

THE AFFECTIVE DIMENSION OF FORMATIVE FEEDBACK

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GENERAL DEFINITIONS

Formative feedback (FF)

is presented to a learner in response to learner's action/performance

'Information the instructor provides to the learners related to their cognitive process and/or behaviors, intended to modify the learner's thinking or behaviour for improving learning (modify these processes) in order to enhance learning' (Shute, 2008).

Contrast with 'Summative Feedback', the 'assessment of learning' conducted at particular points of time (Taras, 2005).

FF is to render the implicit aspects of learning 'transparent' and 'explicit' (Black and William, 2009), hence available for students to use.

It involves students deeply in meta-cognitive strategies, such as goal setting and self-reflection (Black & Jones, 2006).

FF IN HIGHER EDUCATION

- ✓ FF has been applied to higher education settings considerably (Nicol & MacFarlane-Dick, 2006);
- ✓ FF is backed by the rising attention to the issue of learner-centred pedagogies.

Two streams:

1. focuses on helping students to reshape their own work, while performing the learning tasks under continuous feedback (e.g., Kuiper & Pesut, 2004).
- Black and William (2009), sees FF as primarily a cyclical process of clarifying learning intentions, engineering learning activities, providing feedback on progress and activating students as owners of their own learning.
2. Nicol & MacFarlane-Dick (2006) examines how formative feedback empowers students for self-regulated learning.
- The main benefits - its scaffolding of further inquiry can deepen cognitive processing, which in turn leads to the increase of learning motivation; it may close the gap between learner's current levels of achievement and the desired goals,
 - a task that shallow feedback such as 'work harder' cannot accomplish (Vygotsky, 1987).

FEEDBACK MODEL

- Visibility Model (VM) has recently been suggested - feedback is most powerful when it makes learning visible to the teacher, and preferably, also the students.

At various levels,

(Hattie and Timperley, 2007)

CURRENT RESEARCH

- Recent research began to focus on FF's potentials to help students generate internal feedback for the purpose of self monitoring (Cauley & McMillan, 2010), thus fostering self-regulated learning.

‘FORMATIVE FEEDBACK TO ENHANCE STUDENT LEARNING’ (A TDG)

In this TDG project, the team investigated how FF interventions may impact extrinsic motivation and intrinsic motivation differently, and the Positive Affect. The hypotheses are based on the SDT literature (e.g., Deci & Ryan, 2008).

Intrinsic motivation (IM) is best fostered when a student perceives himself/herself as (1) doing an activity to pursue his/her own goals; and (2) doing an activity in the presence of a person he/she feels intimate with.

The nature of FF involves the teachers constantly monitoring the students’ progress, while giving individualized feedback tailor-made to help students accomplish their respective study goals (e.g., Black, Harrison, Lee, Marshall & William, 2003).

- Lam, B. H., Cheng, W. Y. R., & Yang, M. (2016). Formative feedback as a global facilitator: Impact on intrinsic and extrinsic motivation and positive affect. Kong, S. C., Wong, T.L. & Yang, M., Chow, C. F., & Tse, K. H., Theories and emerging practices in scholarship of learning and teaching in higher education in a digital technology era (1-27). Singapore: Springer.
- Lam, B. H. (2016) Constructing assessment strategies. Kong, S. C., Wong, T.L. & Yang, M., Chow, C. F., & Tse, K. H., Theories and emerging practices in scholarship of learning and teaching in higher education in a digital technology era (1-25). Singapore: Springer.

‘Positive emotions’ (PEs) is incorporated, it refers to emotions such as joy, contentment and happiness signal the absence of danger, hence safety for the individual to explore the surroundings (Fredrickson, 1998)

PEs are known to facilitate curiosity and receptiveness to novel information (Silvia, 2008) and promote persistence in challenging tasks (Sansone & Smith, 2000).

Moreover, it has been consistently shown that students who experience positive emotions in their learning tend to be more engaged, and achieve higher (Goetz, Frenzel, Pekrun, Hall & Ludtke, 2007).

FFB strategies were designed to see how they impact students’ overall learning. It refers to a state where an individual tends to engage in ‘approach behaviors’ (Davidson, 1993), a set of behaviors associated with learning and opportunities.

