



Supplementary material

SUPPLEMENTARY MATERIAL TO Chemistry curricular knowledge of secondary school teachers

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THE QUESTIONNAIRE

) Grammar School	a) Maleb) Female
) Secondary Vocational School	
	How old are you?
Iow many years have you taught?	a) 25-30
) Less than 5	b) 31-40
) 5-10	c) 41-50
) 10-20	d) 51-60
) 20-30	e) Above 60
) More than 30	
What are your academic qualifications?	
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In which levels of planning do you use the chemistry curriculum?

- a) When preparing the annual work plan
- b) When preparing a monthly work plan
- c) When preparing a class scenario in writing

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What kind of information contained in the curriculum is the most important to you for the realisation of your teaching plan?

- a) The goals and tasks of chemistry
- b) Operative tasks/outcomes
- c) The contents of topics
- d) Demonstration experiments
- e) Laboratory exercises
- f) Instructions for the realisation of a topic
- g) The manner of realising the curriculum
- h) Additional work

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Has your need to use the curriculum (during periods when there were no changes to it) changed as your working experience increased?

- a) I have used the curriculum to an equal degree all the time
- b) I use the curriculum less now than when I started working
- c) I use the curriculum more now than when I started working

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Mark the curriculum components which you use for the different levels of planning.

	Components of curriculum							
Levels of planning	The goals and tasks of chemistry	tive tasks/	The contents e of topics	stration experi-	atory	Instruc- tions for the real- isation of a topic	The man- ner of realising the curri- culum	Addit- ional work
The annual work plan						1		
The monthly work plan								
The lesson plan								

To what extent are you guided by information contained in the curriculum in realising the following teaching situations?

- 1 Not at all 2 Negligibly small 3 Small 4 Mostly 5 Completely
- 1) Introducing a topic to student
- 2) Explaining and defining new concepts
- 3) Demonstration of experiments
- 4) Organising laboratory exercises
- 5) Demonstrating teaching aids
- 6) Verifying the degree to which the subject matter taught in class has been learned
 - 7)Systematisation of the course contents
 - 8) Organising group work
 - 9) Organising individual work
 - 10) Acquisition of curriculum contents through problem solving
 - 11) Project work
 - 12) Adjusting work to students with special needs
 - 13) Monitoring and assessing students' work
 - **14)** Assigning homework
 - **15**) Using additional sources of knowledge (literature, the Internet...)

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Mark the curriculum components through which you obtain the most information in realising the following teaching situations?

	Components of curriculum							
Teaching situations	The goals and tasks of chemistry	Opera- tive tasks/ outcomes	The contents of topics	Demon- stration experi- ments	Labora- tory exercises	Instructions for the realisation of a topic	The manner of realising the curriculum	Addi- tional work
1) Introducing								
a topic to								
students								
2) Explaining								
and defining								
new concepts								
3)								
Demonstration								
of experiments								

			1	
4) Organising				
laboratory				
exercises				
5)				
Demonstrating				
teaching aids				
6) Verifying				
the degree to				
which the				
subject matter				
taught in class				
has been				
learned				
7) Systematis-				
ation of the				
course contents				
8) Organising				
group work				
9) Organising				
individual				
work				
10) Acquisition				
of curriculum				
contents				
through				
problem				
solving				
11) Project				
work				
12) Adjusting				
work to				
students with				
special needs				
13) Monitoring				
and assessing				
students' work				
14) Assigning				
homework				
15) Using				
additional				

sources of				
knowledge				
(literature, the				
Internet)				

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To what extent does the curriculum offer you possibilities to realise the following.

- 1 Not at all 2 Negligibly small 3 Small 4 Mostly 5 Completely
- 1) Planning activities according to clearly defined teaching goals
- 2) Application of contemporary work methods
- 3) Teaching process featuring students in an active role
- **4)** Acquisition of knowledge in keeping with students' age and previous knowledge
 - 5) Acquisition of all necessary competences, knowledge, skills, views, values
 - 6) Linking curriculum contents with other natural sciences subjects
 - 7) Recognising the individual abilities, predilections and needs of students
 - 8) Inclusion of children with special needs
 - 9) Students to continue education and for higher levels of education
 - 10) Students' continual self-education
 - 11) Adjusting the curriculum contents to the needs of the local environment
 - 12) Inclusion and presentation of new knowledge and achievements
 - 13) Adjusting the contents to subjects and grades
 - 14) Seeing the role of chemistry in certain professions
- 15) Adjusting the contents to the technical, cultural and general level of social development
 - **16)** Monitoring and evaluation of students' achievements
 - 17) Application of clearly defined evaluation criteria
- 18) Checking students' knowledge according to clearly defined learning outcomes

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What changes in the curriculum of chemistry would you be most important for teaching chemistry?

Curriculum components	Concretisation/ reformulation/ developing the existing contents	Adding new elements	Excluding the existing contents
Goals and tasks of chemistry			
Operative tasks / outcomes			
Contents			
Demonstration of experiments			
Laboratory exercises			
Instructions for the realisation of a topic			
The manner of realising the curriculum			
Additional work			