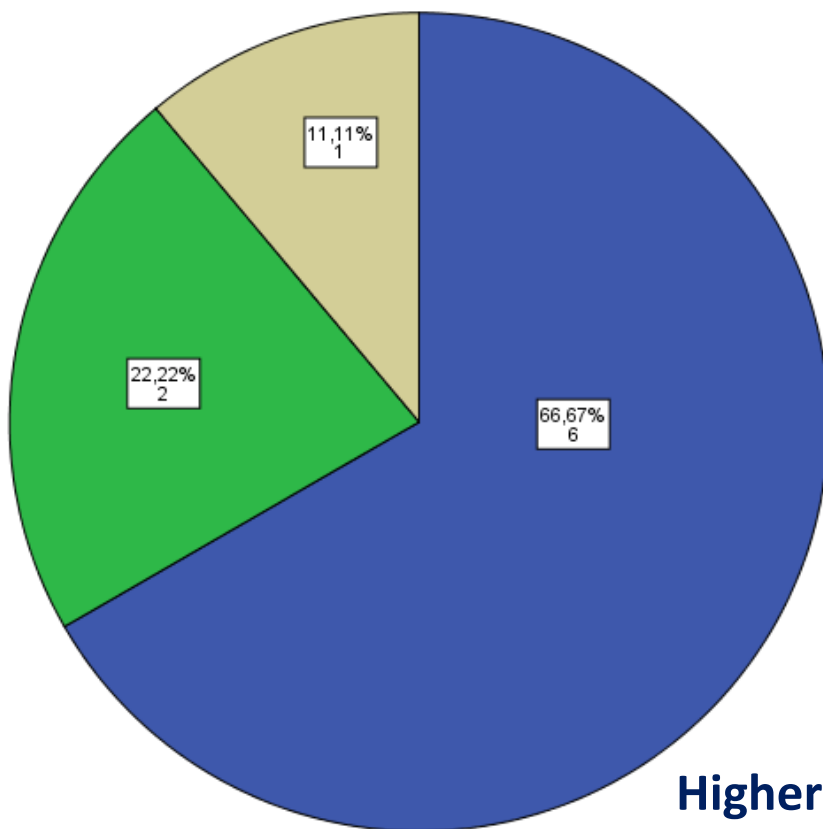
Orthoptic Education Survey – Results

- Responses were received from 9 educational institutions representing 9 countries.
- The educational institutions that participated in this survey are listed in Table 1.

Country	Institution
Italy	Scuola Superiore Provinciale di Sanità Claudiana - Bolzano
The Netherlands	University of Applied Sciences Hogeschool
Switzerland	ZAG Zentrum für Ausbildung im Gesundheitswesen Kanton Zürich
Austria	University of Applied Sciences Salzburg
France	Faculté de médecine Pierre et Marie Curie - UPMC
Germany	Orthoptistenschule Heidelberg
Sweden	Karolinska Institutet
Portugal	Lisbon School of Health Technology
England	University of Liverpool

