Coaching in Higher Education
– Increase student’s insight and competence for planning to reach desired goals

Annika Henningsson, MSc, University Lecturer,
anna.henningsson@angstrom.uu.se
Uppsala University - Campus Gotland
Department of Engineering Sciences,
Division of Quality Sciences
SE-621 67 Visby, Sweden

Annika Henningsson is university lecturer in Quality Management. She earned her M.Sc. in Management Business System at Mid Sweden University. Her current interests are Quality Management and Coaching designed for development processes. Annika has a Black Belt in Six Sigma.

Maria Fredriksson – PhD, Associate Professor,
maria.fredriksson@angstrom.uu.se
Uppsala University – Campus Gotland
Department of Engineering Sciences
Division of Quality Sciences
SE-621 67 Visby, Sweden

Maria Fredriksson is associate professor in Quality Management. She earned her M.Sc. in Political and Social Sciences and her Ph.D. in Quality Management at Luleå University of Technology. Her current interests are Quality Management, Quality in Higher Education and Sustainable Management.

Abstract

Background - In today’s fragmented world, university students often experience increasing pressure with studies, together with a student’s own increased demands on life. The circumstances for today’s university students are somewhat different from earlier generations, which generates needs for different pedagogics and teaching. Based on a study by Henningsson and Fredriksson (2018), planning is one essential part of deep learning, and plan and realize the plans seems to be difficult. Based on a questionnaire with free answers this paper will show that the students need to be educated in what and how to plan and realization of their plans. Learning repertoire in coaching model - long term, means that the student work with reflection and evaluation. These aspects can be linked to students’ progress with the help of the portfolio. The skill of planning is linked to the learning repertoire to reach desired goals.
**Purpose** – This paper aims to investigate if, what and how students plan, i.e., their self-management, in order to give the students insights in their own developing process.

**Methodology/Approach:** This paper is based on a combination of literature study and a survey, in order to study students ways of working to achieve desired goals.

**Findings** – Students are involving in many issues and do not always focus on their education programme. Desirable goals differ between students, and how to reach them. Planning to reach the goals also differs. One conclusion that can be highlighted, is the difficulties or lack of skills to plan, especially when it comes to *how*. In this paper a suggestion to amplify the PDSA-cycle in the portfolio is made.

**Practical Implications** - The major implication of the study is to help students in their personal progress.

**Value of the paper** – The study makes a contribution to the area of Quality Management in Higher Education and the toolbox university students.

**Keywords:** Coaching, Personal Learning, Quality in Higher Education, Toolbox for university students.

**Article classification:** Research paper.
Background

Today’s fragmented world, together with a student’s own increased demands on life while undergoing an education, often generates stress for the individual. The circumstances for today’s university students are somewhat different from earlier generations, which generates needs for different pedagogics and teaching. How individuals are learning varies. (Elmgren & Henriksson, 2018). Also, the changing prerequisites for individuals’ learning and the environment in which the student acts generates the requiring of new ways to meet current and future generations of university students’ need. Henningsson and Fredriksson (2018) discuss an integration of a coaching model from Henningsson and Wixenius (2016), and a portfolio from Snyder (2016). The integrated model Henningsson and Fredriksson, (2018) discusses includes a number of questions, which means that the students work with their own development and actively: formulates goal for their own development; plans the performance to reach the goal; and indeed follow the plans and do the work and analyze the results.

Based on the study conducted by Henningsson and Fredriksson (2018) the answers can be categorized and emphasized, e.g., reflection, analysis, planning and evaluate. These categorized words can be linked to student’s learning repertoire, and to see the coaching model in the long run, which means that the student work with reflection and evaluation. (Berg, 2012) Further on, these aspects can be connected the student’s development by using a portfolio, (Snyder, 2016). Using portfolio together with the questions from the coaching model can be seen as a tool for deep learning, since it contains reflection and insight. The ability to plan is also connected to learning repertoire in order to reach goals. One conclusion from Henningsson and Fredriksson (2018) is that planning seems to be difficult and the students need to be educated in how to set goals and plan how to reach them. Hence, the questions that will be answered in this paper are:

1. How do the student work with the planning of personal learning?
   i. How do the students divide their time during the week?
   ii. What is a desirable goal?
   iii. How do you work with setting new goals for your progress?
   iv. How do you work with reflections upon your development?
   v. How do you work with your weekly planning in order to carry through your studies?
   vi. How do the students value their studies?
   vii. Do you think your planning is helping you to reach your goals?

