Different forms of assessment for transferring students' ownership of learning assessment and developing their skills

Thai Thi Minh

Department of Resource Economics and Food policy, University of Copenhagen

Introduction

Assessment has been established as the most important skills for students' effective learning and for future professional development and lifelong learning (e.g. Sluijsmans et al. (1998), Dochy et al. (1999), Taras (2001, 2003), Amo & Jareno (2011)). When aiming for developing student assessment and learning skills, assessment should be a central element of the learning process in which students need to demonstrate their learning outcomes through the presentation of material appropriate to the task set, and to reflect upon their progress and utilisation of information to make individual judgements on the need for additional effort (Fallows & Chandramohan 2001). In this sense, it is an assessment for learning which is referred as a process in which teacher and students recognize and response to student learning during that learning (Willis 2007, 2011, Cowie 2012). Assessment for learning requires the use of different forms of formative assessment to obtain information about the students' learning, to know how to help the students to improve their learning and to develop their learning skill for the long-life learning (Lopez-Pastor et al. 2013). Among different forms of assessment, self-, peer-, and co-assessments are popular forms that have been intensively used in the high education setting.

There has been a massive work done in using and analysing role of self-, peer-, and co-assessments in creating an active learning environment, assisting students' achievement of learning outcomes, developing students' assessment skill, improving students' writing performance, (eg. Sluijsmans et al. (1998), Lindblom-ylanne et al. (2006), Esfandiari & Myford (2013)).

It is generally argued that the most difficult aspect of self-, peer- and co-assessment is to determine the criteria and instructions for students' assessment as:

> *'Criteria are the basis of evaluating student progress; they identify the critical aspects of a performance or a product that describe in specific terms what is involved in meeting the learning outcomes' (Sluijsmans et al. 1998, pp. 315).*

> *'The specific criteria and good instructions for students seemed to enhance the accuracy of self- and peer-assessment' (Lindblom-ylanne et al. 2006, pp. 59).*

In my own teaching, I have constantly observed that students have been reluctant to assessing their own demonstration of the on-going learning process. Consequently, I have gradually taken over the students' assessment ownership. Hence, it leads to a tendency of students escaping from any forms of assessment, assuming that assessment is the teacher's tasks and responsibilities. Analysis of the formation of student assessment's activities/sections in the course I am teaching has shown that criteria of and instruction for these assessment do matter for the students' autonomy in the assessment process. In other words, the current forms of non-framing assessment criteria and instruction that I am using now do matter for the students giving up their ownership of learning assessment (OLA).

This project aimed to (1) analyse how different forms of assessment and instructions help to transfer OLA back to students and (2) identify what skill can be achieved when using different forms of assessment.

Project's context and design

he project was set in the Agricultural Value Chains in Developing countries course held in April-June 2013 with participation of 31 MSc. students from agriculture-related MSc. programs in University of Copenhagen and other Universities in Denmark. The course was designed with two parts: lecture and practice. In the *lecture* part, students learn value chain-related theories through the lectures, and reflect the theories through group work and case studies. In the *practical* part, students applied these theories to their group project for developing their skills and competences on analysing the selected value chain and communicating the results. A common situation in

the group project is "*one or few work for all*" and then the group project might not fulfil its role in students' learning. Students experiencing this issue have showed less motivation to take part in such type of activity. To avoid this as well as to motivate students' active participation in the practical part, each student in the course had to write an individual assignment documenting results from the group project and reflecting on the process the group had been through. The individual assignment was graded and accounted for 40% of final grade. Moreover, the individual assignment exercise is training for the students' in preparing for the final exam. The 12 hours open-booked exam was designed for giving the students' opportunities to strengthen further the knowledge, skills and competences developed throughout the course as well as demonstrate their ability to develop and use a case-specific analysis framework for the value chain analysis.

Under this course's setting, student's learning assessment was conducted in various activities/sections in the practical part of conducting group project (GP) on "analysing a selected value chain for developing an intervention strategy". The GP was a step-wise process of 1) forming group and selection of an agricultural value chain in developing country for analysis, 2) developing and presenting initial design of GP, 3) analysing the selected value chain, 4) presenting the GP initial results, and 5) presenting final results. Experiment on using different forms, criteria and instructions of students' learning assessment was held in step 2, 4 and 5 in that students assessed their work on the group project and their learning achievement throughout the course as presented in table 24.1.

