IoC – Mapping portfolio evidence to SFIA skills

Version 2.1

20.08.20

Reasons for update

The Accreditation Panel working group looking at the assessment of generic responsibility characteristics noted that there were two key points of assessment – recognition of personal development, and understanding of professional/personal responsibility – that were not currently captured in the portfolio mapping process.

This update is designed to include those aspects as first-class components of the process.

Furthermore, recent discussions in the Panel have recognised the need for two distinct levels of competence: "skill" (corresponding to conscious competence) and "competence" (unconscious competence). These two levels are expressed as distinct thresholds in the scoring scheme below.

Approach

The "planning" section of the approved scoring template was not regarded by the Panel as an essential component of the scheme, and was, in effect, a "makeweight". So, this section has been dropped, with the available marks redistributed between the "technical achievement" section and an expanded "reflection" section.

Systematic consideration of test cases was conducted to ensure that the revised scheme would deliver the outcomes required.

Requirements

- It should not be possible to achieve "skill" or "competence" without validated portfolio entries
- At least basic reflection should be necessary to achieve "skill"
- "competence" should in most cases correspond to the 85% component threshold (and, by implication, "skill" to the 50% level).
- It should not be possible to achieve "competence" without demonstrating reflection, recognition of personal development and appreciation of personal/professional responsibility
- It should be possible to achieve "skill" with a bare minimum of validated portfolio entries

Scoring

Generic scoring scheme

The scoring scheme measures how well a portfolio of evidence demonstrates competence in a SFIA task.

The portfolio contents are assessed for completeness against a set of items of evidence required, and those items of evidence will be measured against a set of quality criteria. The items of evidence and quality criteria are laid out below.

The scoring scheme that will be applied for each aspect is as follows.

Evidence present	Criteria Satisfied	Score
All items	100%	4
	75%	3
	50%	2
	< 50%	1
1 item missing	100%	2
	> 50%	1
2+ missing/None	-	0

Note that, where only one item of evidence is required, the absence of that item implies a score of zero (as none of the quality criteria can be satisfied).

The score awarded for each aspect according to this generic marking scheme will be multiplied by a factor ('weight') specified for that aspect,

Technical Achievement

Weight:16

Item of evidence	Quality criteria
Portfolio entries showing completion of components from a SFIA skill in a real-world environment	There is more than one portfolio entry for at least 85% of the components
Supervisor comments confirming the accuracy of the portfolio entries	There is more than one portfolio entry for at least 50% of the components
	Supervisor comments evaluate achievements against their context
	Portfolio entries are based on evidence rather than assertion

Reflection*

Weight: 9

Item of evidence	Quality criteria
Reflective ad-hoc portfolio entries for achievements across skill	The style of portfolio entries is appropriately professional
Portfolio identifies area(s) of personal development	Reflection is based on evidence rather than assertion
Portfolio identifies instances of personal/professional accountability for achievements	Personal development claims supported by comparison of achievements across period of experience
	Recognition of accountability related to (potentially) customer-facing achievements

* May be in a reflective report rather than in the portfolio itself

Threshold total for "skill":

65

Threshold for "competence"

Testing / profiling

To ensure that the scheme does not permit either "skill" or "competence" to be recognised in the absence of appropriate evidence, a number of test cases were noted:

