

## INNOVATIVE IDEA

Volume 9 Issue 1 2017

DOI: 10.21315/eimj2017.9.1.9

### ARTICLE INFO

Submitted: 27-01-2017

Accepted: 09-02-2017

Online: 31-03-2017

# Simplified Thematic Engagement of Professionalism Scale (STEPS): Promoting Feedback Practice in Nurturing Professionalism

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To cite this article: Roslan NS, Yusoff MSB. Simplified thematic engagement of professionalism scale (STEPS): Promoting feedback practice in nurturing professionalism. *Education in Medicine Journal*. 2017; 9(1): 87–97. <https://doi.org/10.21315/eimj2017.9.1.9>

To link to this article: <https://doi.org/10.21315/eimj2017.9.1.9>

## ABSTRACT

Assessment of medical professionalism is often challenged by the subjectivity of its construct and lack of feedback practice to nurture professional growth. However transmitting professionalism alone has not been shown to improve professional behaviour therefore professionalism need to be assessed if it is viewed as relevant. The authors provided description and guidelines on the use of Simplified Thematic Engagement of Professionalism Scale (STEPS) as summative and formative assessment tool for assessing professionalism attributes. STEPS was developed based on the Professionalism Mini-Evaluation Exercise (P-MEX) format that utilise multiple short encounter assessment and incorporated professionalism values from a local study. The formative component has 15 attributes that were categorised into personal, profession, patient and public. This is assessed using seven scale rubric that promotes feedback practice using feed up, feed back and feed forward concept. The summative component utilises global rating that will be collated longitudinally to form a more robust evaluation of student professionalism. Current investigations are ongoing especially to ascertain the usability and validity of STEPS as peer assessment and self-assessment tool.

**Keywords:** *Professionalism assessment, Feedback, Workplace-based assessment*

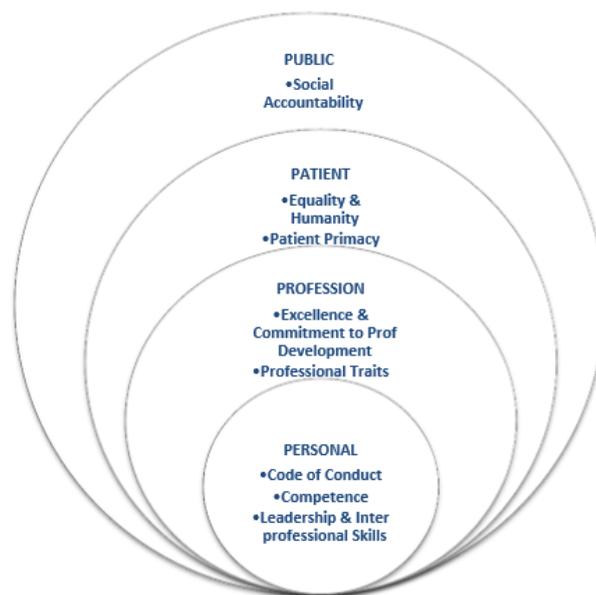
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## INTRODUCTION

Professionalism can be defined as the means by which individual doctors fulfil the medical profession's contract with society (1). It is regarded as one of the core competencies that all medical school should cultivate and evaluate in their students. In the recent years, it has been recognised that professionalism attributes is not universal

and there are cultural differences where it is highly influenced by social contract (2). This has led to emergence of various professionalism attributes proposed in different cultures such as the model of Malaysia medical professionalism (3,4) (Figure 1).



**Figure 1:** A model of Malaysia medical professionalism framework (4)

## PROFESSIONALISM ASSESSMENT

Professionalism has been shown to impact patient care, patient safety, quality of patient’s hands-off and successful patient-physician relationship (5–7). As there is little evidence to advocate that simply teaching professionalism will influence professional behaviour (8), professionalism needs to be assessed if it is regarded important (1). It is acknowledged that although local and international professional bodies has recommended such (9,10), there is no specific assessment done to capture professionalism either in undergraduate level or working physicians in Malaysia. Known barriers of professionalism assessment include abstract definition, context specificity, reluctance to address unprofessional behaviour and ceiling effect (11).

