

## The “Profiles” profile: “a change in the [medical] teaching and learning paradigm” hopefully scrutinised in the future

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### Introduction

As a child, and even grown-up, finding a four-leafed clover used to mean a lucky strike. Of course, the prevalence of such botanic gems may alter in the descent from high-altitude meadows down to genetically rectified agricultural fields. Hence, it must be just Geissenpeter’s alpine insularity to regard a six-leafed clover as something cool. Astonishingly, no one in the graduate medical teaching community seems to be overly excited at the image of a medical graduate as six-leafed clover [1]. Such emotional composure must be preconditioned, because the flower of the six-leafed medical graduate was trademarked more than 10 years ago [2, 3]. Notwithstanding, and according to the CanMEDS roles [4], a medical doctor immediately after graduation has to be a scholar, a professional, a communicator, a collaborator, a manager and a health advocate in one person, a profile which, I confess as a no-longer-total-rooky, is far from being covered by myself. However, although beyond prompt and total achievement, the six CanMEDS roles can still serve as four-leafed clovers, being the impetus for life-long searching or learning. Possibly in that sense, the authors of the article in *Swiss Medical Weekly* on “The Profiles document: ...” intend to leave the CanMEDS roles practically unchanged in their “...new concept to present the educational outcomes of undergraduate medical studies in Switzerland” [5]. “Profiles”, a clever construction among the myriad of ridiculous acronyms, stands for Prouncusal Relevant Objectives for Integrative Learning and Education in Switzerland, and the final document, planned to be available by the end of 2017, will represent the revision of the currently valid Swiss Catalogue of Learning Objectives (SCLO) for undergraduate medical training [3].

### SCLO: the catalogue to be revised

The publication of the *Profiles* article in the *Swiss Medical Weekly* marks halftime of the extensive second revision of the SCLO first published in 2000 [2]. It is carried out by an eminent group of experts, which by January 2016 will release a first draft of the revised document for review by the Swiss medical faculties. One of the new aspects of

the revised SCLO will be the omission of chapter 6 on discipline-related objectives, which included 421 clinical pictures for internal medicine, 329 for surgery, 287 for paediatrics, 122 for gynaecology and obstetrics and 97 for psychiatry, to name only the five major medical disciplines. Inherent to this 85-page, never complete list of clinical diagnoses and health problems have been and are constant complaints by members of the disciplines that their respective field is underrepresented. Thus, the exclusion altogether of this chapter might turn out to be a clever move by the reformers in order not to re-enter exhausting turf battles over the absolutely singular importance of practically all disciplines. On the other hand, feedback from students, particularly those preparing for the Swiss federal licensing examination, have indicated the reassuring function of the list as a map in the jungle of clinical pictures. However, to extend, as backbone of the current SCLO revision, the existing number of approximately 1 800 clinical pictures and still be unable to fill this bag would not have deserved the term revision.

### Profiles: no longer a catalogue

Shrinking the number of clinical pictures to zero is a renewal, because such a radical change requires adding some novel aspect to the plan for undergraduate medical training. For this veritable repair, comparable to the recent Bologna reform [1], the experts in the *Profiles* working group have to be commended, because they apparently have implemented the basic didactic principle of inspiring the pupils by inventing a new show. Its motivating effect is derived from the teacher, who has to concentrate anew on how to familiarise the students with the – revised – subject of instruction. In that sense, even the mere subtraction of the clinical pictures from the SCLO would have been a revision. In the context of avoiding them, the SCLO is being transformed to “Profiles”, the Prouncusal Relevant Objectives for Integrative Learning and Education in Switzerland. And the authors insist on calling the *Profiles* document no longer a catalogue as in SCLO, but “a conceptual framework with clinical, public health, and ethical situations that cross-cut disciplines and skills in the form of entrustable

professional activities” (EPAs) [5]. Luckily, a kind of catalogue, i.e., the list of “situations as starting points”, is still remaining in the *Profiles* document. It is wise to keep the former “problems as starting points” as chapter 5 of the new document, because it is with them the physician is confronted from the first day of her/his professional career. As opposed to the clinical pictures, “problems as starting points” are limited in number: there are 277 in the current version of SCLO.

This list of problems or situations as starting points should not be as brief as possible, but as complete as necessary, because comprehension of these prepares the medical graduate for one of her/his core competencies, that of accurately detecting and treating disease. In particular, the problems as starting points that are highlighted as emergencies should be increased rather than reduced in number, according to their manifold features: angina pectoris does not solely present as chest pain, but also as pressure, oppression, burning, epigastric pain, lower jaw pain, pain in one of or both arms, or dyspnoea. Such an *expansion* of, for example, emergency problems would conflict with the authors’ statement on the *Profiles* document that it “puts less emphasis on the acquisition of knowledge...and more on issues such as clinical reasoning...”. Aside from this formal potential inconsistency, the cited declaration raises the suspicion of a misconception of the term “reasoning”. Radically speaking, how is it possible to associate, relate, link and, thus, to reason, deduce, think in the absence of objects of thought? Less medical knowledge allows fewer and not more links of thought and, hence, aiming less at acquiring knowledge is incompatible with putting more emphasis on clinical reasoning.

