The Use of the CEFR in Performing a Needs Analysis with the Purpose of Identifying Medical Students’ Writing Needs

Ebtesam Abdulhaleem
PhD Student
Supervisors: Prof. Dr. Claudia Harsch and Dr. Neil Murray
An Overview

- Research Context
  - Saudi Medical and Healthcare Colleges
  - Preparatory Year Programme (PYP)
  - PYP Curriculum and Assessment

- The Study Problem

- The Study Aim

- Methodology

- Participants and Tools

- Results
  - Key findings
  - Trusting the CEFR

- Conclusion
Saudi Medical/Healthcare Colleges:

- High admission standards.  
  (Al-Shehri et al 2013)

- High scores in different subjects including English.  
  (Al-Shehri et al 2013)

- English is the main Medium of Instructions (EMI).  
  (Smith & Abouammoh 2013)

- Join a Preparatory Year Programme (PYP) prior to the enrollment at the medical and healthcare colleges.
Preparatory Year Programmes (PYPs)

- One-year intensive programme with intensive focus on English.
- Prepare students to meet their needs at the university colleges.
- Enrollment into medical/healthcare colleges is based on PYP GPA

*The college of Medicine, Pharmacy, Dentistry, Applied medical sciences and Nursing*
PYP Curriculum and Assessment

- English for general purposes (EGP), English for Academic purposes (EAP), and English for Medical Purposes (EMP)
- Placement test (No Speaking or Writing components)
- Three proficiency levels (Elementary, Intermediate, Advanced)
- High-stakes standardized final exam (includes writing)
## PYP Curriculum Framework

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>CEFR</td>
<td>A1</td>
<td>A1-A2</td>
<td>A2</td>
<td>A2-B1</td>
<td>B1</td>
<td>B2</td>
<td>C1</td>
</tr>
</tbody>
</table>

### Track: Medical/Healthcare track
- **Levels:** Elementary, Intermediate, Advanced

### Semester 1
- **Quarter 1:**
  - Elementary A1-A2
  - Pre-Intermediate A2
  - Intermediate B1

### Semester 2
- **Quarter 3:**
  - Pre-Intermediate Plus
  - Intermediate B1

- **Quarter 4:**
  - Intermediate Plus B1-B2
  - Upper Intermediate
  - Advanced C1
A perceived misalignment between the achieved proficiency at the end of the PYP and the required performance in the medical colleges

- The students proficiency in writing is not known.
- Writing is not tested in PYP placement test.
- There is no indication of the students’ potential different levels in writing from the standardized writing exam results (Ceiling effect).
Gap Needs Analysis (Brown 2016)

Identify the gap(s)/misalignment(s) between the proficiency writing levels achieved at the PYP (current situation) and the ones required at the medical and healthcare colleges (target situation).
A longitudinal Mixed Methods approach

**Phase I**
- Preparatory Year Programme (PYP)
  - **QUAN**
    - CEFR Levels Reached
    - Self-
  - **QUAL**
    - Focus Groups (FGs)
    - Students
    - Tutors

**Phase II**
- Medical/Healthcare Colleges
  - **QUAN**
    - CEFR Levels Needed
    - Students
    - Staff
  - **QUAL**
    - FGs/Interviews
    - Students
    - Staff

Gaps/Misalignments

Research Context | The Study Problem | The Study Aim | Methodology | Participants & Tools | Results & Discussion | Conclusion
--- | --- | --- | --- | --- | --- | ---

A longitudinal Mixed Methods approach
Participants

N=252 students participated in both phases

Tools

10 CEFR scales with focus on writing
- Phase I: identify their CEFR proficiency levels
- Phase II: Identify the CEFR levels needed