To date there is at least 88 assessment tools that have been used to measure various attributes of professionalism. Among those, Clinical Evaluation Exercise (Mini-CEX) and Professionalism Mini-Evaluation Exercise (P-MEX), which is an improvised version of Mini-CEX has been used in many context with established validity and

reliability (12,13). Although best practice recommends that revalidation with cultural relevance is important in assessment (14), most of the described tools were conceptualised in the Western context.

## SIMPLIFIED THEMATIC ENGAGEMENT OF PROFESSIONALISM SCALE (STEPS)

Simplified Thematic Engagement of Professionalism Scale or STEPS was developed based on the strong need to have an assessment tool that is valid for summative examination, culturally sensitive and at the same time, having feedback component. It was proposed that there are many existing assessment tool and the existing tools should be improved rather than reinventing new tools (11). Therefore, STEPS was developed based on the P-MEX format (13) using the values from the recent study that examine medical professionalism in Malaysian context (3).

‘Simplified’ signifies the generic use of the form, which can be utilised to assess many attributes in various context. ‘Thematic’ indicates the attributes were arranged in a simpler format to assist professional

development and ‘Engagement’ implies the formative component. Provision of constructive feedback has been shown to improve professionalism behaviour (15) but unfortunately it is rarely given as physicians are either too busy, unsure what is professionalism about or not trained to give effective feedback.

STEPS was designed to allow professionalism being assessed in various context such as ward, outpatient, casualty, operation theatre, tutorial or even teamwork. This has been proven possible by P-MEX which has successfully capture professionalism in these various

context (13). It utilises the ‘snapshots’ concept whereby multiple short encounter assessments can be captured and collated into a whole to develop a comprehensive and reliable professionalism assessment (16). This improves the common practice where professionalism assessment is usually undertaken by a single assessor that can be easily influenced by certain biases such as leniency, severity and prejudging. This ‘snapshots’ approach allow multiple assessors to evaluate a student professionalism, in various context without having to observe the student for long duration.

**FORMATIVE COMPONENT** *(Please tick)*

7	EXEMPLARY	Exceptional and outstanding professional conduct.
6	ABOVE EXPECTATION	Demonstrated performance beyond the expected level.
5	MET EXPECTATION	Demonstrated performance at par with the expected level.
4	INEXPERIENCED	Unintentional unprofessional conduct.
3	BELOW EXPECTATION	Intentional unprofessional conduct with apparent intended corrective action.
2	UNDESIRABLE	Intentional unprofessional conduct with no apparent intended corrective action.
1	INTOLERABLE	Repetitive or serious unprofessional conduct that imposes harm with no apparent intended corrective action.

LEVEL	ATTRIBUTES	1	2	3	4	5	6	7	N/R
PERSONAL	Committed to personal and professional codes								
	Showed competence to provide care								
	Demonstrated respect and good communication								
	Displayed leadership and teamwork								
PROFESSION	Met commitments and dedication								
	Maintained patient confidentiality								
	Dealt with professional dilemma effectively								
PATIENT	Committed to self-directed learning								
	Listened actively to patient								
	Showed empathy and compassion								
	Recognized patient's sensitivity								
	Respected patient's needs and decision								
PUBLIC	Acknowledged own limitation								
	Used health resource appropriately								
	Committed to societal welfare								

Figure 2: Formative component of STEPS

### FEEDBACK PRACTICE

Each STEPS form contains two components that are formative and summative. Under the formative component (Figure 2), attributes table guides students to understand professionalism behaviour desired from them. The 15 item attributes were derived from the model of Malaysia medical professionalism (4) and refined by several sessions with 42 clinicians from the institution. The attributes have been refined to ensure that it is as comprehensive and at the same time trying not to be over-exhaustive.