To work with continuous improvement and plan, do study and act is the leading theme in Quality Management. In this paper, the authors combine Quality Management with Pedagogy. Hence, the section about theory will deal with methods from Quality Management and the portfolio, coaching and learning activities from Pedagogy.

Theoretical Frame of Reference

Here will shortly the theory of PDSA-cycle from Quality Management be described, since it will be used in the solutions in this paper. One important ingredient in QM is the pro-active thinking, which will be emphasized during the work. Further on, in this paper the authors make no difference between Total Quality Management (TQM) and Quality Management
Quality Management (QM) is a discipline of its own that originates from production quality and the quality of a process as parts of other disciplines, QM includes also, such concepts as quality of life (Dale et al., 2001). According to Dale (1999), QM is both a philosophy and a set of guiding principles for managing an organization. These principles and the ways of working with improvements are not limited to work places, but can also be used for improving life for individuals. (Brown et al., 1994; and Stratton, 1997). QM is about prevent and work pro-active, change and improve, not control and repair. One method that can be used is the improvement cycle, also called the PDSA-cycle.

The PDSA-cycle, illustrated by Figure 1, is a form of flow diagram for learning and for improvement of a product or a process that describes a methodology for structuring improvement work. The first step is “Plan”, when someone has an idea or suggestion for a change, i.e., for improving a product or a process. Deming (1994)

At the planning stage, different management tools can be used. By working with these tools, participants can analyse what needs to be done and how it should be done.

Figure 1. The PDSA cycle is a flow diagram for learning and for improvement of a product or a process. From Deming (1994).

The next step is “Do”. At this stage a person or group should be chosen, with the responsibility for the plans to be followed. The third step, “Study”, is implemented when it is time to study and analyse the results. Here it is important to study both improvements and failures, and to document what went well and to establish a new, improved procedure for the process. The last step in the cycle is “Act”. At this stage one adopts, or adjusts to, the change, or abandons it. Sometimes it is necessary to go through the cycle again. Deming (1994)

Coaching

Coaching is about a trust-based learning process that takes place between two individuals, i.e., the coach and the recipient of coaching. A coaching model is based on the development of the human and/or the process. This is done though open relevant framing of questions which
should be based on the situation and the objectives. There are different uses for coaching models. They can help to develop behaviour, to develop the individual, the process or the entire system. Coaching can be used as a tool for individuals with the role of a leader, e.g. university lecturers or even students. Henningsson & Wixenius (2016)

Model for human development

Coaching is according to Berg (2007) a model to help people succeed. Through questions, alternative suggestions and feedback, the coach help the coached, to develop his own talents and achieve goals. Whitmore (2002) believes that the coach's goal is to create awareness, sense of responsibility and self-esteem with the coached. In order to achieve results with coaching, the individual should be encouraged and helped to expand his thoughts repertoire, action repertoire, learning repertoire and emotional repertoire. (Berg, 2007)

- Thought repertoire involves acquiring mental maps to read, interpret, explore and understand the reality, including one and others.
- Action repertoire means being able to use the "Toolbox" so that you have many methods to choose from depending on the situation. The tools can be personal effectiveness, self-management or conflict management.
- Learning repertoire means better utilization of better learning methods such as role models, self-reflection and feedback. Experiment with new ways of thinking and existence.
- Emotion repertoire mean developing positive feelings such as patience, security, respect, appreciation, self-confidence, confidence in the future, hope, optimism and joy.

Berg & Karlsen (2012) consider that an easy way to coach involves asking three basic questions; where are you now? What do you want? Lastly, how will you get there? The current situation needs to be interpreted to reach where the person stands today. The desired future situation must be clarified, and it is necessary to find out how the action will take place to achieve the wishes (Berg, 2007; Whitmore, 2002), see Figure 2.

![Figure 2](image)

Figure 2  Three basic questions used when coaching, (based on Berg, 2007, p. 124).

Portfolio

Portfolio is a documentation tool mainly for the student but also for supervisors and teachers. It provides the opportunity to document, communicate and create forums that promote optimal learning in a structured way. Elmgren & Henriksson (2016)

According to Snyder (2016) Portfolio is a tool and a process that promotes deep learning in the short and long term. The purpose of the portfolio is to create an overall perspective of the
student's learning and learning development. The portfolio briefly discussed and used in this paper is inspired by Snyder (2016).

