

Technical Subject Teacher

FF12 Education and training · ISCO-08 2320 · CBS 0112 Teachers of vocational subjects in secondary education · seniority medior · Also known as: Technology Teacher, Engineering Subject Teacher

Teaches technology lessons in a workshop classroom with machines and tools, and teaches pupils technical understanding and safe working practice.

The technical subject teacher combines theory lessons with practical assignments in an in-school workshop. Unlike a general subject teacher, this role also carries responsibility for the safe use of machines and tools. Selection often tests technical subject knowledge, while the ability to run a workshop classroom with machines and tools safely and in an orderly way is rarely tested.

Key figures for this profile

25 skills · 5 competencies to measure · 6 knockout skills · centre of gravity: Professional knowledge domains 33%, Communication and influence 13%, Collaboration and interpersonal effectiveness 13%

1 Competencies to measure

These are the behavioural and ability constructs in this profile. Each one shows which hrmforce questionnaire measures it.

Competencies to measure	Target level	hrmforce instrument	Assessment method	Behavioural anchor at target level
Stress tolerance Competency (50-framework): Stress resilience	 N4	Big Fifty, 15PF, Mental Resilience (4C)	Personality questionnaire	Keeps working in a structured way at peak load, keeps agreements with clients clear and flags early which results are at risk.

Competencies to measure	Target level	hrmforce instrument	Assessment method	Behavioural anchor at target level
Safety awareness Competency (50-framework): Discipline Knockout	 N4	Big Fifty, Competency Check	Situational Judgement Test	Recognises unsafe situations in own process, intervenes and addresses colleagues without bringing the work to a halt.
interpersonal sensitivity Competency (50-framework): Sensitivity	 N3	Big Fifty, 360 Feedback, Colour Profile (Jung)	Personality questionnaire	Names observed tension or reticence during a conversation and adapts tone, pace and wording accordingly.
Verbal reasoning	 N3	Ability Scan	Cognitive ability test	Extracts the core arguments from a report of several pages and shows with textual references which conclusion does and does not follow.
Professional demeanour and representation Competency (50-framework): Organizational Sensitivity	 N3	360 Feedback, Competency Check	On-the-job observation	Represents the team with clients and external parties, chooses appropriate language and addresses colleagues on inappropriate conduct.

2 Full skill profile

Every skill in this profile, sorted by weight. The behavioural anchor under each skill belongs to the target level.

T	Skill	Target level	Weight	Knockout	Assessment method	hrmforce instrument
V	Clear oral expression Builds an unprepared spoken explanation into core point, background and next step, and adapts pace to the listener.	 N4	5	yes	Assessment centre	Communication Styles, Competency Check
V	Instructional practice Independently varies formats with a mixed ability group and adjusts the explanation on the basis of signals from the class.	 N4	5	yes	On-the-job observation	Work sample test, Competency Check
V	Pedagogical practice Recognises patterns in group behaviour, independently chooses an approach and discusses concerns about a pupil with the support coordinator.	 N4	5	yes	On-the-job observation	Competency Check, Work sample test
G	Stress tolerance Keeps working in a structured way at peak load, keeps agreements with clients clear and flags early which results are at risk.	 N4	4	no	Personality questionnaire	Big Fifty, 15PF, Mental Resilience (4C)

T	Skill	Target level	Weight	Knockout	Assessment method	hrmforce instrument
K	Technical understanding Independently explains the behaviour of an installation during a fault and traces the problem back to a technical principle.	 N4	4	yes	Knowledge test	Ability Scan, Knowledge test (client-specific)
G	Safety awareness Recognises unsafe situations in own process, intervenes and addresses colleagues without bringing the work to a halt.	 N4	4	yes	Situational Judgement Test	Big Fifty, Competency Check
G	interpersonal sensitivity Names observed tension or reticence during a conversation and adapts tone, pace and wording accordingly.	 N3	4	no	Personality questionnaire	Big Fifty, 360 Feedback, Colour Profile (Jung)
V	de-escalating and setting limits States which limit is being crossed when behaviour is unwanted, what the consequence is, and ends the conversation when needed.	 N3	4	no	Situational Judgement Test	Conflict Styles, Big Fifty, Mental Resilience (4C)
V	Assessment and grading Independently constructs a test with a test matrix, checks the results for flaws and discusses grading standards with subject colleagues.	 N3	4	yes	Portfolio or evidence	Portfolio, Knowledge test (client-specific)

