

SEFT-EVALUATION SKILLS: WHY AND HOW SHOULD WE DEVELOP THEM?



LISE ST-PIERRE
Professor
Université de Sherbrooke
Performa

Over the years, it became clear to me that it was particularly important to support the development of my student's self-evaluation skills. This preoccupation took on even more importance as I deepened my understanding of metacognition and made the link between the development of competency and intellectual autonomy. In fact, various experiences have convinced me that these three themes shed light on three complementary facets of the same dimension.

Self-evaluation will be presented in a formative perspective of competency development and personal development rather than as a tool for certification. This article will focus on the training required for a student to self-evaluate and judge himself; essential conditions if the student is to give meaning to the evaluation and judgment rendered by the professor and, consequently, benefit from them in the progression of his learning. This focus on personal development removes certain constraints inherent to the development of sophisticated instrumentation for a valid evaluation and allows for the creation of educational activities.

This text¹ has three sections organized around the following questions. What is self-evaluation? Why should students learn to self-evaluate? How should we support the development of self-evaluation skills? This last section will deal with instrumentation and approaches.

WHAT IS SELF-EVALUATION?

In order to better understand the concept of self-evaluation, it is important to define the concepts of evaluation and "assessment". There are many definitions of evaluation in the educational field. Two of these have captured our attention: "Qualitative and quantitative *judgment*² rendered on the *value* of a learning *product* or *process*" (Lafortune, St-Pierre, 1996, 1998); and "*comparison* of observable characteristics to *standards* that are based on precise *criteria*". (Legendre, 1993).

The first definition emphasizes measurements (judgment, value, product, process), while the second brings out the importance of criteria (comparison, norms, criteria). Both concepts are generally based on a limited number of observations. Moreover, the "assessment" concept refers to an evaluation where great importance is placed on the professors' judgment relative to competency development and the learning progress. The measurement, or preferably the collection of information, is ongoing and multidimensional. A more precise understanding of competencies and experimentation with learning strategies in developing these skills, has brought the shortcomings of our evaluation concepts to light. In a learning paradigm, educational and evaluation approaches recognize the authenticity, global nature

and multiplicity of observations, the methods of gathering information, continuity and support, the progressive aspect of developing competencies, the interactivity of descriptive approaches, the integration of evaluation in learning and the multiplicity of the dimensions in question (Scallon, 2004).

The student must be able to assess his progress, identify his strengths and areas that still require work; determine the remedial path while focusing equally on production and approaches. In an assessment perspective, evaluation practices used for certification share characteristics with formative evaluation practices, including self-evaluation.

Unlike the concepts of self-test, self-exam and self-correction, self-evaluation is a reflective approach, a valuation, a well-argued judgment. According to Scallon (2004), it is "a rating scale, a critical reflection on the value of certain ideas, work, situations, approaches, educational developments in qualitative terms and based on criteria identified by the student himself". Legendre (1993) specifies two inherent conditions for self-evaluation: One, a reference to pre-determined objectives and criteria"; and two, the capacity of the subject to make the most objective judgment possible on himself".

Self-evaluation is therefore primarily a qualitative approach, a critical reflection. It involves the reflective review of the approach, result, activity, production, etc. It ends in a snapshot for the student of

¹ Adaptation of a text prepared for *Actes du colloque* of the AQPC, June 2004.

² In this quotation and the following one, the italics are used by the author of the article.



his progress based on these observations. Scallon (2004) points out that the development of self-evaluation is an important dimension in education. He believes self-evaluation is a skill to be acquired. In other words, something to be learned, a habit to be nurtured and knowledge that should be integrated.

► WHY SHOULD STUDENTS SELF-EVALUATE?

Self-evaluation practices have been an integral part of learning strategies for some time now. Who hasn't checked his answers to an exam against the answer sheet or corrected his work while the teacher was "correcting on the board", or corrected his exercises with a friend, etc.? These practices were implemented to diversify classroom activities, reduce the burden of corrections, decrease individual supervision and develop autonomy with regard to personal study.

Within the context of learning acquired in the development of complex and global competencies, self-evaluation takes on a totally different dimension. As a supplement to Scallon's definition, it identifies skill and behaviour development along three distinct axes: Intellectual autonomy, metacognition and competency development.

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Therefore, the practice of self-evaluation becomes an educational goal rather than a class activity. By targeting this goal, we recognize the formative and educative role of evaluation; we promote progressive development, the assumption of responsibility and intellectual autonomy. In the same spirit, we have created teaching/learning situations specifically designed to reach this objective.

