Formative activity and its effect on student learning: results of a pilot study.

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Aims

- Report the results of the pilot research
- Report the researcher's experience of, and learning from, using specific methodologies
- Work in progress

Background

- Much literature about the role formative assessment and formative feedback plays in the student learning trajectory – some of it favourable, some of it less so
- There is considerable resource afforded to formative activities
- Are these activities of benefit to student learning?

Research Question

 What is the value and impact of formative assessment and formative feedback to the learning experience of students?

Purpose of the Pilot

- Test the process
- To enable a "tried and tested", more rigorous and refined research methodology to be implemented in the main study
- Identify unpredictable events, results or consequences that might be beneficial to the main study in that they should be nurtured and exploited, or eliminated

Ethics and Approvals

- School Research Ethics Panel approval
- NRES not necessary
- Permissions to recruit participants from Head of Department, relevant Head of Divisions and Course Leaders

Methodology

- One UK university
- All full-time, final year undergraduate students from two "health and social care" courses (n=80)
- o 3 distinct components:
 - anonymous electronic questionnaire
 - participant observation
 - student focus group
- All participants anonymous electronic questionnaire via VLE
- Three participants, plus two, were purposively selected

 observed and video and/or audio recorded in at least
 1 authentic university-based or practice-based learning setting in which they received feedback
- Observed participants student focus group

- Initial requests and email prompts a 32.5% return rate (n=26)
- Students were asked to describe themselves as a gifted, average or weak student
- Almost 85% (n=22) of respondents rated themselves as an average student

	Freq	%	Valid %	Cumulative %
A gifted student	1	3.8	3.8	3.8
A weak student	2	7.7	7.7	11.5
An average student	22	84.6	84.6	96.2
Don't know	1	3.8	3.8	100.0
Total	26	100.0	100.0	

- Strongest in academic or clinical aspects of studies?
- Almost 70%
 (n=18) felt
 they were
 strongest in
 their clinical
 practice

	Freq	%	Valid %	Cumulative %
Academic work	1	3.8	3.8	3.8
Both elements	6	23.1	23.1	26.9
Clinical practice	18	69.2	69.2	96.2
Don't know	1	3.8	3.8	100.0
Total	26	100.0	100.0	

				Strongest				
				Academic work	Both elements	Clinical	Don't know	Total
ſ	Description	A gifted student	Count	1	0	0	0	1
			% of Total	3.8%	.0%	.0%	.0%	3.8%
		A weak student	Count	0	1	1	0	2
			% of Total	.0%	3.8%	3.8%	.0%	7.7%
		An average student	Count	0	5	16	1	22
			% of Total	.0%	19.2%	61.5%	3.8%	84.6%
		Don't know	Count	0	0	1	0	1
			% of Total	.0%	.0%	3.8%	.0%	3.8%
	Total		Count	1	6	18	1	26
L			% of Total	3.8%	23.1%	69.2%	3.8%	100.0%

Of the almost 85% of students (n=22) who rated themselves as average, 61.5% (n=16) felt that clinical practice was the strongest element of their studies

- Almost 85% (n=22) and almost 77% (n=20) of respondents had experienced FA and FFB respectively during that academic year, with over 71% (n=19) experiencing both
- 2 of the respondents who had experienced FA responded that they had not or did not know if they had received FFB
- Of 23 individual responses to the question "How would you describe formative assessment?" 65% (n=15) explicitly described it in a manner pertaining to summative assessment and/or verification of learning "degree mark", or "it doesn't count" or similar:
 - "Pieces of work that are marked within the university graded system, but that don't actually count towards your degree"
 - "Marks that don't count towards your overall score"
 - "An assessment which has no addition to our final degree class"
- Only 1 respondent mentioned "learn" not used in the prospective sense:
 - "Formative assessment is a method of testing students on topics that they have learnt so far that do not count towards final marks"

- When asked specifically about the purpose of formative assessment, replies were more akin to learning:
 - "To aid learning"
- o But ...
 - "For tutors to see what you are learning and areas which are lacking in understanding"

- Examples for formative assessment and formative feedback asked for – generally a good level of recognition of the "formal" formative assessment tasks and when "formal" formative feedback offered:
 - "... a mock practical exam ..."
 - "Tests in lectures ..."
- But very little recognition of the continual [often practicerelated] formative assessment and formative feedback:
 - "A practical session where feedback is given to allow for development of practical skills"
 - "for example during ... practical sessions ... The tutors would give us feedback ..."
- Does this mean that the 61.5% of students who described themselves as average but strongest in clinical elements are not acting on formative feedback on practice as they don't recognise it as such?
- E.g. an example of FFB:
 - "A printed sheet with a mark and comments on"

Learning?

- Unclear and/or artificial differential between FA and FFB?
- Lack of recognition of "informal" FA and FFB opportunities
- Lack of self-regulation and ownership
- Retrospective where is the feed-forward learning?
- Electronic questionnaire VLE unable to produce results in a user-friendly way
- Electronic questionnaire poor response rate
- NVivo
- Timing

Participant Observation

- Video and/or audio recorded plus field notes analysis ongoing
- Assumptions made:
 - Practice/clinical experiences of students will be similar
 - Exposure to "feedback" will be similar
- Students verbally (e.g. "Yeah"/"Hmm"/"Yes"/"OK") and non-verbally (e.g. nodding) suggest to tutors that they understand the feedback being given but then demonstrate that they misinterpret what is being said and/or remain unclear by the subsequent questions they ask:
 - T: "... ethics section is superficial ..."
 - S: "It needs to be a lot longer"
- If there is no opportunity to ask questions (e.g. written feedback alone), do students remain unclear?
- Lack of ownership:
 - "I don't know why ... the Group seemed to think that it was a good idea"
- Evident that students want to simply pass assessment tasks assessment driven
- Mixed messages from tutors:
 - "Again it's not me that's marked it, I'd have just ..." inconsistencies
 - "It's going to be capped at 40 regardless ..." assessment-driven

Learning?

- Don't make assumptions about student learning opportunities based on own learning and teaching experiences
- Is dialogue crucial to learning from feedback?
- Assessment [not learning]-driven culture?
- Students appear to receive mixed messages from tutors
 - Is the goalpost a moveable feast?
 - How do standards and benchmarks fit with this?
 - How can students "close the gap" when the gap and/or how to get to the "gap" is constantly shifting?
- Does HE truly want to foster a learning culture or does it want to be measured by student achievements alone? Can the 2 be a partnership?

Student Focus Group

- Questionnaire
 - Electronic method of data collection efficient
 - Anonymous data but respondents want to put a face to the researcher and be provided with a data collection opportunity
 - "We didn't realise it was you"
 - Need to be selective with reminder emails
- Understanding of FA and FFB
 - " ... a self-evaluation tool ... you can see areas that you're strong in and also ... any weak areas ..."
 - " an opportunity to obtain constructive feedback ..."
 - In relation to a comment about constructive feedback not always being that constructive "... depends how you view it ..." – insight into levels of learning adopted by students?
- Formative assessment indistinguishable from formative feedback [to the student]
- Participant observation
 - Excluding service-users impossible within an authentic practice-based learning opportunity – NRES implications

Learning?

- Reconsider engagement with student cohort and authentic practice-based learning settings
- Is the VLE the best vehicle for the questionnaire?
- Levels of student learning will "one size really fit all?" What are we trying to achieve within HE with respect to feedback?
- Reframe my research question: What is the value and impact of feedback to the learning experience of students?

Next Steps

- Reconsider practical elements of methodology
- Reconsider the breadth of feedback
 - including dialogical aspects
- NRES
- Revisit the literature for "feedback"