T	Skill	Target level	Weight	Knockout	Assessment method	hrmforce instrument
A	Verbal reasoning Extracts the core arguments from a report of several pages and shows with textual references which conclusion does and does not follow.	 N3	3	no	Cognitive ability test	Ability Scan
V	Critical thinking and source evaluation Detects fallacies and selective evidence in reports and states which conclusion the data do support.	 N3	3	no	Work sample test	Competency Check, Work sample test
V	Presenting Tailors structure, examples and level of detail to the knowledge of the audience and handles critical questions without preparation.	 N3	3	no	Assessment centre	Competency Check, 360 Feedback
V	Written expression Independently writes texts with opening, core and closing, chooses a tone per audience and applies fixed terms consistently.	 N3	3	no	Work sample test	Work sample test, Competency Check
V	working in teams Divides work with colleagues, shares information others need without being asked, and adjusts own planning to fit team goals.	 N3	3	no	360-degree feedback	Big Fifty, 360 Feedback, Competency Check

T	Skill	Target level	Weight	Knockout	Assessment method	hrmforce instrument
V	Planning and organising Plans the work of the team for several weeks, distributes tasks and reshuffles on disruptions without missing deadlines.	 N3	3	no	Work sample test	Competency Check, 360 Feedback, Work sample test
G	Professional demeanour and representation Represents the team with clients and external parties, chooses appropriate language and addresses colleagues on inappropriate conduct.	 N3	3	no	On-the-job observation	360 Feedback, Competency Check
V	Reflecting on own practice Takes time to review difficult situations, looks for patterns in own conduct and records one improvement point in writing.	 N3	3	no	360-degree feedback	360 Feedback, Development Review
V	Professional currency and specialist literature Tracks sources and guidelines structurally, weighs their quality and adapts the own working method to new insights.	 N3	3	no	Portfolio or evidence	Portfolio, Knowledge test (client-specific)
V	Instructional design and curriculum Independently designs a teaching period with coherent goals, materials and assessment and aligns it with subject colleagues.	 N3	3	no	Portfolio or evidence	Portfolio, Competency Check

T	Skill	Target level	Weight	Knockout	Assessment method	hrmforce instrument
V	Pupil guidance Independently analyses the cause of lagging results, makes a plan with the pupil and involves parents and the support team.	 N3	3	no	On-the-job observation	Competency Check, Development Review
V	Communication with parents and carers Independently holds a conversation with parents about disappointing results, states the facts and reaches joint agreements.	 N3	3	no	On-the-job observation	Work sample test, Competency Check
V	Selecting and using tools Selects tools independently for varying materials and jobs, substantiates the choice and replaces worn parts in time.	 N3	3	no	Work sample test	Work sample test
V	Working with digital devices and applications Selects the appropriate device and application for each task and fixes common disruptions without support from others.	 N3	2	no	Work sample test	Knowledge test (client-specific), Work sample test
K	AI literacy Explains in own words that a language model predicts from patterns and can therefore produce incorrect output.	 N2	2	no	Knowledge test	Knowledge test (client-specific)

T	Skill	Target level	Weight	Knockout	Assessment method	hrmforce instrument
T	Using collaboration platforms Shares files and messages in the designated channel and follows instructions on permissions and storage locations.	 N2	1	no	Work sample test	Work sample test, 360 Feedback

3 Levels per seniority

The same profile with the job family seniority adjustment applied. Target levels are clamped to 1 to 5.

Skill	junior	medior	senior
Clear oral expression	N3	N4	N5
Instructional practice	N3	N4	N5
Pedagogical practice	N3	N4	N5
Stress tolerance	N3	N4	N5
Technical understanding	N3	N4	N5
Safety awareness	N3	N4	N5
interpersonal sensitivity	N2	N3	N4
de-escalating and setting limits	N2	N3	N4
Assessment and grading	N2	N3	N4
Verbal reasoning	N2	N3	N4
Critical thinking and source evaluation	N2	N3	N4
Presenting	N2	N3	N4
Written expression	N2	N3	N4
working in teams	N2	N3	N4
Planning and organising	N2	N3	N4
Professional demeanour and representation	N2	N3	N4
Reflecting on own practice	N2	N3	N4
Professional currency and specialist literature	N2	N3	N4
Instructional design and curriculum	N2	N3	N4
Pupil guidance	N2	N3	N4
Communication with parents and carers	N2	N3	N4
Selecting and using tools	N2	N3	N4
Working with digital devices and applications	N2	N3	N4

Skill	junior	medior	senior
AI literacy	N1	N2	N3
Using collaboration platforms	N1	N2	N3