As presented in table 24.1, three forms of assessment were used in the experiment. The *first* form is co-assessment in which teacher took the leading role in developing assessment criteria and managing the oral feedback; assessment criteria was general and unclear objective towards the student's learning propose; and assessment's instrument was organized in the collective manner and under the format of one-way-communication oral feedback. The *second* form was peer-assessment in which teacher set a general frame of the assessment's aims, tasks that student need to do, and timeframe for these tasks; the students proactively set own-criteria for assessment either collectively (in groups of 4 to 5 students) or individually towards improving their GP results; and assessment's instrument was organized in the interactive manners with plenary discussion based on the group-based written feedbacks and issues raised during the presentation and discussion. The *third* form was self-assessment in which teacher set specific assessment criteria that help the students reflects on knowledge, skill and competence that

Assessment's order & form	Context for assessment	Criteria	Instructions/instrument
1. Co-assessment	*1st event*: 7 group presentations of project design in 105 minutes	Criteria are set by teacher: • What are unclear?	Oral feedback
	2nd event: 6 group presentations of initial group project results in 150 minutes	Criteria are set by teacher: • What are unclear? • What are interesting? • What need more work/focus?	Oral feedback
2. Peer-assessment	*1st event*: 7 written group presentation about final group project results	Criteria are set by each group toward to improve the group project performance/presentation	Group-peer assessment with discussion and written feedback
	2nd event: 7 oral group presentation about final group project results in 210 minutes	Criteria are set by each student toward to improve the individual assignment performance	Plenary discussion after group presentation
3. Self-assessment	*1st event:* 1 hour group-reflection on the learning process during the course	Criteria are set by teacher: • What do you learning from the course? • What do you achieved from the course?	Delphi with cross-checking among students participants
	2nd event: Individual reflection on group project and individual assignment (of out the group project)	Criteria are set by teacher: • What are the knowledge, skills, and competences that students have obtained that are important for their future professional life? • Could the group project be organized in a way that would help you obtained the knowledge/skills/ competences better? • Should teachers organize the group project differently in the future?	Self-reflection with the delivery of a written essay

Table 24.1. Design of the experiment.

they had learnt from the course as well as a critical assessment to their own learning process; assessment's instrument was lied in the students' individual reflection on their achievement and learning.

Data was collected during different times of learning assessment under the form of 1) notes taking during the oral feedback and plenary discussion; 2) group peer-review's written feedback; 3) individual self-reflection essay, and 4) notes collected from group-reflection using Delphi method. The analysis and interpretation was conducted based on framework presented in the figure 24.1.

Results

24.0.1 Relationship between assessment forms and students' OLA

In my observation, the students' OLA is reflected through their attitude towards and their participation in the feedback event as well as the rele-
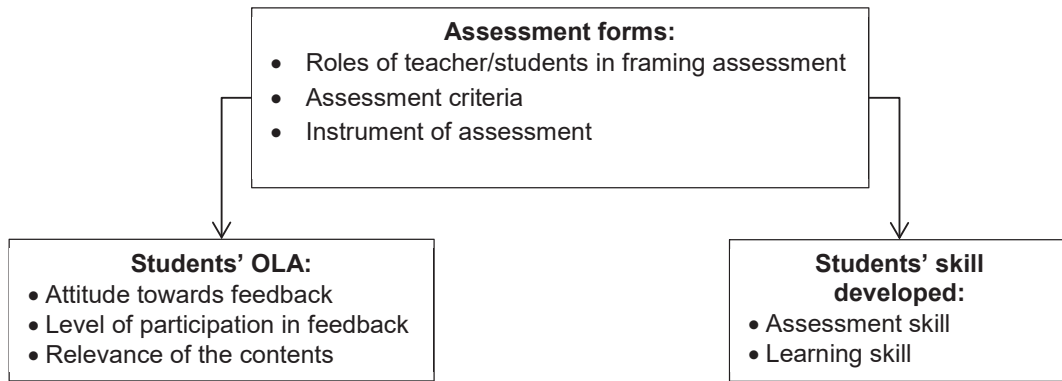
```
┌──────────────────────────────────────────────────┐
│                 Assessment forms:                  │
│   •  Roles of teacher/students in framing assessment │
│   •  Assessment criteria                           │
│   •  Instrument of assessment                      │
└──────────────────────────────────────────────────┘
```