SELF-EVALUATION, A DIMENSION OF AUTONOMY

At the collegial level, an autonomous student pursues personal, precise and hierarchical goals, uses a vast array of learning strategies, practices critical thinking to reach his goals, is able to identify his progress and shortcomings with regard to his choices, and assume the consequences (St-Pierre, 2004). Being able to identify progress and regression is directly related to the skill and use of self-evaluation.

SELF-EVALUATION, A METACOGNITIVE SKILL

During a cognitive learning activity or problem resolution, there is interaction between two people: The one carrying out the cognitive operation and the one who is monitoring the mental activity. This monitoring activity corresponds to metacognition, and researchers generally recognize two components in its constitution: Metacognitive knowledge and the management of the cognitive or affective activity (cognition and the affective factors that influence it). This is the declarative aspect of metacognition. The management of mental activity refers to strategies used in order to plan, control and regulate. This is the procedural aspect, the know-how of metacognition (Lafortune, St-Pierre, 1994a, 1994b, 1996, 1998; St-Pierre, 1994). Lafortune and St-Pierre add a third component to the mix, especially when the development of metacognitive skills and habits is targeted: To become aware of one's mental activity and conditions that affect it. This aspect relates to "putting into words", verbalization and reflection on mental activity.

Let us delve further into control and regulation strategies that directly affect self-evaluation and on which the capacity for metacognitive skills rest. The control process is based on the gathering of information, a follow through on thinking and the review of cognitive activities, their status and efficiency. Control strategies allow us to monitor what we do, verify our progress, evaluate compliance of the process and the product with what is expected, judge the relevance of stages reached and of the approach itself. Control is a diagnostic tool, an analysis of the quality of the product and process. Regulation, for its part, is an intervention that follows the diagnosis, or a judgment resulting from the control activities. It consists either of pursuing the approach, abandoning or modifying it. Control and regulation take place during the task or upon completion. This is very similar to practices in reflective thinking: Reflection during an activity and reflection on an activity. The difference is that metacognition deals with learning and problem resolution, whereas reflective thinking deals with actions performed within a professional practice. They are nevertheless the same type of activities: Observation, verbalization, to describe, compare, explain, re-adjust, analyze, etc. (Lafortune, Deaudelin, 2001).

SELF-EVALUATION, A COMPONENT OF COMPETENCY

A competency is generally defined as complex knowledge to act that calls into play the mobilization of a set of integrated resources (internal and external) for the purpose of identifying and effectively resolving problems in a same family of situations in an autonomous fashion (Scallon, 2004; Tardif, 2003; Roegiers, 2001; Lasnier, 2000; Jonnaert and Vander Borgh, 1999; Pôle de l'Est, 1996). With collegial reform, most



programs are now defined by competencies and incorporate self-evaluation, to varying degrees. In some cases, evaluation is a general program goal; in others, it is part of objectives and standards (what we call “competencies” at collegial level); or included in performance criteria. For example, let us look at the Social Sciences program (300.A0) and the Special Education program (351.A0). The first deals succinctly with this dimension through the competency of the integration activity (O22T). The second incorporates it into objectives and standards, particularly those related to intervention competencies. In this program, numerous performance criteria are used to support and judge the development of the capacity for self-evaluation: The identification of strengths and weaknesses; socio-affective reactions, ways to improve communication skills, quality of the activities, professional integration etc. Lastly, we would like to point out that the development of autonomous reflective and critical thinking, the essence of self-evaluation, is one of the general educational goals targeted in all collegial programs (MEQ, 2000, 2002). The analysis of these general goals, objectives and standards reveals different approaches relative to the objects of evaluation and the ways of performing self-evaluations.

■ SUPPORTING THE DEVELOPMENT OF SELF-EVALUATION SKILLS

There are many possible objects of self-evaluation: The quality of a product, activity, project; the effectiveness of a process or approach; personal characteristics, strengths and weaknesses, behaviour, reactions, capacities, contribution, integration, competency in a specific field, the degree or level of development of this competency, progress, self-sufficiency, the state of personal resources (knowledge, skills, attitudes), the ability to identify and make use of relevant external resources. Scallon (2004) also suggests that students should ultimately evaluate their own self-evaluation ability.

Once these subjects have been identified, two aspects need to be considered in the development of self-evaluation skills: The approach and the tools. On the subject of approach, we can plan steps and interventions, foresee necessary precautions and potential pitfalls. With regard to tools, we can seek inspiration from those in certification; and use those of data-collection tools used in quantitative and qualitative research with particular attention given to the latter; and, strategies for developing metacognition and reflective thinking.

APPROACH STAGES

A complete self-evaluation approach might involve eight stages. Keeping in mind the progressive development of the skill, we can focus our interventions on a specific stage depending on the competency, the level targeted, the maturity of the students and their capacity for metacognitive skills. In my opinion, as in the teaching of any learning strategy, teaching self-evaluation skills should be planned and structured in the same way as all teaching content (St-Pierre, 2002, 2004). Here are the stages:

³ Evaluating one's final production (critical exam on learning process; critical exam on final production).