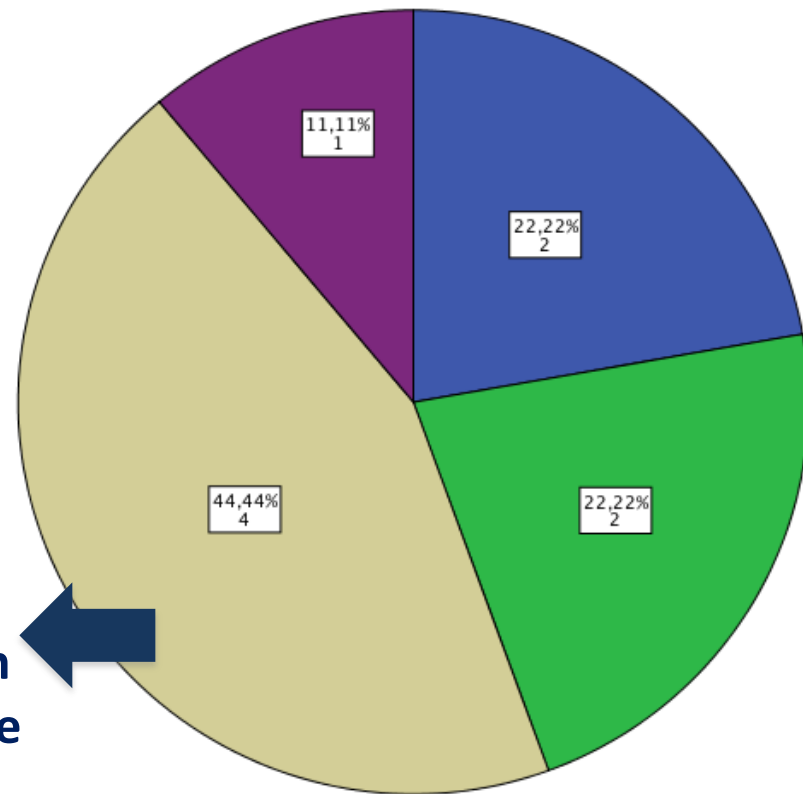
Orthoptic Education Survey – Results

Program and Institution



Duration of the Programme in years

- 3.0
- 4.0
- 4.5



In which level of the European Qualifications Framework is the Orthoptic program officially classified?

- Level 4
- Level 5
- Level 6
- Non-Applicable

Higher education
BSc degree

EQF Level	Institutions	Knowledge	Skills	Competence
Level 4 Apprenticeship programmes	Orthoptistenschule Heidelberg ZAG Zentrum für Ausbildung im Gesundheitswesen Kanton Zürich	Factual and theoretical knowledge in broad contexts within a field of work or study	A range of cognitive and practical skills required to generate solutions to specific problems in a field of work or study	Exercise self-management within the guidelines of work or study contexts that are usually predictable, but are subject to change; supervise the routine work of others, taking some responsibility for the evaluation and improvement of work or study activities
Level 5 Higher Education short cycle (no academic degree)	Scuola Superiore Provinciale di Sanità Claudiana – Bolzano Faculté de médecine Pierre et Marie Curie - UPMC	Comprehensive, specialized, factual and theoretical knowledge within a field of work or study and an awareness of the boundaries of that knowledge	A comprehensive range of cognitive and practical skills required to develop creative solutions to abstract problems	Exercise management and supervision in contexts of work or study activities where there is unpredictable change; review and develop performance of self and others
Level 6 Higher education BSc degree	University of Applied Sciences Hogeschool Lisbon School of Health Technology University of Applied Sciences Salzburg University of Liverpool	Advanced knowledge of a field of work or study, involving a critical understanding of theories and principles	Advanced skills, demonstrating mastery and innovation, required to solve complex and unpredictable problems in a specialised field of work or study	Manage complex technical or professional activities or projects, taking responsibility for decision-making in unpredictable work or study contexts; take responsibility for managing professional development of individuals and groups

Orthoptic Education Survey – Results

Program

- 7 institutions (77.8%) adopted the **Bologna Process** for the education of Orthoptists.



- The majority (n=4; 44.4%) reported to have an Orthoptic Program with **180 ECTS** (European Credit Transfer System), only 2 reported to have 240 ECTS and 1 reported to have 285 ECTS (Karolinska Institutet in Sweden).

- Calculations of the amount of **student workload** for one ECTS were variable between Institutions with a minimum of 20 hours and a maximum of 28 hours (24.4 ± 3.2).