┌─────────────────────────────────┐   ┌─────────────────────────────────┐
│   Students' OLA: │   │   Students' skill   │
│ • Attitude towards feedback   │   │   developed: │
│ • Level of participation in feedback │   │ • Assessment skill   │
│ • Relevance of the contents   │   │ • Learning skill   │
└─────────────────────────────────┘   └─────────────────────────────────┘

Fig. 24.1. Framework for analysing relationships between assessment forms, students' OLA and skill developed.

vance of the feedback's contents that they delivered. In the setting of co-assessment events, the students who had to give feedback showed their unresponsive attitude to the feedback section. In the first co-assessment event, there were no comment and feedback from the student audients for presentation; only four questions were raised from the audients that mainly classified the technical information in related to value-chain-related terminologies. In the second co-assessment event, there were 8 questions raised for classification of information related to specific value chain presented and fours comments for further works to improve the GP results. Interestingly, these comments were given to two presentations that spontaneously specifically asked for at the beginning of their presentation. These results indicated a very passive participation of the students in the feedback events as well as irrelevance of the feedback contents. It could be firstly because of unclear feedback criteria and tasks that had gave to them and they really did not have time to think and to prepare for their feedbacks. Secondly, students were not given enough time to think about feedbacks. These hindered the students' participation as they tended to assume that it is the teacher's responsibility to give feedback to students. Consequently, the students who received the feedback showed their carelessness about comments they got from the student audients. In the setting of peer-assessment events, the students showed responsive attitude and active participation level, from both sides of giving and receiving feedbacks. The feedback-giving-students delivered their "group-based review reports" on time and with very clear themes on positive and negative points of the group presentation that they have to comment on. Although the format and the way of communication

their feedback messages varied from reports to reports, most of the reports showed a comprehensive level of analysis what they get from the given presentation and thoughtful construction of the feedbacks as showed in some examples (taken from one feedback report) of feedbacks addressing very specific and micro issues (see example 1), others with very complicated and sophisticated issues at the overall level (see example 2), while some feedbacks highlighting complicated issues in the specific slide in the presentation (see example 3).

> *Example 1: "Slide 13: nice with prices in kg/DKK; slide 20: seem very smart. What does the number present?"*

> *Example 2: "institutional analysis or analysis of enabling environment you did should be a more focus on this area, either both or just one of them; use one of the tools from lectures; more details on specific policies, organisations and institutions for Madagascar and the vanilla production".*

> *Example 3: "The difference between institutional arrangements and institutional environment doesn't really become clear from slide no.15 (is it national vs. private 'policies')? If so, Food safety standards and financing policies can be both we think".*

Clearly, almost all feedbacks were highly relevant as the feedback-receiving students highlighted what comments they incorporated for improving their presentation and what comments they did not and the reasons for that. Several groups of students mentioned that as they was informed that another group will make review and commenting on their presentations, they had prepared presentations thoughtfully as they do not want to get many negative feedbacks. Thus, clear tasks, specific constructive criteria towards improving the GP performance and the high level of interaction in the feedback process have helped to develop responsive attitude and actions, and active participation of both giving and receiving students, which in turn, clearly positively impact the relevance of comments as well as the institutionalization of these comments.

In the setting of self-assessment, the students showed high self-motivation and self-criticism in both assessments events of using Delphi method and writing essay. They showed their interests in, ownership to, and competence in making critical assessment to their learning achievement and learning behaviours. For example, in the first event, the students critically pointed out and discussed about their initial opposed attitude and reactions to the deep

learning approach had been applied and how these were changed during the course as one student stated:

> "At the beginning, even when going through the half of the course, I was very irritated about exercises, group discussions, brainstorming, etc. I talked with other students and they also agreed with me that these activities are annoying as we do not get use to them before. However, when moving to the second half of the course, I realized that these activities did help a lot in digesting information and tools obtained in the course. At the end, I really like this way of teaching, especially when we did the brainstorming section on dynamics of value chain analysis and how to apply it in the reality last week."