4 The proficiency scale

Level	Label	Autonomy	Complexity	Scope	Depth of knowledge
N1	Guided	works under supervision and follows instruction	routine, one variable at a time	own task	basic understanding of terminology
N2	Applying	works independently within set frameworks	familiar situations with limited variation	own role	working knowledge, applies standard approach
N3	Proficient	sets own approach and seeks input proactively	several variables, some ambiguity	own team or process	thorough knowledge, weighs alternatives
N4	Advanced	directs others and decides on the approach	complex, with conflicting interests	several teams or a department	in-depth knowledge, advises others
N5	Leading	sets the standard and the policy	strategic, under high uncertainty	organisation, value chain or profession	authority, advances the profession

5 Behavioural anchors per skill

Anchors sit at N1, N3 and N5. N2 and N4 are deliberately not anchored: raters interpolate between them, following the O*NET convention.

Skill	N1	N3	N5
Clear oral expression Phrasing messages in spoken language so that the core point, the structure and the requested action are immediately clear to the listener.	Restates in own words what has been agreed and repeats the core of the instruction as a check.	Builds an unprepared spoken explanation into core point, background and next step, and adapts pace to the listener.	Sets the organisation wide standard for spoken clarity, explains complex strategic choices understandably and coaches others on their word choice.
Instructional practice Delivers lessons in which learning goals, explanation, assignments and feedback align, and attunes pace and format to the group.	Delivers a lesson segment under guidance according to a prepared lesson plan and keeps to the indicated formats.	Independently varies formats with a mixed ability group and adjusts the explanation on the basis of signals from the class.	Develops the school's instructional framework, grounds it in research and guides colleagues through lesson observation and feedback.

Skill	N1	N3	N5
Pedagogical practice Creates a safe and orderly learning climate, guides pupil behaviour and attunes the approach to age and developmental stage.	Applies the class agreements under guidance and addresses pupils on unwanted behaviour following the standard routine.	Recognises patterns in group behaviour, independently chooses an approach and discusses concerns about a pupil with the support coordinator.	Develops the school's pedagogical policy, draws up behaviour protocols and guides teams through stalled group dynamics.
Stress tolerance Keeps delivering work of the same quality under time pressure, opposition or unexpected turns and maintains a businesslike tone with others.	Keeps working on the current task as pressure rises and asks the supervisor which task can wait.	Keeps working in a structured way at peak load, keeps agreements with clients clear and flags early which results are at risk.	Keeps the organisation workable in crises, takes decisions under high uncertainty and sets the standard for composed action under pressure.
Technical understanding Understands how machines, structures and installations work, recognises causes of failure and explains them using technical and physical principles.	Names the parts of a simple machine and explains, using the manual, what function each part has.	Independently explains the behaviour of an installation during a fault and traces the problem back to a technical principle.	Develops technical guidelines for the field and is consulted internally and externally on design and failure questions.
Safety awareness Continuously watches for unsafe situations and actions at work, addresses others about them and chooses the safe working method even under time pressure.	Follows the safety rules of the workplace and checks back when in doubt about an operation.	Recognises unsafe situations in own process, intervenes and addresses colleagues without bringing the work to a halt.	Sets the safety standard for the organisation, makes safety discussable at every level and steers behaviour and culture.
interpersonal sensitivity Noticing verbal and non-verbal signals from others, naming what stands out and adjusting own behaviour accordingly during the contact.	Notices when a conversation partner disengages or hesitates and asks whether the explanation is clear.	Names observed tension or reticence during a conversation and adapts tone, pace and wording accordingly.	Trains others in recognising social signals and uses that insight when designing sensitive change processes across the organisation.

Skill	N1	N3	N5
de-escalating and setting limits Reducing rising tension or unwanted behaviour by staying calm, stating the limit clearly and steering or ending the conversation.	Stays calm when facing an angry reaction, lets the other person speak and calls in a colleague or manager.	States which limit is being crossed when behaviour is unwanted, what the consequence is, and ends the conversation when needed.	Establishes organisation-wide agreements on transgressive behaviour, arranges support and follow-up, and holds managers to that line.
Assessment and grading Constructs tests and assessment tasks that cover the learning goals, grades work against criteria and gives pupils usable feedback.	Administers an existing test according to instruction and grades the work using the answer model provided.	Independently constructs a test with a test matrix, checks the results for flaws and discusses grading standards with subject colleagues.	Develops the institution's assessment policy, safeguards examination quality and advises examination boards on grading standards.
Verbal reasoning Understands written and spoken language and draws logical conclusions from it, also when the text is long, dense or ambiguous.	Summarises a short work instruction in own words and points out which word or sentence remains unclear.	Extracts the core arguments from a report of several pages and shows with textual references which conclusion does and does not follow.	Dissects legal or policy texts with conflicting passages, reformulates the central question and substantiates the chosen reading for the whole organisation.
Critical thinking and source evaluation Tests claims for logic, evidence and the interest of the source and thereby distinguishes facts from opinions and assumptions.	Asks what a claim is based on and checks whether the source is named and can be found.	Detects fallacies and selective evidence in reports and states which conclusion the data do support.	Sets the assessment criteria for sources and claims, including for texts made by artificial intelligence, and enforces them organisation wide.
Presenting Building and delivering a message to a group with a clear line of argument, fitting materials and attention to reactions and questions from the audience.	Presents a prepared set of slides about own work and answers factual questions with help from an experienced colleague.	Tailors structure, examples and level of detail to the knowledge of the audience and handles critical questions without preparation.	Presents at external conferences on behalf of the organisation, sets the key message for the field and coaches others on their delivery.