⁴ 019Q, 019T, 019X, 019Y, 019Z, 01A0 OIA1, OIA2, OIA3, OIA6, OIA7, OIA9, OIAA, OIAB, OIAC.

⁵ Based on past experience, this stage is undoubtedly the most difficult for students and teachers. It demands high-level intellectual capabilities and good emotional maturity. Students need support at this stage; they need examples and models or case studies to analyze.

1. Appropriation of targeted objectives including knowledge, understanding, sharing and personal commitment.
2. Discussion on the nature of tasks and activities favourable to the development and exercise of the desired competency and realization of productions.
3. Analysis of examples to identify qualities, characteristics and demonstrations of a successful product or process.
4. Formulation or appropriation of rating criteria, indicators and scales in support of reflection.
5. Execution of the task with attention paid to quality. (This is the beginning of the actual self-evaluation stage.)
6. Comparison of indicators on a rating scale to the criteria and quality level of a product or process, if necessary.
7. Critical reflection, judgment. (This stage⁵ is of particular importance in the self-evaluation process.)
8. Self-regulation (for example, modifications and different uses).

PEDAGOGICAL INTERVENTIONS

The range of pedagogical interventions that can be devised in support of self-evaluation is limited only by the creativity of the teaching personnel. In terms of educational strategies centered on developing self-evaluation skills, a guiding principle for teacher intervention and course planning would be to allot special time periods and activities specific to developing self-evaluation. By respecting this principle, the following activities can lead to the development of self-evaluation skills insofar as they produce



well-argued critical judgments that are qualitative as often as possible, on the progress of learning, the quality of productions and approaches used:

- Teaching/learning activities relative to the definition and discussion on objectives, tasks and criteria;
- Planning activities, observation, self-observation of professional approaches and interventions, simulated or real;
- Collective discussions on the subject of observations;
- Activities for product and process comparison to each other as well as standards and criteria;
- Validation and confrontation activities; any activity that uses observation grids, rating grids or marking grids;
- Mental and written reflections, individual and collective, on the impact, follow-up, improvements and alternate uses of a product or an intervention, etc.

PITFALLS TO AVOID AND NECESSARY PRECAUTIONS

Several phenomena risk destabilizing learning strategies that target self-evaluation if we do not proceed with caution. Initially, student misunderstanding of objectives, strategies, expected performance (standards) and criteria can result in approaches that are ineffective. Then, disagreement or lack of commitment on their part may result in avoidance behaviour. A feeling of self-efficiency that is either weak, too strong or unrealistic, may lead the student to a biased self-evaluation that goes against the evaluation of his competency by the teacher. On the other hand, tools that are ill-suited,

incomplete or imprecise, can limit the depth and adequateness of student reflection and critical judgment. Assigning a summative rather than a “formative” function to activities used in the development of self-evaluation can also diminish the credibility of the self-evaluation process. Finally, any inconsistencies in the teacher’s values regarding the role and purpose of evaluations and education strategies used can be detected by the students and further hinder their commitment to the approach.

The tools that support the development and practice of self-evaluation can be as varied as the pedagogical interventions themselves.

Certain precautions must be taken for the skill to develop harmoniously and the habit to take root progressively. First of all, it is very important for both students and teachers that the latter clarify their personal goals and values relative to evaluation, self-evaluation, the development of self-sufficiency, competencies and metacognition. It is also important to ensure that the expected approach, criteria, tools etc. are known, understood and shared with the students. It is also recommended to develop a teaching/learning situation for self-evaluation that is thorough, integrated into the course and the teaching/learning content itself. The transition of students from self-evaluation to self-sufficient self-regulation is delicate and requires regressive support that diminishes as the competency of the student increases. Finally, of utmost importance is the function of role model, an example of a person who has integrated self-evaluation into their way of being. To accomplish this, it is important to be thorough, transparent and consistent; to provide descriptive feedback for data in metacognitive reasoning that underlies self-evaluation. It is also important to self-evaluate, to solicit student feedback with regard to the teaching provided and to show how we keep track (or not) of this data, for what reasons and based on what reflections and criteria.

