Research Skill Development Framework

A conceptual model to make explicit the incremental and cyclic development of student research skills

LEVEL OF STUDENT AUTONOMY

FACET OF INQUIRY

		Level 1 *Students research at the level of a **closed inquiry*** and require a **high degree of structure/guidance***	Level 2 *Students research at the level of a **closed inquiry*** and require **some structure/guidance***	Level 3 *Students research **independently** at the level of a **closed inquiry****	Level 4 *Students research at the level of an **open inquiry*** within **structured guidelines***	Level 5 *Students research at the level of an **open inquiry*** within **self-determined guidelines** in accordance with the discipline*
A. *Students **embark** on inquiry and so **determine a need** for knowledge/ understanding*	*Curious*	Respond to questions/tasks arising explicitly from a closed inquiry.	Respond to questions/tasks required by and implicit in a closed inquiry.	Respond to questions/tasks generated from a closed inquiry.	Generate questions/aims/ hypotheses framed within structured guidelines.	Generate questions/aims/hypotheses based on experience, expertise and literature.
B. *Students **find/generate** needed information/ data using appropriate methodology*	*Determined*	Collect and record required information/data using a prescribed methodology from a prescribed source in which the information/ data is clearly evident.	Collect and record required information/data using a prescribed methodology from prescribed source/s in which the information/ data is not clearly evident.	Collect and record required information/data from self-selected sources using one of several prescribed methodologies.	Collect and record self-determined information/data from self-selected sources, choosing an appropriate methodology based on structured guidelines.	Collect and record self-determined information/data from self-selected sources, choosing or devising an appropriate methodology with self-structured guidelines.
C. *Students **critically evaluate** information/ data and the process to find/generate this information/data*	*Critical*	Evaluate information/data and the inquiry process using simple prescribed criteria.	Evaluate information/data and the inquiry process using prescribed criteria.	Evaluate information/data and the inquiry process using criteria related to the aims of the inquiry.	Evaluate information/data and the inquiry process comprehensively using self-determined criteria developed within structured guidelines.	Evaluate information/data and the inquiry process rigorously using self-generated criteria based on experience, expertise and literature.
D. *Students **organise** information collected/ generated and manage the research process*	*Organised*	Organise information/data and manage the research process according to a simple prescribed structure.	Organise information/data and manage the research process according to prescribed structures.	Organise information/data and manage the research process by adapting provided structures.	Organise information/data and manage the research process using self-determined structures that fit provided guidelines.	Organise information/data and manage the research process using self-determined protocols in accordance with the discipline.
E. *Students **synthesise** and **analyse** and **apply** new knowledge*	*Creative*	Synthesise and analyse information/ data to reproduce existing knowledge in prescribed formats. Ask questions of clarification/ curiosity.	Synthesise and analyse information/ data to reorganise existing knowledge in standard formats. Ask relevant, researchable questions.	Synthesise and analyse information/ data to construct emergent knowledge. Ask rigorous, researchable questions based on new understandings.	Synthesise, analyse and apply information/data to fill recognised knowledge gaps.	Synthesise, analyse and apply information/data to fill self-identified gaps or extend knowledge.
F. *Students **communicate** knowledge and the processes used to generate it, with an awareness of ethical, social and cultural issues*	*Persuasive*	Use mainly lay language and prescribed genre to demonstrate required knowledge and understanding for lecturer/teacher as the audience.	Use some discipline-specific language and prescribed genre to demonstrate self-selected knowledge and understanding from a stated perspective and for a specified audience.	Use mostly discipline-specific language and appropriate genre to demonstrate knowledge and understanding within a field from a scholarly perspective and for a specified audience.	Use the language of the discipline and appropriate genre to address knowledge and understanding gaps from several perspectives for a self-selected audience.	Use the language of the discipline, choosing appropriate genre to extend knowledge and understanding, from diverse perspectives for a range of audiences.

* closed = lecturer specified. open = student initiated. Lecturers and teachers determine scope of inquiry and standard required; student achievement determines the Level their research actually attains. For example, the provision of an open inquiry within structured guidelines (Level 4) in the First Year University context will see some students providing evidence of Level 1 attainment for a specific facet, with others demonstrating Level 2, Level 3 or Level 4, depending on their degree of rigour.

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