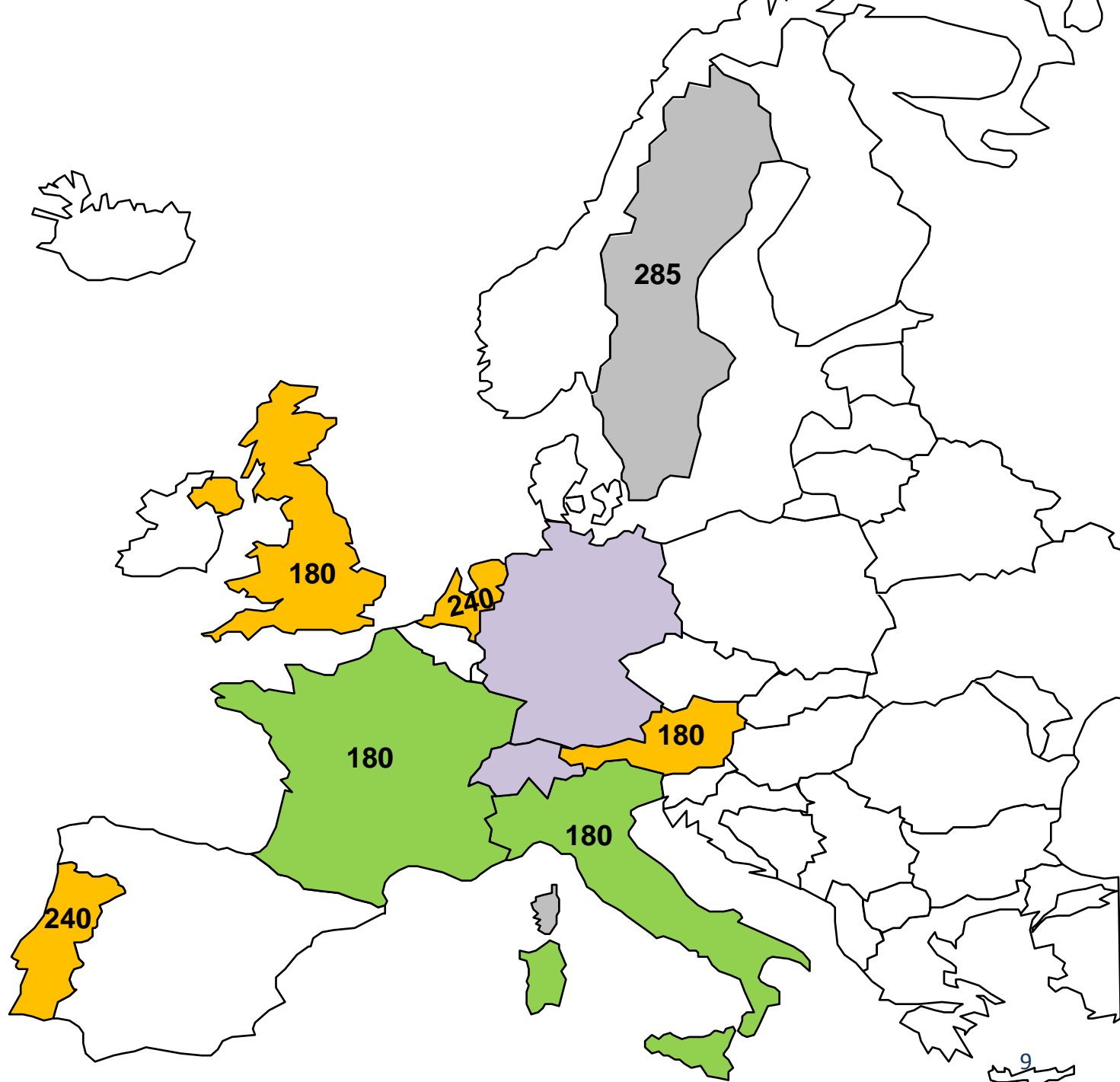
Higher
education
BSc degree
(1st cycle)

