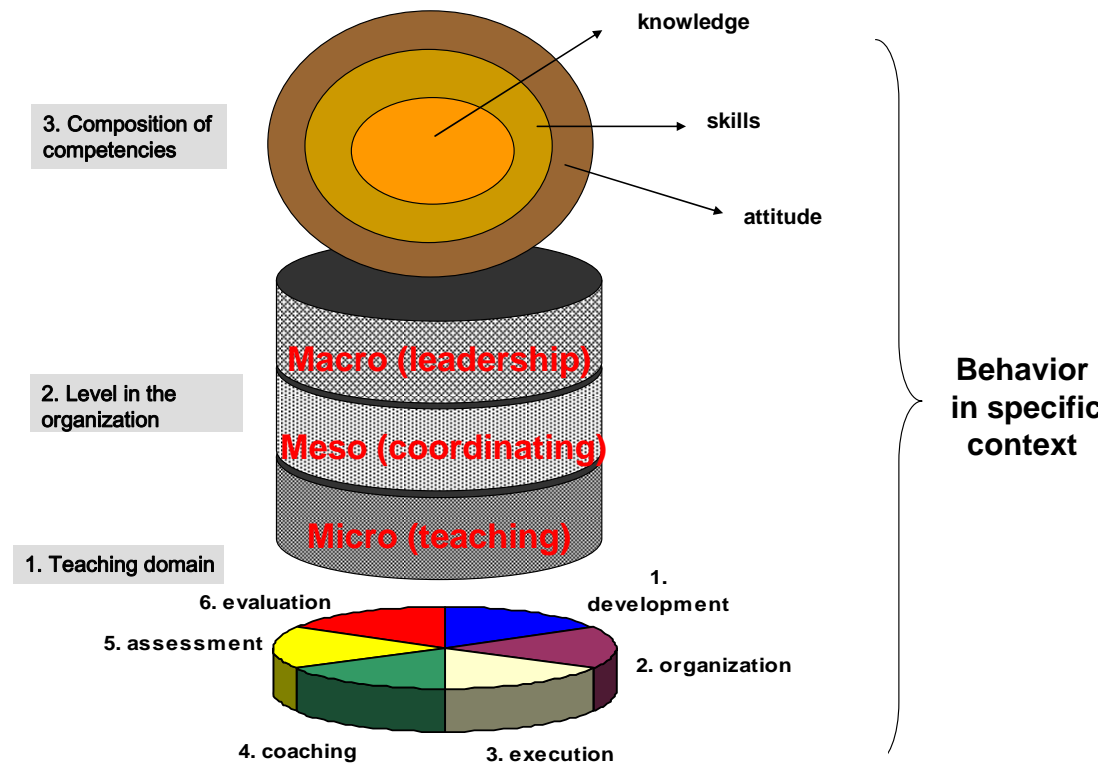


## A Framework of Teaching Competencies across the Medical Education Continuum

Task Force Council of Deans of Medical Schools in the Netherlands/Special Interest Group Faculty Development Netherlands Association for Medical Education

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## 1. Overview of domains and sub domains of teaching

		EDUCATIONAL DOMAINS					
		1. Development	2. Organization	3. Execution	4. Coaching	5. Assessment	6. Evaluation
SUB DOMAINS	1. Exploration	Educational principles, context and content	Organizational context	The state of the art of the contents and teaching environment	Exploration of the coaching needs	Relevant rules and regulations	Previous evaluations, educational and organizational context
	2. Development	Learning objectives, means, assessment	Planning and organizing the teaching	Updating the contents; planning the study load	Support in (re) defining the coaching needs	Construction of the exam	Preparation of the evaluation
	3. Implementation	Facilitation and guarding of the implementation	Selection of available organizational means	Coaching the learning process; being a role model	Observation and feedback	Giving the exam (criteria; assessment conditions)	Performing the evaluation and reporting the results
	4. Reflection/ conclusion	Formal and informal evaluation	Communication and conclusion about the organization	Reflection on teaching process and role as teacher	Conclusion of and reflection on the coaching	Analysis and interpretation of the results	Analysis, interpretation and reporting of the results
	5. Leadership		Organizational collaboration				

### 2. Organizational level

The following pages each describe one of the domains with its sub domains. For each sub domain a distinction is made for the different organizational levels. Organizational levels are defined as follows:

Micro (teaching)	Meso (coordinating)	Macro (leadership)
Primarily performing at the level of small teaching units, such as lecture, small groups, coaching individual students or trainees, bed-side teaching, clinical conference	Coordinating and developing a coherent part of a curriculum or (specialty) training program, such as courses, blocks, clerkships, lines, electives	Responsible for (one or more) (major parts of) a curriculum or (specialty) training program.