The attributes are also categorised to personal, profession, patient and public to assist the student understanding and professional development. It also symbolizes that professionalism is a process and the ultimate goal for every physician is to be a socially accountable where they are not confined to their workplace only.

A glossary is also made available in the students’ logbook for description of each attributes. This glossary explains each attributes in the spectrum of professionally burned-out (non-stigmatised term for unprofessional behaviour) to professionally

engaged (professional conduct) such as in Figure 3. In the glossary, the year of which the attributes should develop is also included just to guide the student’s professional development.

A student may be assessed on several attributes on single encounter. It is expected that in the early clinical year, the students will be assessed more on the personal values. As they progressed through the clinical years, they are expected to develop other attributes. These attributes can be assessed against a seven-scale rubric that ranges from intolerant to exemplary. At the same time, the attributes table and the seven-scale rubric can be used by the assessors or physicians to assess the students and give feedback. Students often received feedback on personal and affect such as “*You are an excellent student,*” that is unrelated to task

performance and ineffective in changing behaviour. STEPS aspires to encourage effective feedback and reflection that focuses on the task process and self-autonomy using the quick feed up (attributes table) – feedback (rubric) – feed forward (attributes table) concept (17).

Under the summative component (Figure 4), the assessor will give a global rating from the scale of 1 to 9 to the student. This score will be accumulated longitudinally with other STEPS assessment to form a more robust decision making on the student professionalism. In our institution, each student will have at least 30 STEPS throughout the clinical years and each unsatisfactory mark (1-3) will be notified to the faculty to help the students to improve on the attributes.

PROFESSIONALLY BURNED-OUT	← ATTRIBUTES (Suitability) →	PROFESSIONALLY ENGAGED
Candidates intentionally breach the declared standard of medical profession (MMC), institution policy (USM), wear attires that is unhygienic or unacceptable for doctors, or being dishonest and immoral.	Commitment to personal and professional codes (Year 3)	Candidates adhere to the declared standard of medical profession (MMC), institution policy (USM), comply to dressing codes expected of a doctor and being honest and conscientious consistently.
Candidates show unsatisfactory knowledge or lack of skills that can hamper the quality of patient care.	Competence to provide care (Year 5)	Candidates show adequate knowledge that is evidence-based, acceptable skills for safe practice and act in confidence while on duty.
Candidates display disrespect and poor communication that include using inappropriate manner and jargon.	Respect and communication (Year 3)	Candidates display respect and effective communication that includes using appropriate manner and comprehensible language.

Figure 3: Glossary of STEPS attributes

**SUMMATIVE COMPONENT** *(Please fill in and return to Academic Office)*

1	2	3	4	5	6	7	8	9
Unsatisfactory			Satisfactory			Excellent		

Comments: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Evaluator signature: \_\_\_\_\_

Figure 4: Summative component of STEPS

## PRELIMINARY FINDINGS

STEPS was field tested in two stages. In the first stage, 42 faculty members were asked to recall any encounter with medical students through which professionalism attributes can be observed. This was to ensure that the attributes is comprehensive without trivialising the assessment form. From this exercise, the attribute “*Committed to life-long learning*” was revised to “*Committed to self-directed learning*” as the faculty members thought that life-long learning is difficult to assess in short encounter.

As professionalism assessment deals with a lot of subjectivity, a two hours training session was conducted with 30 faculty members from various specialities (17 medical based and 13 surgical based) for calibration. In this stage, the faculty members had an hour introductory session and free discussion on the use of STEPS. The attributes were introduced and calibration was made by explaining on the rubric. Then, three short videos of common scenarios with students were shown and the faculty members were asked to rate the student (in the video) independently. The forms were completed by 30 faculty members. The summative marks were analysed using SPSS version 22 to measure its internal consistency and interrater reliability. Results indicate high level of internal consistency (Cronbach’s Alpha more than 0.90) and very good level of agreement between faculty members (interclass correlation coefficient more than 0.70).