BSc + Post-
graduate
qualification

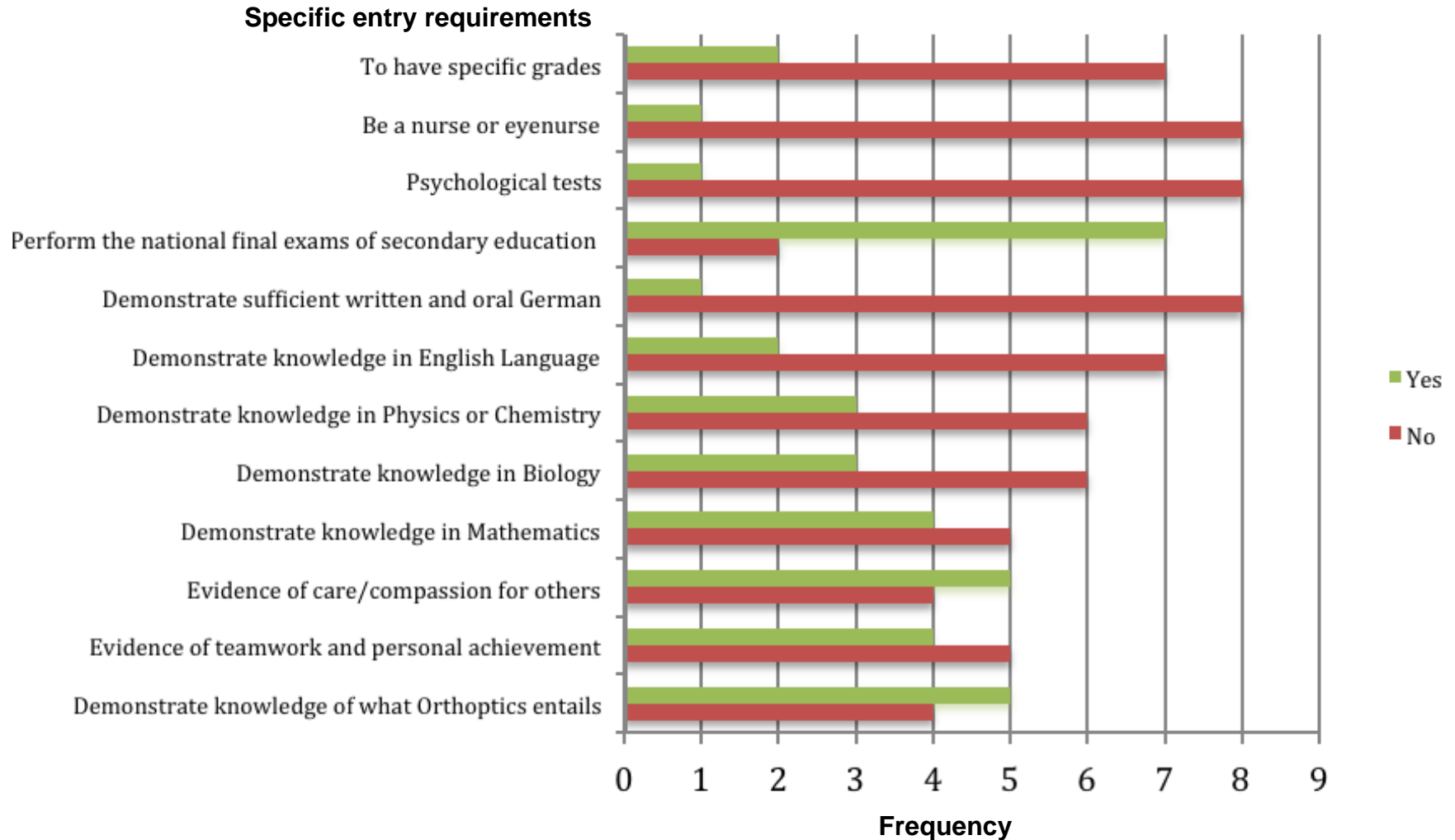
Higher Education
short cycle (no
academic
degree)

Apprenticeship
programmes

ECTS



Orthoptic Education Survey – Results



Programme contents	Competency level (frequency and %)						
	0	1	2	3	4	5	n
General anatomy and physiology	---	---	4 (44.4)	2 (22.2)	3 (33.3)	---	9
Neurophysiology	---	---	4 (44.4)	4 (44.4)	1 (11.1)	---	9
Physics and optics	---	---	1 (11.1)	2 (22.2)	4 (44.4)	2 (22.2)	9
Objective Refraction (retinoscopy)	---	---	---	---	5 (55.6)	4 (44.4)	9
Subjective refraction	---	---	---	1 (11.1)	4 (44.4)	4 (44.4)	9
Contact lenses	---	2 (25.0)	3 (37.5)	1 (12.5)	2 (25.0)	---	8
Low Vision	---	---	2 (22.2)	4 (44.4)	2 (22.2)	1 (11.1)	9
Orthoptics (physiology and pathology of binocular vision)	---	---	---	---	3 (33.3)	6 (66.7)	9
Orthoptics (heterophorias/heterotropias)	---	---	---	---	3 (33.3)	6 (66.7)	9
Amblyopia and pleoptics	---	---	---	---	4 (44.4)	5 (55.6)	9
Neuroophthalmology	---	---	1 (11.1)	2 (22.2)	5 (55.6)	1 (11.1)	9
Disorders of the sensory system	---	---	---	2 (22.2)	7 (77.8)	---	9
Electrophysiology (VEP/ERG/EOG)	---	3 (33.3)	1 (11.1)	4 (44.4)	1 (11.1)	---	9
Neuropsychological disorders	---	2 (22.2)	3 (33.3)	3 (33.3)	1 (11.1)	---	9
Disorders of the motor system, infranuclear motility disorders and supranuclear motility disorders	---	---	---	2 (22.2)	5 (55.6)	2 (22.2)	9
Ocular motility	---	---	---	---	3 (33.3)	6 (66.7)	9
Disorders of the pupil	---	---	---	2 (22.2)	4 (44.4)	3 (33.3)	9
Disorders of the lids	---	---	1 (11.1)	3 (33.3)	5 (55.6)	---	9
Neurorehabilitation	---	---	3 (33.3)	5 (55.6)	1 (11.1)	---	9
Strabismus surgery	---	---	3 (33.3)	1 (11.1)	3 (33.3)	2 (22.2)	9
General ophthalmology and fundoscopy	---	---	2 (22.2)	5 (55.6)	2 (22.2)	---	9
Ophthalmologic complementary techniques and visual fields	---	---	---	2 (22.2)	5 (55.6)	2 (22.2)	9
Glaucoma	---	2 (22.2)	4 (44.4)	2 (22.2)	1 (11.1)	---	9
OCT	---	2 (22.2)	2 (22.2)	2 (22.2)	2 (22.2)	1 (11.1)	9
Biometry	---	1 (11.1)	4 (44.4)	2 (22.2)	1 (11.1)	1 (11.1)	9
General pathology and paediatrics	---	---	3 (33.3)	2 (22.2)	4 (44.4)	---	9
Pharmacology	---	---	3 (33.3)	5 (55.6)	1 (11.1)	---	9
Hygiene and microbiology	---	---	3 (33.3)	5 (55.6)	1 (11.1)	---	9
Professional, occupational ethics, related laws	---	---	---	4 (44.4)	5 (55.6)	---	9
Communication and professional behaviour	---	---	1 (11.1)	2 (22.2)	5 (55.6)	1 (11.1)	9
Evidence based medicine	---	---	1 (11.1)	4 (44.4)	2 (22.2)	2 (22.2)	9