### 3. Composition of competencies

Knowledge, skills and attitude have not (yet) been detailed

<b>Domain Development (DEV):</b> This may concern both completely new development and adaptation of existing units/programs.			
<b>Sub domain</b>	<b>Micro (teaching)</b>	<b>Meso (coordinating)</b>	<b>Macro (leadership)</b>
<b>DEV.1. Exploration</b>	<b>DEV.1.-mi</b> Explores the educational principles and conditions of the curriculum/ (specialty) training program and applies these to the <i>own teaching unit</i> to be developed. Updates the contents. Uses previous evaluations if available.	<b>DEV.1.-me</b> Explores the educational principles and conditions of the curriculum/ (specialty) training program and the curricular context of the contents. Applies these to the <i>part(s) of the curriculum/ (specialty) training program</i> to be developed and coordinated. Uses previous evaluations and educational literature if available.	<b>DEV.1.-ma</b> Explores the educational principles of ( <i>major parts of</i> ) a curriculum or ( <i>specialty</i> ) training program and the state of the art in the field. Relates these to local, specialty defined, national and/or international frameworks. Analyses and critically assesses policy documents and educational literature.
<b>DEV.2. Development</b>	<b>DEV.2.-mi</b> Develops an effective and consistent teaching unit (learning objectives, means and assessment). Consults colleagues involved in related units	<b>DEV.2.-me</b> Develops and coordinates the development of effective and consistent <i>parts of a curriculum/ (specialty) training program</i> (learning objectives, means, assessment) compatible with the context of the curriculum/ (specialty) training program.	<b>DEV.2.-ma</b> Initiates and develops policies to adapt or revise ( <i>major parts</i> ) of a curriculum/ ( <i>specialty</i> ) training program or to develop a new curriculum/ ( <i>specialty</i> ) training program or major parts thereof.
<b>DEV.3. Implementation</b>	<b>DEV.3.-mi</b> Takes care of and facilitates the implementation of the developed <i>own teaching unit</i> , including the conditions and organization.	<b>DEV.3.-me</b> Takes care of, facilitates and coordinates the implementation of the developed <i>parts of a curriculum/ (specialty) training program</i> , including the conditions and organization.	<b>DEV.3.-ma</b> Takes care of the implementation of the developed ( <i>major parts of</i> ) the curriculum/ ( <i>specialty</i> ) training program and takes responsibility for the pre-conditions and organization.
<b>DEV.4. Reflection/conclusion</b>	<b>DEV.4.-mi</b> Collects and interprets (formal and informal) information about the contents and implementation of <i>the own teaching unit</i> and draws conclusions.	<b>DEV.4.-me</b> Collects and interprets (formal and informal) information about the contents, implementation and coordination of the parts of a curriculum/ ( <i>specialty</i> ) training program and draws conclusions.	<b>DEV.4.-ma</b> Collects and interprets (formal and informal) information about the contents, implementation and coordination of ( <i>major parts</i> ) of a curriculum/ ( <i>specialty</i> ) training program and draws conclusions.

<b>Domain Organization (OR):</b> This concerns all aspects of logistics involving education			
<b>Sub domain</b>	<b>Micro (teaching)</b>	<b>Meso (coordinating)</b>	<b>Macro (leadership)</b>
<b>OR.1. Exploration</b>	<b>OR.1.-mi</b> Explores the ways education is organized within the own department or in the part of the curriculum in which <i>the own teaching unit</i> is embedded, e.g. planning, organization, materials, financing, and organizes <i>the own teaching unit</i> accordingly.	<b>OR.1.a-me</b> Explores the ways education is organized within the institute, curriculum/(specialty) training program, e.g. planning, organization, materials, financing. Organizes (a) part(s) of the curriculum/(specialty) training program accordingly.	<b>OR.1.-ma</b> Explores the ways education is organized within the university/specialty boards, e.g. planning, organization, materials, financing and organizes ( <i>major parts</i> ) of the curriculum/(specialty) training program accordingly.
<b>OR.2. Development</b>	<b>OR.2.-mi</b> Plans and organizes <i>the own teaching unit</i> regarding preparation, execution, assessment and evaluation.	<b>OR.2.a-me</b> Plans and organizes (a) part(s) of the curriculum/(specialty) training program regarding preparation, execution, assessment and evaluation.	<b>OR.2.a-ma</b> Plans and organizes ( <i>major parts</i> ) of a curriculum/(specialty) training program regarding preparation, execution, assessment and evaluation.
		<b>OR.2.b-me</b> Plans and directs the input of teachers (at micro level) in (a) part(s) of the curriculum/(specialty) training program, taking into consideration their specific competences and expertise.	<b>OR.2.b-ma</b> Plans and directs the input of teachers (at meso level) in ( <i>major parts of</i> ) curriculum/(specialty) training program, taking into consideration their specific competences and expertise. Safeguards that time for education is available within the organization.
<b>OR.3. Implementation</b>	<b>OR.3.-mi</b> Selects and applies available means efficiently for <i>the own teaching unit</i> .	<b>OR.3-me</b> Creates the appropriate pre-conditions, means and materials in order to allow <i>teachers at micro-level</i> to perform optimally.	<b>OR.3-ma</b> Creates the appropriate pre-conditions, means and materials in order to allow <i>coordinators at meso-level</i> to perform optimally.