### EPAs: a paradigm shift?

The counterpart of skipping the clinical pictures in the new *Profiles* document is the surplus of entrustable professional activities (EPAs), defined as units of professional tasks that an individual can be trusted to perform without supervision, once sufficient ability has been demonstrated [5]. As further exemplified by the above-mentioned example of chest pain and its clinical camouflage, subsequent vomiting, convulsions with loss of consciousness and apnoea should be correctly recognised and followed-up by checking the vital signs, whereupon the inability to detect a pulse should be immediately followed by diagnosing cardiac arrest and starting resuscitation. Such a situation ought to be manageable by the medical doctor even before the first day of her/his graduate professional activity, and it is alluded to as one of the key EPAs. With this example, the problem of defining trust becomes evident. Whereas the act of resuscitation can be examined easily, testing the ability to recognise and correctly synthesise the initial problems may be challenging because of their variability of presentation. Generally, one of the major tasks will be to define how exactly trust is gained in the ability of a medical student to handle correctly situations as starting points. This is likely the prerequisite for defining EPAs.

The *Profiles* scheme with its crucial introduction of EPAs is described by the authors of the current article as constituting “a change in the teaching and learning paradigm” [5].

This notion at the present stage of development of the *Profiles* document may be premature and challengeable, because EPAs are derivable from the mastering levels and letters attached to each clinical picture in the original SCLO [3]. For the above example of unstable angina pectoris or myocardial infarction, the level and letters of mastering (=EPA) are 2 (“be able to cope with in practice” [3]), and – among less important letters – D, T and E: the problem is synthesised to a diagnosis by simple means (D), primary and secondary assessments are performed and emergency measures are initiated (T and E). The fact that no letter E is attached to the clinical picture of cardiorespiratory arrest is not an argument against the proximity of SCLO levels and letters of mastering to EPAs, but it highlights the need for an SCLO revision.

### Graduate medical education research: a paradigm shift

To state that the goal of any renewal is improvement entirely lacks originality. To test with a randomised controlled trial the effect of the SCLO revision on outcome in the Swiss federal licensing examination would be a world premiere. The basic scientific plan of such a trial looks uncomplicated: the hypothesis would be that new (*Profiles* document) is better than old (SCLO), the primary study endpoint would (for statistical reasons) be points for correct answers at the written and oral federal licensing examination [6], all Swiss students would be randomly allocated at the start of their master curriculum to the old or new catalogue. At this point, the difficulties of such a trial start to emerge: which organisational measures would have to be taken to keep the trial as blinded as possible, or, would an open-label trial with the inherent diffusion of old and new learning contents still allow a real differentiation between the two forms of undergraduate medical teaching? It is likely these kind of hurdles to medical education research which resist its take-off or even success [7]. Asch and Weinstein recently commented that “graduate medical education [is] more the product of tradition than evidence...” [8]. Whether the lack of funding is cause or effect of the hibernation of medical education research is uncertain. However, to evaluate the new *Profiles* document in a really scientific sense could be called a paradigm shift.

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### References

- 1 Michaud PA. Reforms of the pre-graduate curriculum for medical students: the Bologna process and beyond. *Swiss Med Wkly*. 2012;142:w13738.
- 2 Bloch R, Bürgi H. The Swiss catalogue of learning objectives. *Med Teach*. 2002;24:144–50.
- 3 Bürgi H, Rindlisbacher B, Bader C, Bloch R, Bosman F, Gasser C, et al. Swiss Catalogue of Learning Objectives for Undergraduate Medical Training. Working Group under a Mandate of the Joint Commission of the Swiss Medical Schools. 2008;2nd edition:1–142.

- 4 Renting N, Gans RO, Borleffs JC, Van Der Wal MA, Jaarsma AD, Cohen-Schotanus J. A feedback system in residency to evaluate CanMEDS roles and provide high-quality feedback: Exploring its application. *Med Teach*. 2015;Oct 2015:1–8 [E-pub ahead of print].
- 5 Michaud PA, Jucker-Kupper P. The “Profiles” document: a new concept to present the educational outcomes of undergraduate medical studies in Switzerland. *Swiss Med Wkly*. 2016;146:w14270.
- 6 Guttormsen S, Beyeler C, Bonvin R, Feller S, Schirlo C, Schnabel K, Schurter T, et al. The new licencing examination for human medicine: from concept to implementation. *Swiss Med Wkly*. 2013;143:w13897.
- 7 Horton R. A new epoch for health professionals’ education. *Lancet*. 2010;376:1875–7.
- 8 Asch DA and Weinstein DF. Innovation in medical education. *N Engl J Med*. 2014;371:794–5.