THE TOOLS

The tools that support the development and practice of self-evaluation can be as varied as the pedagogical interventions themselves. They may be simple tools. Complete works on the construction of tools for the collection of quantitative and qualitative data can be found in manuals on research methods. Other works, such as the recent book by Scallon (2004) are dedicated to the evaluation of scholastic learning. Nevertheless, I believe that the most varied and rich selection of tools for the development of metacognition can be found in books dealing with pedagogical interventions and instruments for developing specific self-evaluation skills (Lafortune, St-Pierre, 1994a, 1994b, 1996, 1998; Lafortune, Deaudelin, 2001), and developing reflective thinking (Lafortune, L., Mongeau, P, Pallascio, R., 1998). Under certain conditions, the growing use of portfolios in learning and the evaluation of learning will ensure the development of pedagogical strategies for developing self-evaluation skills. The following paragraphs look briefly at these issues.

The evaluation grid

The first group of tools that come to mind are the rating, evaluation, observation and marking grids; tools inspired by the certification process. A marking grid that allows



students to qualify their production either positively or negatively, with or without a symbol indicating the result, is a first step in the right direction:

Good

Bad

Nevertheless, it is obvious that such a practice does not favour in-depth reflection on criteria, does not allow for evaluating relative progress, does not facilitate the research of clues and means of improvement, nor does it support critical judgment. Ordinal scales of the following type serve many purposes, but none support the development of reflective thinking!

Insufficient

Passing

Very good

OR

Insufficient

Average

Good

Average

Excellent

Qualitative tools with a descriptive scale are promising tools for the evaluation of competencies and they would no doubt also be effective in a formative perspective. They support critical reflection, help in justifying a judgment and encourage progress on the road to improvement. They reveal the criteria and the different levels in which the student may be. In other words, they assure a certain fairness, adapt well to real situations and assign appropriate importance to the teacher's judgment. However, their development can be very laborious. Finally, a descriptive grid implies a number of specific aspects to consider, examples of which can be found in various works (Leroux et Bigras, 2004; Scallon, 2004).

In fact whether singly or in groups, asking questions, verbalizing a reflection orally or in writing, about the way we do things, or rating the way we do things, or arguing in favour of practices, justifying choices, etc. [...] are conducive to the development of the capacity for metacognition and in particular, self-evaluation.

Metacognitive tools and reflective practice

Metacognition has been described as "The cognitive self-awareness of a person prior to taking action in the planning, evaluating, adjustment and validation of their own learning approach" (Lafortune, Deaudelin, 2001, p. 37). To reach this self-awareness we can use methods that go beyond observation grids; methods designed from a teaching strategy rather than a perspective of measurement. There are logbooks, daily journals, metacognitive questioning, metacognitive conversations and group discussions. In fact whether singly or in groups, asking questions, verbalizing a reflection orally or in writing, about the way we do things, or rating the way we do things, or arguing in favour of practices, justifying choices, etc. (Lafortune, St-Pierre, 1994a, 1994b, 1996, 1998; Lafortune, Deaudelin, 2001) are conducive to the development of the capacity for metacognition and in particular, self-evaluation.

Reflective thinking tools could also be used more advantageously in the development of self-evaluation. The discussion of cases—simulated, real or experienced—in groups, discussions in dyads on interventions, the analysis of an approach or production, are favourable opportunities for developing the critical judgment needed in self-evaluation. A very simple way of encouraging reflection and stimulating discussions consists of using sentences that require completion or questions such as: "What was I trying to do? What did I do during the practical exercise? Why did I do that? What conditions or components of the context helped or hindered the intervention or the realization of a production?", and others.

The learning portfolio

The question of portfolio is explored in Scallon's latest work (2004), where it is the subject of an entire chapter. Let us review certain ideas put forth there. To support the development of self-evaluation skills, the portfolio becomes a formative tool if the student:

- Selects the work himself and justifies his selection;
- Draws the recipient's attention to a given aspect;
- Describes strong points and those in need of improvement;
- Selects contrasting attempts that display his progress;
- Describes or summarizes the learning accomplished;
- Renders an accurate judgment on his own progress. (Scallon, 2004)



CONCLUSION

To summarize, self-evaluation within the formative perspective of competency development and the student's personal development, is a skill that needs to be identified, examined and refined. This practice resembles suggestions found in the writings on metacognition and reflective thinking, as well as performance criteria mentioned in a number of college study programs.

We must weigh the behaviour of students who are intellectually autonomous (St-Pierre, 2004). Whatever approach we use in developing the capacity for self-evaluation, whether we look at it from the perspective of competency development, metacognitive development or intellectual autonomy, teaching this skill at college level is an essential concern. ●

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Lise ST-PIERRE has many years of experience as a Math Teacher and an Educational Advisor at Cégep de Baie-Comeau. She is also a key resource person with PERFORMA. Lise is presently a professor in the Faculty of Education and a member of CERES (Centre d'études et de recherche en enseignement supérieur) at Université de Sherbrooke. Her research and teaching activities focus on training teachers and professionals in collegial pedagogy.

lise.st-pierre@usherbrooke.ca