Discussing on this point, the students agreed that it was the common 'sense' occurred in this class. This reflection was also highlighted by a number of students in their self-assessment essays as stated in one example below:

> "During the course I mainly struggled with understanding the whole idea of the analysis framework. As we moved towards the end of the course all the information presented kind of 'clicked' together and I gained overall understanding of different topics regarding value chain analysis and how they are related. I realize now that sometimes you have to be patient when learning and take one step at a time."

In the self-assessment setting, the specification level of assessment criteria did not matter to the students' positive attitude and actions towards evaluation of their learning achievement and behaviours. The role of teacher and the type of instrument, however, determine the level of self-evaluation and institutionalization of the students' learning assessment. When teacher took the role of a listener and facilitator (not a judge), and when an opened, safe and trustful environment was created, the students were more motivated and critics to their self-learning assessment.

Relationships between assessment forms and students' skill developed

When looking at relationships between assessment forms and students' skill developed, I focused on what skills the students developed under what types of criteria and instrument used in different assessment forms as summarized in table 24.2.

Table 24.2 shows that types of assessment criteria and instrument closely connect to types of skill that the students developed. The students

Criteria and instrument	Assessment and learning skill
General criteria; unplanned instrument (i.e.: 1st and 2nd events in co-assessment)	• Non skill was observed. Only raising the students' awareness about learning assessment
Constructive criteria for improving GP performance; interactive peer-review (i.e.: 1st and 2nd events in peer-assessment)	• Framing the assessment criteria for having constructive comments • Asking for comments • Analysing the relevance of comments • Making decision on what are relevant and what are not • Formulating an effective feedback report with mentioning both good and weak points • Constructing clear messages in the comments • Effective communicating the comments to receivers • Developing ability to learn in the interactive teaching-leaning environment
General evaluative criteria for assessment of the students' learning; collective reflection (i.e.: 1st event in self-assessment)	• Reflecting on learning behaviour and attitude • Effective communicating and discussing messages in the self-reflection
General evaluative criteria for assessment of the students' learning; self-reflection (i.e.: 2nd event in self-assessment)	• Reflecting on own learning behaviour and attitude • Elaborating learning achievement • Analysing relationships between course structure, teaching-learning methods applied, students' activities and learning achievements and skill developed

Table 24.2. Types of criteria and instrument used and the students' skill developed.

developed more practical skills such as communication, questioning, and analysing skills when a set of constructive criteria for improving GP performance and interaction-oriented instrument was employed. Meanwhile, using general evaluative criteria to evaluate the learning achievement, the students developed more 'hard' skill that relates to the specific task of reflection of their own learning achievement. For achieving the course's learning outcomes, constructive criteria should be emphasized with the peer-assessment format.

24.1 Reflections and concluding remarks

In general, the students' OLA had changed from no ownership in the co-assessment, to collective ownership in the peer-assessment, and to self-motivation in the self-assessment. These changes are strongly influenced by specification level and orientation of assessment criteria as well as role of teacher and nature of the environment that was created for the assessment. Orientation of assessment criteria and nature of the feedback environment also shape the nature of skills developed by the students. For the students' achievement of learning outcomes in the course, the more

constructive criteria for improving student activities' performance and results should be emphasized. Framing assessment then can use the principle of students' self-assessment for learning rather than the teachers' responsibility-oriented assessment of learning.

Reflecting my own observation and analysis throughout the experiment showed importance and necessary to transfer OLA from teacher to the students. This transfer can be done through framing the assessment section based on the constructive assessment (or learning-centred assessment and assessment for learning) principles (Desrosiers et al. 1997, Lopez-Pastor et al. 2013). With assessment for learning, students have opportunities to ask for and get feedbacks on issues that they think that are important for improving their learning. It can fit to dual purposes of: 1) increasing the students' motivation, mastery and autonomy as learners to develop their capacity to monitor and plan their own learning progress, and 2) improving student learning rather than summative grading and in the ownership of the learning where the student voice is heard in judging quality.