Skill	N1	N3	N5
Written expression Putting thoughts into correct and readable text with a logical paragraph structure, fitting tone and word choice suited to the reader.	Writes short messages and reports free of language errors after using a checking tool and a review round by a colleague.	Independently writes texts with opening, core and closing, chooses a tone per audience and applies fixed terms consistently.	Draws up the writing guide and house style for the organisation, approves publications on content and develops the writing skill of teams.
working in teams Contributing to a team result by dividing tasks, sharing information, keeping agreements and involving colleagues in the work at hand.	Carries out an own task within the team as agreed and reports to the team lead when something does not work.	Divides work with colleagues, shares information others need without being asked, and adjusts own planning to fit team goals.	Designs collaboration agreements for several teams in the organisation, evaluates them against results and revises them on the basis of data.
Planning and organising Placing activities, people and resources in time, setting priorities and arranging dependencies so that agreed results are delivered on schedule.	Makes a daily or weekly schedule for own tasks and sticks to the agreed order and times.	Plans the work of the team for several weeks, distributes tasks and reshuffles on disruptions without missing deadlines.	Sets the planning system for the organisation, links annual plan, capacity and budget and decides on conflicting claims.
Professional demeanour and representation Behaves in contact with clients, colleagues and external parties according to the organisation's conduct and dress standards, including outside the own workplace.	Follows house rules on conduct, language and dress and asks the supervisor for guidance when in doubt.	Represents the team with clients and external parties, chooses appropriate language and addresses colleagues on inappropriate conduct.	Represents the organisation in the public domain and sets the standards of conduct that apply when doing so.
Reflecting on own practice Looks back on own work in a structured way, names the effect of choices made and formulates one concrete point to do differently.	Answers the questions of the supervisor after a task about what went well and what was difficult.	Takes time to review difficult situations, looks for patterns in own conduct and records one improvement point in writing.	Builds reflection into work processes as a standard step, guides peer review across the organisation and keeps difficult assumptions open for discussion.

Skill	N1	N3	N5
Professional currency and specialist literature Follows developments in the own profession through literature, guidelines and networks and works relevant new insights into own practice.	Reads the professional information received and names which part matters for the own work.	Tracks sources and guidelines structurally, weighs their quality and adapts the own working method to new insights.	Assesses the state of the field, weighs conflicting research and determines which guidelines the organisation will follow from now on.
Instructional design and curriculum Designs learning pathways and materials in which goals, content, formats and assessment cohere, aligned with attainment targets or qualification requirements.	Supplements an existing lesson plan under guidance with assignments that match the stated learning goal.	Independently designs a teaching period with coherent goals, materials and assessment and aligns it with subject colleagues.	Develops the curriculum for the entire programme, links it to statutory requirements and leads its introduction across all teams.
Pupil guidance Guides pupils with learning difficulties, study choices and personal questions, refers on where needed and tracks progress in the file.	Conducts a guidance conversation under supervision using the standard form and records the agreements in the pupil file.	Independently analyses the cause of lagging results, makes a plan with the pupil and involves parents and the support team.	Develops the school's guidance structure, draws up referral protocols and coaches mentors in their role.
Communication with parents and carers Informs parents and carers about a pupil's development and behaviour, holds conversations when there are concerns and makes agreements with them.	Informs parents about practical matters as agreed and refers substantive questions to the mentor.	Independently holds a conversation with parents about disappointing results, states the facts and reaches joint agreements.	Sets the policy for communication with parents, mediates in complaints and trains colleagues in difficult parent conversations.
Selecting and using tools Selects the appropriate hand tool or power tool for a job, uses it as prescribed and keeps it in usable and safe condition.	Uses the tool provided for a fixed operation and returns it to its designated place after use.	Selects tools independently for varying materials and jobs, substantiates the choice and replaces worn parts in time.	Sets tool policy, assesses new tools for suitability and safety and determines what becomes the standard equipment.