‘FORMATIVE FEEDBACK TO ENHANCE STUDENT LEARNING’ (A TDG)

~QUANTITATIVE FINDINGS~

Participants:

127 students attending courses on teacher education. 79 females (62.2%) and 48 males (37.8%), and the mean age was 21.5 (SD = 2.44). The vast majority (over 95%) were ethnical Chinese.

A quasi-experiment to investigate the impacts of theoretically derived FF practices on students' extrinsic and intrinsic motivation and their positive emotions experienced during the courses in which the practices were put forth.

A Questionnaire comprised measures of Extrinsic and Intrinsic Motivations to attend the courses, plus the Positive Affect students experienced over the past few weeks. It was administered 2 times; before the course started and when the course completed.

The findings suggested that FF leads to increases in IM to attend the courses and students' overall positive emotions.

It also exerts a 'protecting' effect on their EM to attend the courses.

DESIGN OF FORMATIVE FEEDBACK STRATEGIES

Strategies	Justification and Description	Examples of Practice
Setting study goals	<p>Students were asked to put down their five study goals in priority order on a worksheet given at the course's beginning. This method is underpinned by the concept of feedback (Yang & Carless, 2013; Carless et al. 2011). Humans use discrepancies between goals and outcome feedback as the basis of evaluation of selves. These evaluations, in turn, affect their effort (Earley, 1988). Setting goals, thus, becomes the first step of motivating students to learn.</p>	<ul style="list-style-type: none"> One student responded that her key goal of learning is to 'get well-prepared to be a professional English teacher by knowing more about Hong Kong curriculum'. http://www.ied.edu.hk/aiclass/FFS/1-Study%20Goal.pdf
Students' self-reflection of the intended learning outcomes	<p>Students received a self assessment tool via email after they had completed lessons (usually one or two) of the same theme. They were provided with the lessons' CLO for self- reflecting the level of achievements they should be able to achieve, by a 4-point scale. The overall self reflection of outcomes will be discussed and followed up by the instructor (either in classes or in moodle). https://docs.google.com/forms/d/e/1FAIpQLScOpoin-0IkMkVtldDzY82ibRW7P7pUCtmcTMmrGB079Xx1ug/viewform</p> <p>The ideas from feedback suggested that students should be constantly urged to evaluate their own progress on learning goals (Hattie & Timperley, 2007). Students need constant information on their progress towards learning goals, as they base their self-evaluations on discrepancies between the goals and their current level. Discrepancies motivate effort.</p>	<ul style="list-style-type: none"> One of the intended learning outcomes that students responded for a lesson on 'formative assessment', is "After you studied this course, how well you think you are able to describe 'formative assessment'"? According to the response rate, it was noted that this item was reported an average of 3.51, which suggests that students were all confident that they can master the general knowledge on the theme they learned in a class