Similar session was also conducted to 92 third year medical students where the results indicate high level of internal consistency (Cronbach’s Alpha more than 0.90) and very good level of agreement between students (interclass correlation coefficient more than 0.70).

Qualitative analysis with the students after STEPS implementation in third year clinical postings indicated that STEPS was useful in enhancing understanding of professionalism,

awareness of consistent professional conduct in daily practice and promoting self-reflection. Major limitations identified were not all faculty members were trained to give effective feedback and time limitations for consolidation.

## IMPLICATION

The preliminary findings suggest that STEPS is a content valid and reliable tool to assess professionalism. However since STEPS is at its early implementation phase, more studies are warranted to ascertain its validity. Qualitative analysis also demonstrated its value in promoting self-reflection and awareness on professionalism. We have accentuated to the faculty members and students that STEPS does not meant to be punitive but constructive. Thus, more studies are needed to explore the educational impact of STEPS from both students and faculty perspective. Early analysis has also demonstrated good internal reproducibility of the score in students training. Hence, more studies are essential to examine STEPS as a tool for peer assessment and peer feedback. It is also imperative to examine the validity of STEPS in postgraduate students and doctors as professionalism is a process and should be assess throughout undergraduate and beyond (15).

## CONCLUSION

The implementation of professionalism assessment is challenging but ascertaining professional growth is unlikely without assessment (11). Having said that, there is no single assessment tool that can capture professionalism and triangulation is imperative (15). Initial study on STEPS has demonstrated its content validity and reliability and more studies are needed to establish its consequential validity and educational impact. We hope that STEPS will stimulate more institutions to use constructive professionalism assessment that promote feedback practice.

## ACKNOWLEDGEMENTS

This study is funded by Universiti Sains Malaysia Short Term Grant 304/PPSP/61313159.

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## APPENDICES



### SIMPLIFIED THEMATIC ENGAGEMENT OF PROFESSIONALISM SCALE (STEPS)

(Student copy)

Evaluator: \_\_\_\_\_

Student: \_\_\_\_\_ Student ID: \_\_\_\_\_

CONTEXT (Please Tick)-

Year: 3  4  5

Large Group Presentation  Small Group Tutorial  Group Work

Ward  Outpatient  Others

### FORMATIVE COMPONENT (Please tick)

7	EXEMPLARY	Exceptional and outstanding professional conduct.
6	ABOVE EXPECTATION	Demonstrated performance beyond the expected level.
5	MET EXPECTATION	Demonstrated performance at par with the expected level.
4	INEXPERIENCED	Unintentional unprofessional conduct.
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1	INTOLERABLE	Repetitive or serious unprofessional conduct that imposes harm with no apparent intended corrective action.

LEVEL	ATTRIBUTES	1	2	3	4	5	6	7	N/R
PERSONAL	Committed to personal and professional codes								
	Showed competence to provide care								
	Demonstrated respect and good communication								
	Displayed leadership and teamwork								
PROFESSION	Met commitments and dedication								
	Maintained patient confidentiality								
	Dealt with professional dilemma effectively								
	Committed to self-directed learning								
PATIENT	Listened actively to patient								
	Showed empathy and compassion								
	Recognized patient's sensitivity								
	Respected patient's needs and decision								
	Acknowledged own limitation								
PUBLIC	Used health resource appropriately								
	Committed to societal welfare								