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Orthoptic Education Survey – Results

Institution



- 8 Schools have **skills/clinical laboratories** for the education in Orthoptics.
- Only 1 School offers **exchange programs** (e.g. Erasmus).
- Two Institutions offer **specialized Orthoptic programs** at Postgraduate, Masters and Doctoral level (Karolinska Institute and University of Liverpool) and 6 (66.7%) offer lifelong learning courses.

Orthoptic Education Survey – Results

Placement sites

- **Quality of clinical placements** is assured by different instruments:
 - probation reports provided by the students,
 - accreditation processes,
 - demonstration of practical know-how in conferences and,
 - use of academic teachers as supervisors.



Orthoptic Education Survey – Results

Students

- **Number of students** that started the academic year in 2015/2016:

- 2 schools didn't receive any student.
- The other schools receive a minimum of 11 students and a maximum of 85 students (28.8 ± 28.6).

- The **amount of practical training** in weeks that the students perform in the skills lab at the schools varies between 3 and 103 weeks (24.1 ± 34.2) and in clinical practice (e.g. hospital) varies between 28 and 85 (56.2 ± 21.6).



Orthoptic Education Survey – Results



- **Requirements to be a Teacher** on the Orthoptic program include a Doctorate degree in 3 institutions (33.3%), a Master degree in other 3 institutions (33.3%) and a Bachelor degree in two institutions (22.2%).

- In 7 Institutions is mandatory for students to be **trained by Orthoptists**.

- The **number of Orthoptists** in each School varies between 2 and 50 (12.8 ± 15.0):

- The ratio of students to teaching staff per full time equivalent is variable with a minimum of 1 teacher to 3 students and 1 teacher to 22 students.