DESIGN OF FORMATIVE FEEDBACK STRATEGIES

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Teacher comments on in-process draft	<p>The teacher gave comments on draft assignments in progress. Students could submit voluntarily in a limited number of words, for the interim and final written assignments. The main purpose is to help students troubleshoot their own performance and self-correct.</p> <p>Constant information to students about their progress towards their goals could serve to prompt efforts to close the ‘gap’ between the goal and the current level.</p> <p>Positive feedback (praise for high achievers and encouragement for low achievers) from teacher could serve to give reinforcements to the students for working hard, and promote higher motivation to learn (Carless et al. 2011).</p> <p>Error Analysis : share with students the results - tautology, superficial and abstract, illogic comments, emotional comments, over simplified statements, and over generalized statements; and some writing techniques</p>	<ul style="list-style-type: none"> • In writing a topic on “What will be the constraints of introducing Formative Assessment in schools in Hong Kong?”. A student submitted a draft idea through email to the teacher, and teacher gave comments to scaffold the process of coming up with a more thoroughly elaborated idea. Below is a direct extract from the email exchange between the student and the teacher, the underlined is the teacher’s comment: • The student wrote: Formative assessment can be conducted by formal and informal measures, teachers need to design or plan the assessment and prepare of them, and hence their workload will increase. • The teacher remarked: Workload is the issue and the constraints come from not workload itself, this meaningful idea formative assessment is encouraged, however, teacher may need support so that they can be done well in practice – then you may mention briefly what you need in more specific terms, if not, teacher could be overloaded and becomes a barrier of change in reality.
Verbal feedback on group tasks outputs	<p>The teachers gave verbal feedbacks on their students’ ideas and outputs during in-class group tasks, such as in-class discussion.</p> <p>Using Dialogic Approach of feedback: Interactive conversations and discussions“; all dialogue to support learning in both formal and informal situation” (Askew and Lodge, 2000).</p> <p>The method is based on scaffolding (Cole, 2006), which refers to the process by which the students are led to start with more helps and supports, and then gradually move on to work on the problems on their own (Graesser, McNamara, & VanLehn, 2005).</p> <p>Teachers’ verbal feedback serve to provide information related to the students’ current levels and probes for answers to in-class questions. The teachers constantly prompted students to elaborate on their answers. In-class discussions were also used to provide peer scaffolding by the more skilled students to the less skilled ones, intending to produce a FF culture.</p>	<p>Sample Lesson Extract A: A teacher and her students were discussing the heavy workload of current Hong Kong teachers</p> <p>Sample Lesson Extract B: The students were asked to draw a picture to represent feedback. Their pictures have been gathered and the teachers have prompted them to explain what they have drawn.</p> <p>Sample Lesson Extract C: Dialogical feedback</p>

Artefacts:

REFLECTIONS:

The role teacher plays in the process of introducing FF is crucial.

As a Nurturer

With reference to Positive Affect, the individualized nature of FF means that lessons would be geared towards helping students fulfil their own study goals, instead of making them abide by arbitrary standards.

Also, the very essence of FF requires teachers to develop a certain level of understanding of their students as individuals with differing needs, in order to give individualized feedbacks.

The tutor wanted to offer the support to remove the barriers of learning for some students, especially those who need individual support.

This can urge teachers to become inclined to form emotionally close relationships with students, as such relationships are known to be essential (e.g., Valkenburg & Peter, 2007).

As a Moral Agent

While students were expected to be self-regulate in their learning, the uptake of feedback and follow up of tutors' feedback must be explicitly communicated and introduced to students as a requirement and their take;

Students' learning attitude and study approach determine how they seek support in the FF process;

Students will become very easily rely on teachers if continuous FF will be given/ given too readily; e.g. students may want to take as much as they could from the strengthened feedback mechanism, they approached teacher with questions that they should tackle on their own, such as comprehending assignment instruction, searching a particular reference title etc.

Teachers, in teaching, creates a 'lived space' for students, and shapes the outcome space for students. The feedback strategies that produced positive learning to students needed to be supported by a class structure teachers create.

Providing students with the feedbacks that involve all the first three levels, but are devoid of emotional support (e.g., the teacher not telling the students that he/she is proud of them) actually crippled the students' engagement and effort.

The building of the classroom structure is suggested as crucial (a collaboration between teacher and students, within students in groups and as a class). Being able to consider the types of feedback to be used in a particular process is crucial

This kind of techniques is worthy of more attention as the teacher playing the role of a nurturer and at the same time they have to indicate the extent to which the feedback can be catered, in order to help students to become a self-regulated learner. This is to avoid the 'punitive effect' (MacDonald, 1974) of making innovations

Most crucially, positive emotion is global: in a positive emotion, the individual will show approach behaviors towards activities around him/her as a whole.

FUTURE RESEARCH

There has been relatively little literature about the use of formative feedback strategies, it can be more useful if Not much has been reported from the literature about what factors may influence students' behaviour of actively seeking feedbacks from teachers.

If feedback is aimed at changing students and developing their self-regulated learning, understanding of student behaviour and the attitude of different students in perceiving the feedback mechanism can be sought.

Hattie (2009) reviewed the findings from over 150 studies and investigated the effects of various educational intervention on outcomes and the average effect of feedback was $d=.79$, placing it at the top ten factors that have the most influence on learning. FF is regarded as one of the traits of expert teaching. Feedback strategies used by expert teachers has been emerged as a clear direction of this field of study.

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