**SUMMATIVE COMPONENT** (Please refer to the next page for summative evaluation by examiner)

**SIMPLIFIED THEMATIC ENGAGEMENT OF PROFESSIONALISM SCALE (STEPS)**  
(*Academic copy*)

Evaluator: \_\_\_\_\_

Student: \_\_\_\_\_ Student ID: \_\_\_\_\_

**CONTEXT** (*Please Tick*)

**Year:** 3  4  5

Large Group Presentation  Small Group Tutorial  Group Work

Ward  Outpatient  Others

Feedback given to the student Yes  No  Student signature: \_\_\_\_\_

**SUMMATIVE COMPONENT** (*Please fill in and return to Academic Office*)

1	2	3	4	5	6	7	8	9
Unsatisfactory			Satisfactory			Excellent		

Comments: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Evaluator signature: \_\_\_\_\_

GLOSSARY OF ATTRIBUTES: STEPS

<b>PROFESSIONALLY BURNED-OUT</b>	← <b>ATTRIBUTES</b> (Suitability) →	<b>PROFESSIONALLY ENGAGED</b>
Candidates intentionally breach the declared standard of medical profession (MMC), institution policy (USM), wear attires that is unhygienic or unacceptable for doctors, or being dishonest and immoral.	Commitment to personal and professional codes  (Year 3)	Candidates adhere to the declared standard of medical profession (MMC), institution policy (USM), comply to dressing codes expected of a doctor and being honest and conscientious consistently.
Candidates show unsatisfactory knowledge or lack of skills that can hamper the quality of patient care.	Competence to provide care  (Year 5)	Candidates show adequate knowledge that is evidence-based, acceptable skills for safe practice and act in confidence while on duty.
Candidates display disrespect and poor communication that include using inappropriate manner and jargon.	Respect and communication  (Year 3)	Candidates display respect and effective communication that includes using appropriate manner and comprehensible language.
Candidates unable to show good leadership qualities, work in isolation and unwilling to cooperate for achieving common goals.	Leadership and teamwork  (Year 4)	Candidates demonstrate good leadership qualities and able to work in group to achieve common goals while nurturing each other.
Candidates show poor commitment toward a given task or demonstrate poor effort to complete the task.	Commitments and dedication  (Year 3)	Candidates show good commitment towards a given task and demonstrate full effort to complete the task.
Candidates disclose any information relating to a patient to third parties without the patient consent.	Patient confidentiality  (Year 3)	Candidates hold secret all information relating to a patient, unless the patient gives consent permitting disclosure.
Candidates unaware and mismanage a situation in which a difficult choice has to be made between two or more alternatives.	Professional dilemma dealing  (Year 5)	Candidates recognize and manage a situation in which a difficult choice has to be made between two or more alternatives.
Candidates display lack of effort to enhance their performance (knowledge, skills, values, attitudes).	Self-directed learning  (Year 3)	Candidates display voluntary effort to enhance their performance (knowledge, skills, values, attitudes).
Candidates show disinterest to patients, ignore verbal and non-verbal cues, and not validate information obtained from the patient.	Active listening to patients  (Year 5)	Candidates show interest to patients, respond to verbal and non-verbal cues, and validate information obtained from the patient.

Candidates display lack of ability to understand and share the feelings of someone's suffering and show lack of desire to help.	Empathy and compassion (Year 3)	Candidates display an ability to understand and share the feelings of someone's suffering and show desire to help.
Candidates demonstrate ignorance to customs, cultures and belief of patients that influence their care.	Recognized patient's sensitivity (Year 5)	Candidates demonstrate alertness to customs, cultures and belief of patients that influence their care.
Candidates show disrespect towards a patient's decision after treatment options and implications have been informed.	Respected patient's needs and decision (Year 5)	Candidates show respect towards a patient's decision after treatment options and implications have been informed.
Candidates unaware and deny errors due to own gaps.	Acknowledged own limitation (Year 5)	Candidates aware and admit errors due to own gaps.
Candidates utilize health resources unnecessarily or inefficiently.	Appropriate use of health resources (Year 5)	Candidates utilize health resources based on needs and evidence-based.
Candidates are confined to their own practices without taking into account the needs of public well-being.	Commitment to societal welfare (Year 5)	Candidates show active engagement to the needs of public well-being.