- It should not be possible to achieve "skill" or "competence" without validated portfolio entries
 - The maximum score available from the reflection category is 36. A further 29 is required to achieve "skill", and 49 for "competent"
 - To gain at least 29 marks from the Achievement section, it is necessary to have at least one item of evidence and all four quality attributes, or both items of evidence and at least two quality attributes (weighted score of 32 in either case).
 - Absence of any portfolio entries implies absence of confirming comments, giving a score of zero.
 - Absence of supervisor's confirmation (evidence) implies absence of third quality criteria (contextualising experience), giving a weighted score of 16.
 - Thus, however good the portfolio itself, in the absence of supervisor's confirmation, even with excellent planning and reflection, it is not possible to score sufficient to achieve skill or, by implication, competence.
- At least basic reflection should be necessary to achieve "skill"
 - The maximum weighted score for an excellent portfolio, with supervisor comments confirming both the content and the context of the entries, is 64, which is one below the threshold for "skill".
 - This means that at least a minimal score (9) would be required from the reflection section, which implies
 - at least two of the items of evidence, and two of the quality criteria, or
 - It should be noted that, for this case, it would be possible, in theory, for one or other of "personal development" or "professional accountability" to be absent.
 - all three items of evidence and one quality criterion.
 - It seems doubtful that an "excellent" portfolio of achievement would not embody at least rudimentary reflection.
- "competence" should in most cases correspond to the 85% component threshold
 - This test reduces to three questions:
 - Is the "85% of components criteria" necessary to achieve competence?
 - An overall score of 85 would need a score of 49 from the technical achievement section, assuming the maximum score of 36 from reflection.
 - If any one quality criterion were missed, then the maximum score from the technical achievement section would be 3 * 16 = 48.
 - It follows that "competence" can be achieved only if all four quality criteria are satisfied, including the "85% of components" criterion.
 - Can a portfolio which demonstrates the "85% of components" quality criterion fail to achieve even "skill"?
 - 85% => 50% and portfolio entries (1 item of evidence + 2 quality criteria).
 - In the absence of supervisor confirmation, this would give a technical achievement score of just 16.
 - Even with the maximum reflection score of 36, this would not meet the "skill" threshold.

- By implication, it will be possible to have overall scores anywhere between 16 and 84, even with the "85% threshold" satisfied, so this test is failed.
- It should not be possible to achieve "competence" without demonstrating reflection, recognition of personal development and appreciation of personal/professional responsibility
 - The minimum "reflection" score to achieve competence is 85-64 = 21, corresponding to an unscaled score of 3.
 - It is not possible to score 3 with one item of "reflection" evidence missing.
 - Hence, to achieve "competence", all three items of reflection evidence must be present.
- It should be possible to achieve "skill" with a bare minimum of validated portfolio entries
 - Given that both portfolio entries and supervisor confirmation are necessary to gain a sufficient score in the "achievement" section, there are three possible "bare minimum" scenarios, depending on which quality criteria are satisfied:
 - 85% coverage, neither context nor evidence
 - Implies 50% coverage
 - Without context or evidence, the weighted scored would be 2 * 16 = 32
 - Would require a score of 33 essentially "full marks" on the reflection section.
 - 50% coverage and the entries either being evidence based or contextualised by the supervisor comments.
 - Such a portfolio would also earn a weighted score of 2 * 16 = 32, leaving a shortfall of 33.
 - Again, this would require full marks for reflection, which may be challenging..
 - Alternatively, 50% coverage and entries are both evidence based and contextualised by supervisor comments
 - This would give a weighted score of 48, leaving a shortfall of just 17.
 - This requires a score of 18 for "reflection", which implies all three items of evidence and two or three quality criteria satisfied.
 - Similarly, with 85% coverage,
 - only one of contextualisation and evidence base would be required for a weighted score of 48 (since 85% implies 50% coverage).
 - Again, this would require all three items of reflection evidence, and two or three quality criteria.

Sensitivity to parameters

It should be noted that altering the balance of marks between "technical achievement" and "reflection" could change the outcomes of the tests above quite significantly.

Any such re-balancing should be accompanied by reworking of the thresholds to ensure the desired outcomes are met.

Conclusion

In summary,

- An unvalidated portfolio is insufficient to achieve either "skill" or "competence".
- It is possible to achieve "skill" with a minimal validated portfolio and at least basic reflection.
- To achieve "competence", the portfolio must be validated, and the reflection component must demonstrate basic reflection, recognition of personal development and appreciation of personal/professional responsibility.
- Covering 85% of the components of a skill does not on its own guarantee achievement of "competence".

This seems an appropriate set of outcomes, which are commended to the Panel.