Analysis:
- Using paired t-test to compare the differences in mean scores
- Identifying the differences between phase I and II
<table>
<thead>
<tr>
<th>Overall written production</th>
<th>I can write simple isolated phrases and sentences.</th>
</tr>
</thead>
<tbody>
<tr>
<td>I can write a series of simple phrases and sentences linked with simple connectors like ‘and’, ‘but’ and ‘because’.</td>
<td></td>
</tr>
<tr>
<td>I can write straightforward connected texts on a range of familiar subjects within my field of interest, by linking a series of shorter discrete elements into a linear sequence.</td>
<td></td>
</tr>
<tr>
<td>I can write clear, detailed texts on a variety of subjects related to my field of interest, synthesising and evaluating information and arguments from a number of sources.</td>
<td></td>
</tr>
<tr>
<td>I can write clear, well-structured texts of complex subjects, underlining the relevant salient issues, expanding and supporting points of view at some length with subsidiary points, reasons and relevant examples, and rounding off with an appropriate conclusion.</td>
<td></td>
</tr>
<tr>
<td>Yes I can do</td>
<td>Yes I can do</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Overall written interaction</th>
<th>I can ask for or pass on personal details in written form.</th>
</tr>
</thead>
<tbody>
<tr>
<td>I can write short, simple formulaic notes relating to matters in areas of immediate need.</td>
<td></td>
</tr>
<tr>
<td>I can convey information in a clear, concrete and succinct manner, as well as concrete topics, check information and ask about or explain problems with reasonable precision. I can write personal letters and notes asking for or conveying simple information of immediate relevance, getting across the point I feel to be important.</td>
<td></td>
</tr>
<tr>
<td>I can express news and views effectively in writing, and relate to those of others.</td>
<td></td>
</tr>
<tr>
<td>Yes I can do</td>
<td>Yes I can do</td>
</tr>
</tbody>
</table>

As C1
Misalignments between Phase I and Phase II

Phase I: M= 4.42, SD=2.50
Phase II: M= 5.88, SD= 1.30
P =0.005, Cohen’s d -0.192

Phase I: M= 6.85, SD=2.23
Phase II: M= 6.13, SD= 1.94
P <0.001, Cohen’s d -0.250

Phase I: M= 4.73, SD=2.39
Phase II: M= 5.16, SD= 1.93
P =0.001, Cohen’s d -0.148

Phase I: M= 4.2, SD=2.50
Phase II: M= 5.88, SD= 1.30
P =0.005, Cohen’s d -0.192
1- Qualitative Data supported the findings from the Quantitative Data

<table>
<thead>
<tr>
<th>PYP</th>
<th>Medical and healthcare colleges</th>
</tr>
</thead>
<tbody>
<tr>
<td>- The students are ready to learn and improve their writing</td>
<td></td>
</tr>
<tr>
<td>- They have basic general writing skills</td>
<td></td>
</tr>
<tr>
<td>- They have very limited practice at the PYP</td>
<td></td>
</tr>
</tbody>
</table>

**Focus on general vocabulary and some academic vocabulary**

| Need basic medical terminology |

**Focus on general descriptive writing e.g. “Describe your day at the university”**

| Need other writing genres (e.g. lap reports) |

---

![Graph showing misalignment between phase I and II](image-url)
2- Incremental alignment between Self- and tutors assessment and the PYP levels

\[ F=95.2, \ P<.001, \ \eta^2=0.26 \]

\[ F=113.5, \ P<.001, \ \eta^2=0.30 \]
3- Close similarity between Self- and Tutors’ assessment

<table>
<thead>
<tr>
<th>Level</th>
<th>Self Students</th>
<th>Tutors</th>
<th>t-value</th>
<th>P-value</th>
<th>Cohen's d</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elementary</td>
<td>M= 4.3, SD=1.5</td>
<td>M= 3.9, SD=1.5</td>
<td>t(161)=1.94, P=.05</td>
<td>Cohen’s d= 0.26</td>
<td></td>
</tr>
<tr>
<td>Intermediate</td>
<td>M= 4.8, SD=1.4</td>
<td>M= 5.1, SD=1.6</td>
<td>t(499)=-2.32, P=.02</td>
<td>Cohen’s d= -0.14</td>
<td></td>
</tr>
<tr>
<td>Advanced</td>
<td>M= 6.6, SD=1.4</td>
<td>M= 6.59, SD=1.5</td>
<td>t(365)=.249, P=.803</td>
<td>Cohen’s d= 0.026</td>
<td></td>
</tr>
</tbody>
</table>
4- Reasonable Misalignments between phase I and II across the three PYP levels
The CEFR can potentially be used as a tool to conduct a Needs Analysis Study.

It can be used to spot the gaps/misalignments in the curriculum.
References


Thank You