Skill	N1	N3	N5
Working with digital devices and applications Uses computers, mobile devices and standard applications to carry out work tasks, adjusts settings and resolves simple usage problems without help.	Opens and uses the prescribed applications for own tasks and asks for help whenever an unfamiliar message appears.	Selects the appropriate device and application for each task and fixes common disruptions without support from others.	Defines organisation wide which digital workplace facilities are used and guides their introduction across all teams.
AI literacy Knows how AI systems work, what they can and cannot do, states where they fit or not and uses correct terminology.	Explains in own words that a language model predicts from patterns and can therefore produce incorrect output.	Judges per work task whether AI is suitable, names the main limitations and explains how it works to colleagues.	Defines what AI literacy means in the organisation, measures the level and links it to training and deployment policy.
Using collaboration platforms Collaborates in digital platforms by sharing files, setting up tasks and channels and following agreements on working together online.	Shares files and messages in the designated channel and follows instructions on permissions and storage locations.	Sets up channels, task boards and permissions for a team and addresses colleagues on agreements about online collaboration.	Determines organisational policy for digital collaboration and steers the introduction of new ways of working together.

6 Assessment methods and validity

The validities are the corrected meta-analytic estimates from Sackett, Zhang, Berry and Lievens (2022) in the Journal of Applied Psychology, which replace the older Schmidt and Hunter (1998) figures. The spread matters as much as the mean: with a high SD, validity varies strongly by context.

Assessment method	rho	SD	What it is
Assessment centre	0.29	0.09	Multiple exercises, multiple assessors, dimension-wise scoring.
On-the-job observation	-	-	Structured workplace observation with a form based on behavioural anchors.
Personality questionnaire	0.40	0.15	Self-report of behavioural preferences. At hrnforce the Big Fifty and the 15PF.
Knowledge test	0.40	0.13	Test of declarative job knowledge, usually assembled per client.
Situational Judgement Test	0.12	0.11	Scenario with response options, scored on knowledge or behavioural tendency.
Portfolio or evidence	-	-	A collection of prior work or results, assessed against fixed criteria.
Cognitive ability test	0.41	0.14	Standardised test of verbal, numerical or abstract reasoning.
Work sample test	0.33	0.09	The candidate performs a representative work sample under standardised conditions.
360-degree feedback	-	-	Multiple raters around the person rate behaviour against behavioural anchors.

7 Assessment instruments for this job

hrnforce instrument	Skills	What it measures
Competency Check	13	Behavioral-Level Competency Assessment
Work sample test	9	Representative work sample under standardized conditions
360 Feedback	7	Multiple assessments based on behavioral anchors
Big Fifty	5	Personality questionnaire, 150 items, 25 factors
Knowledge test (client-specific)	5	Professional knowledge test, customized for each client
Portfolio	3	Evaluation of prior work against fixed criteria

hrmforce instrument	Skills	What it measures
Mental Resilience (4C)	2	Mental Resilience According to the 4C Model
Ability Scan	2	Aptitude Test: Verbal, Numerical, and Abstract Reasoning Skills
Development Review	2	Structured development interview
Communication Styles	1	Preferred communication style
15PF	1	Personality Profile, a shorter alternative to the Big Fifty
Colour Profile (Jung)	1	Four color types, linked to Big Fifty factors
Conflict Styles	1	Preferred style in conflict situations

8 How to use this profile

1. Agree the profile with the hiring manager before the first candidate is measured. Weights shifted afterwards make the outcome indefensible.
2. Choose the assessment method per skill from the Assessment method column. Combine at most three methods per candidate.
3. Calibrate the assessors in a two-hour session using the anchors in chapter 5. Anchors without rater training deliver little.
4. Fill in the match calculator and discuss the gaps in the development conversation. Type A and type G are selection criteria, not one-quarter development goals.

Source: hrmforce Skills Framework 2.0, version 2.0.0, built 2026-09-08. Crosswalks to ESCO v1.2.1, O*NET 31.0, Lightcast Open Skills, SFIA 9, DigComp 3.0, EntreComp, LifeComp, GreenComp, AILit, WEF Future of Jobs 2025, ISCO-08 and the Dutch CBS occupational classification BRC 2014 edition 2025. This profile is a starting point, not a standard: align it with your own organisation before selecting on it.