Continued

Organization continued

<b>Domain Organization (OR):</b> This concerns all aspects of logistics involving education			
<b>Sub domain</b>	<b>Micro (teaching)</b>	<b>Meso (coordinating)</b>	<b>Macro (leadership)</b>
<b>OR.4. Reflection/ conclusion</b>	<b>OR.4.-mi</b> Communicates clearly about the organization of <i>the own teaching unit</i> and collaborates effectively with others involved, e.g. students, other teachers, supporting personnel and the coordinator at meso-level. Reflects on and draws conclusions about the organization of <i>the own teaching unit</i> .	<b>OR.4-me</b> Communicates clearly about the organization of <i>(a) part(s) of the curriculum/(specialty) training program</i> and collaborates effectively with others involved, e.g., teachers (micro-level), other coordinators (meso-level) and the coordinators of the curriculum/ (specialty) training program (macro-level). Reflects on and draws conclusions about the organization of <i>(a) part(s) of the curriculum/(specialty) training program</i> .	<b>OR.4.-ma</b> Communicates clearly about the organization of <i>(major parts) of the curriculum/(specialty) training program</i> and collaborates effectively with others involved, e.g., coordinators (meso-level), the leadership and policy makers of the relevant organization, e.g. board of faculty/university/hospital, professional organization and the professional field. Reflects on and draws conclusions about the organization of <i>(major parts) of the curriculum/(specialty) training program</i> .
<b>OR.5. Leadership</b>	<b>OR.5.-mi</b> Leads collaborators open and constructively in the organization of <i>the own teaching unit</i> .	<b>OR.5-me</b> Leads all teachers and those operating <i>in the coordinated part of the curriculum</i> (micro level) open and constructively.	<b>OR.5.-ma</b> Leads all those operating <i>in the coordinated (major parts of) the curriculum</i> (meso-level) open and constructively.

Domain Execution (EX): This relates to the actual teaching (Development has been concluded; assessment and evaluation will follow)			
Sub domain	Micro (teaching)	Meso (coordinating)	Macro (leadership)
<b>EX.1. Exploration</b>	<b>EX.1.-mi</b> Explores the state of the art in the field in relation to the contents of <i>the own teaching unit</i> and takes the context into consideration, e.g. clinical vs. non-clinical; curriculum philosophy; specialty requirements; etc. Applies the prevailing educational principles of the teaching unit to be given.	<p><i>According to the task force the actual teaching largely takes place at the organizational micro-level. Related activities at meso and macro level are a) educational training of teachers and b) postgraduate training of colleagues in the own discipline/specialty. These activities have not been worked out.</i></p>	
<b>EX.2. Development</b>	<b>EX.2.-mi</b> Updates the contents to the state of the art in the field. Programs the study load for the student/resident relative to the available time; adheres to his/her own calendar relating to teaching activities and schedules sufficient (preparation) time.		
<b>EX.3. Implementation</b>	<b>EX.3.-mi</b> Coaches the learning process of the student/resident, is a role model and stimulates the learning; is clear in what is expected from the student/resident and about his/her own role as a teacher. Selects and applies learning methods and means in relation to the learning objectives.		
<b>EX.4. Reflection</b>	<b>EX.4.-mi</b> Reflects on the teaching process and the own role, reviews evaluations and makes necessary adaptations.		