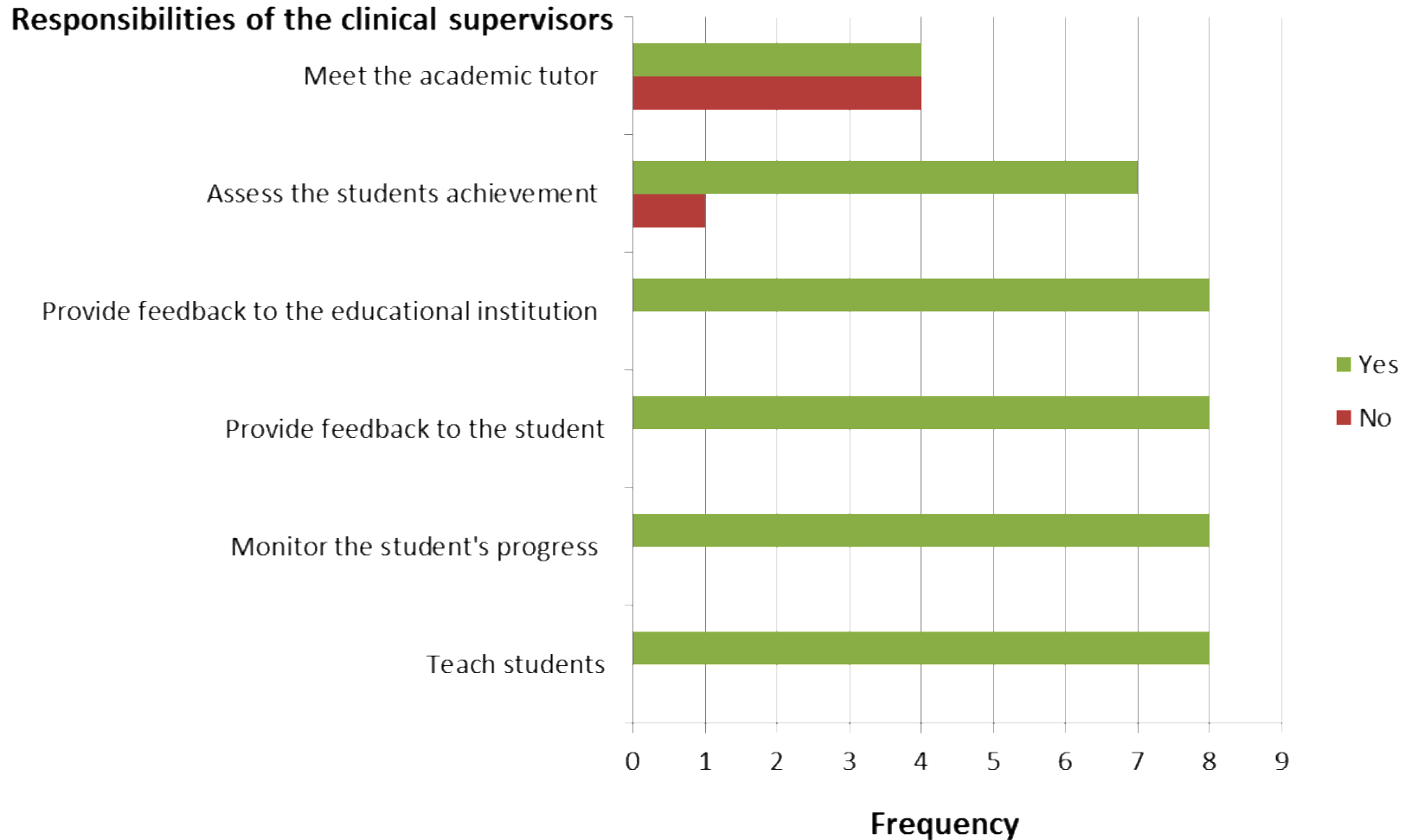
Orthoptic Education Survey – Results



Supervisors

- **Dedicated supervisor** at each clinical placement site:
 - Must be an Orthoptist (n=9) with at least one (n=1) or two years (n=7) of experience as a qualified Orthoptist.
 - Training to be a supervisor is considered a requirement in 5 institutions (55.6%).
 - Pedagogical training for clinical supervisors is compulsory in 4 Institutions (44.4%).

Orthoptic Education Survey – Results



Discussion

- **Education varies** across different countries in Europe and healthcare professionals in the orthoptic field have different knowledge and skills:
 - This variation is demonstrable by the number of years of education and the combination of programs with the education of other professions.
 - The **Bologna cycle for the education of Orthoptists** was not adopted in all Schools that participated in this study and the level of European Qualifications Framework varies (no classification to level 6).
 - Even in the schools where the Bologna cycle was adopted significant differences remain regarding the **number of ECTS** (European Credit Transfer System) and calculations of the amount of **student workload** for one ECTS.
 - The level of proficiency of **program contents** also varied between Schools.

Discussion

- Similarities were found in **core contents**: physiology and pathology of binocular vision, heterophorias/heterotropias, ocular motility and disorders of the sensory system.
- There is a need to define **European competency levels (ECL)** for innovative education and training in Orthoptics:
 - The establishment of **ECL** is important to produce learning packages that can be accessed transnationally for curriculum development, available for teachers, students, health care staff and labor companies.
 - A **European diploma in Orthoptics** can be designed to recognize skills and qualifications to facilitate learning, employability and labour mobility.
- Further research is needed to examine the extent and type of variations that occur in other European Countries.

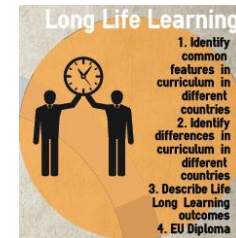


How to move forward?

**Publication of
results in article
format – research
paper**



**Application of the
survey to all
institutions in
each country in
Europe that have
a programme**



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