<b>Domain Coaching (CO):</b> this concerns the coaching of the learning process (cognitive, metacognitive and affective) of students/residents (micro level) and the coaching of the educational activities of teachers (meso – and macro-level).			
<b>Sub domain</b>	<b>Micro (teaching)</b>	<b>Meso (coordinating)</b>	<b>Macro (leadership)</b>
<b>CO.1. Exploration</b>	<b>CO.1.-mi</b> Explores the coaching needs of the <i>student/resident</i> , suggests an appropriate coaching plan and takes initiatives to alignment of coaching needs and coaching offer.	<b>CO.1.-me</b> Explores the coaching needs of <i>less experienced colleagues</i> (micro-level), suggests an appropriate coaching plan and takes initiatives to alignment of coaching needs and coaching offer.	<i>not applicable</i>
<b>CO.2. Development</b>	<b>CO.2.-mi</b> Supports the <i>student/resident</i> in (re)defining learning objectives and ways to reach the goals and to select appropriate alternative ways. Stimulates the <i>student/resident</i> to critically and constructively reflect on his/her learning objectives, approach and results. Tapers the coaching towards self-steering by the <i>student/resident</i> .	<b>CO.2.-me</b> Supports <i>less experienced colleagues</i> (micro-level) in defining their learning objectives and corresponding approach for their teaching activities.	<i>not applicable</i>
<b>CO.3. Implementation</b>	<b>CO.3.-mi</b> Assesses, before and during coaching sessions, the learning process of the <i>student/resident</i> and his/her reflective skills, based on own observations supplemented by information from other sources. Gives the <i>student/resident</i> feedback regularly.	<b>CO.3.-me</b> Assesses the functioning as a teacher of the <i>less experienced colleague</i> and his/her reflective skills, based on own observations and coaching sessions. Gives the <i>less experienced colleague</i> feedback regularly.	<i>not applicable</i>
<b>CO.4. Reflection</b>	<b>CO.4.-mi</b> Rounds the coaching off distinctly, including reflection on the passed coaching, takes the feedback from the <i>student/resident</i> into consideration. Is open to sharing and discussing experiences with colleagues.	<b>CO.4.-me</b> Rounds the coaching off distinctly, including reflection on the passed coaching, takes the feedback from the <i>less experienced colleague</i> into consideration. Is open to sharing and discussing experiences with colleagues.	<i>not applicable</i>

<b>Domain: Assessment (AS):</b> This domain relates to both formative (feedback) and summative (decisive) assessment and to all assessment methods, such as written, oral, observations, reports and portfolio.			
<b>Sub domain</b>	<b>Micro (teaching)</b>	<b>Meso (coordinating)</b>	<b>Macro (leadership)</b>
<b>AS.1. Exploration</b>	<b>AS.1.-mi</b> Explores the relevant rules and regulations of the curriculum or guidelines for specialty training to assess the student or trainee.	<b>AS.1.-me</b> Develops rules and regulations for assessment which are clear to both teachers and students/residents. Makes these rules and regulations public in a timely and clearly manner.	<b>AS.1.-ma</b> Contributes to the establishment of assessment rules and regulations <i>for (major parts of) a curriculum, (specialty) training program</i> , locally or (inter)nationally. Contributes to the further development of assessment policies of a curriculum/(specialty) training program based on evaluations, own research or literature.
<b>AS.2. Development</b>	<b>AS.2.a-mi</b> Selects (a combination of) assessment methods, for <i>the own teaching unit</i> , corresponding with the learning objectives and taking into account validity and reliability. Distinguishes between formative and summative assessment.	<b>AS.2.a-me</b> Selects (a combination of) assessment methods <i>for (a) part(s) of the curriculum</i> , which are clear, valid and reliable and in line with the learning objectives and the learning activities. Distinguishes between formative and summative assessment.	<b>AS.2.a-ma</b> Selects (a combination of) assessment methods <i>for (major parts of) a curriculum/(specialty) training program</i> , which are clear, valid and reliable and in line with the learning objectives and the learning activities. Distinguishes between formative and summative assessment.
	<b>AS.2.b-mi</b> Contributes to the construction of an exam.	<b>AS.2.b-me</b> Constructs and is responsible for a full exam for <i>(a) part(s) of the curriculum</i> .	<b>AS.2.b-ma</b> Constructs and is responsible for the <i>assessment plan of (major parts of) a curriculum/(specialty) training program</i> .
		<b>AS.2.c-me</b> Coaches and supports an assessment team in the construction of <i>an exam</i> .	<b>AS.2.c-ma</b> Coaches a team of teachers in the development and construction of an <i>assessment plan</i> for (major parts of) a curriculum/(specialty) training program.

continued

Assessment continued

Domain: Assessment (AS): This domain relates to both formative (feedback) and summative (decisive) assessment and to all assessment methods, such as written, oral, observations, reports and portfolio.			
Sub domain	Micro (teaching)	Meso (coordinating)	Macro (leadership)
<b>AS.3. Implementation</b>	<b>AS.3.-mi</b> Formulates clear criteria for <i>the student/resident</i> during the assessment. Safeguards fairness and provides optimal assessment conditions. Applies the criteria in the judgment.	<b>AS.3.-me</b> Takes responsibility for the organization of the assessment within <i>(a) part(s) of the curriculum/(specialty) training program</i> .	<b>AS.3.-ma</b> Takes responsibility for the organization of the assessment <i>within (major parts) of a curriculum/(specialty) training program</i> .
<b>AS.4. Reflection</b>	<b>AS.4.a-mi</b> Draws conclusions from the results of the exam regarding the performance of the student/resident (and the own performance).	<b>AS.4.a-me</b> Interprets reliability, validity, acceptance and the educational effects of an exam, including costs and personnel and draws conclusions.	<b>AS.4.a-ma</b> Interprets reliability, validity, acceptance and the educational effects of the assessment plan of (major parts of) a curriculum/(specialty) training program, including costs (incl. personnel) and draws conclusions
	<b>AS.4.b-mi</b> Suggests and implements improvements in the <i>own contributions</i> , based on the evaluation results.	<b>AS.4.b-me.</b> Suggests and implements improvements in <i>the exam</i> based on the evaluation results.	<b>AS.4.b-ma</b> Suggests and monitors improvements in <i>the assessment plan</i> , based on evaluation results.

Domain: Evaluation (EV): This concerns all aspects of the educational process and includes quality assurance			
Sub domain	Micro (teaching)	Meso (coordinating)	Macro (leadership)
<b>EV.1. Exploration</b>	<b>EV.1.-mi</b> Explores educational and organizational context of <i>the own teaching unit</i> and studies earlier evaluations, if available.	<b>EV.1.-me</b> Explores educational and organizational context of <i>(a) part(s) of a curriculum/(specialty) training program the own teaching unit</i> and studies earlier evaluations, if available.	<b>EV.1.- ma</b> Explores (inter)national guidelines for quality assurance at the level of <i>(major parts of) a curriculum/(specialty) training program</i>
<b>EV.2. Development</b>	<b>EV.2.-mi</b> Contributes to quality assurance by preparing the evaluation of <i>the own teaching unit</i> , taking into account earlier evaluations.	<b>EV.2.-me</b> Contributes to quality assurance of <i>(a) part(s) of a curriculum/(specialty) training program</i> by implementing educational and organizational measures beforehand, taking earlier evaluations into account.	<b>EV.2.- ma</b> Prepares and performs activities for external audits and site visits (e.g .self evaluation), being a concrete external accountability method for quality assurance of <i>(major parts of) a curriculum/(specialty) training program</i> .
<b>EV.3. Implementation</b>	<b>EV.3.-mi</b> Evaluates <i>the own teaching unit</i> formally and informally (self evaluation, evaluation by students/residents, peer evaluation). Reports evaluation results of the own teaching unit systematically to students/residents, colleagues and coordinator (meso-level).	<b>EV.3.-me</b> Performs or coordinates the evaluation of <i>(a) part(s) of a curriculum/ (specialty) training program</i> according to the guidelines, thus contributing to the quality assurance. Reports evaluation results of <i>(a) part(s) of a curriculum/(specialty) training program</i> systematically and discusses those with teachers, students/residents, colleagues and management. Gives account of the efficacy of the quality assurance to the management (macro-level).	<b>EV.3.-ma</b> Leads and monitors quality assurance procedures for quality assurance of <i>(major parts of) a curriculum/(specialty) training program</i> and reports to the board of the institute about the results of the audit, based on objective data and results of quality assurance procedures. Is involved in quality assurance procedures for other curricula.
<b>EV.4. Reflection/conclusion</b>	<b>EV.4.-mi</b> Suggests improvements for the own teaching unit and its context at meso-level. Contributes to quality assurance (e.g. own and other's expertise) by means of evaluations. Systematically analyzes the effect of the own behavior in the educational setting and/or the efficacy of <i>the own teaching activities</i> .	<b>EV.4.-me</b> Suggests practical and policy improvements for quality assurance procedures for <i>(a) part(s) of a curriculum/ (specialty) training program</i> . Contributes to the overall assessment and development of quality assurance and participates in educational research.	<b>EV.4.-ma</b> Revises policies when indicated (evaluation policy, professionalization, research, preconditions and means). Initiates and develops a research policy and stimulates staff to do educational research.