**Pedagogical development and learning activities**

Elmgren och Henriksson (2018) emphasize that it is what the students are doing that affect their learning. The students’ time and engagement are essential resources that should be used in learning activities so the students can succeed in their studies. Learning activities such as, watching films and other e-based material, is complementary to the in-classroom learning. This means that the student is strategically activated. The different learning activities will suit different students depending on the student, the topic, the goals, the resources, the disposition of the course and lastly the lecturer. Another important aspect to all the above mentioned is that reflections need to be done in action, in the moment, and after the activities, see figure 3.

![Learning Reflection Practice Feedback](image)

**Figure 3.** The figure illustrates the student’s learning process without interplay with others. (Inspired from Elmgren and Henriksson 2018, p. 292).

In Elmgren och Henriksson (2018), they discuss the Astin’s theory of student involvement from 1999. The theory is about the students’ engagement. The student’s learning and personal progress is directly connected to the quality and quantity of the student’s engagement. For instance, there are investigations showing that students devote less than 30 hours per week to their studies.

**Methodology**

Case study is an approach associated with the qualitative tradition. Here the researchers explores a single “phenomenon”, the case bounded by time and activity. The latter may be a programme, event, social group or process. In addition, the researchers collect detailed information by using different data collection procedures for a period of time. Yin (1994) notes further that case studies are preferred when questions like “how” or “why” are posed, and when the focus is on a contemporary phenomenon in some real-life context. Because of the purpose of this paper, a case study approach is made. Most of the asked questions are “how” questions.

In this paper a qualitative study was conducted with a questionnaire as data sampling method, in order to deeper understand how the students work with the planning of their learning, and how they document their own development. The students answered the questionnaire in the classroom during 30 minutes.
Delimitation made in this paper that affect the method is that the investigation was made on individual level. Also, it is first year university students that answered the questionnaire. The questionnaire was divided into three parts. In the first part information about and the goal with the investigation was presented and the questions were introductory, e.g., about age, sex, residential state, education. The second part of the questionnaire, with open questions, dealt with the students planning, way of working towards desirable goals and reflection. The questions, (see “Background”), were asked, and then analyzed through text analysis, where certain concepts and words were categorized.

**Empirical Results**

The result from the questionnaire is divided according to the research questions. In the investigated course 14 students were admitted, out of which 11 students have participated in the survey, which means almost 79 %. The first question was about how the students divide their time during the week.

![Total duration per week](image)

*Figure 4.* The figure shows duration per week, of study, work, family, sleep and for hobbies.

The result shows that the total amount of time for study, work, family, sleep and for hobbies vary greatly. The variation lays between 50 hours to 160 hours per student. Further on, the time for family is 4.5 hours in average per student and week, but vary from 0 hours up to 20 hours per week. Result also shows that the time for hobby is 12.5 hours in average per student and week but vary from 0 hours up to 40 hours per week.
Figure 5. The figure illustrates duration per week and student, for study and work.

The result from the investigation shows that the time for study is 39 hours in average per student and week, but vary from 10 hours up to 60 hours per week. Furthermore, the time for work is 11 hours in average per student and week, but vary from 0 hours up to 52.5 hours per week, see figure 5.

Figure 6. Illustration of duration per week and student, for study and sleep.

Result shows that the time for sleep is 47 hours in average per student and week but vary from 32 hours up to 60 hours per week.

The next question was about what a desirable goal is to the students. The open answers were for instance (authors’ translation):

“I see achievable and appealing goal as desirable”
“ar employed with a job that give a lot of experience and that I am content with”
“A goal is desired when it’s relevant and obtainable”
“Knowledge, better understanding”
“Get an understanding within the subject. Be able to work with it outside the university”
“High score, sense of learning, structure”
“To be fit, smart and educated”
“No answer”

iii. How do you work with setting new goals for your progress?

“Reflects on the challenges that interest me, and I am at the same time curious about new subjects and areas”
“Different according to the goal, visualization”
“I ask myself what I want to reach and then what I will do with it”
“Always challenge myself and dare to say yes!”
“New courses, new challenges. See what feels bad and change my plan”
“I don’t work with it”

iv. How do you work with reflections of your development?

“Intronspective reflection and discussion about learning with others”
“I’m working with reflections in my portfolio”
“I reflect shortly, after the situation I’ve experience fruitful and instructive, through thoughts and discussions”
“I ask myself if I really understand what I learned to see if I developed”
“I work with reflections during the work towards, and after reached goal”
“Doesn’t work with it. Reflections associated within earlier/new knowledge within new courses and context”
“Doesn’t work with it, I just do it”

v. How do you work with your weekly planning in order to carry through your studies?

“To–Do list, combined with observations of forthcoming lectures and deadlines”
“I’m working frequently with planning of my studies. Weekly planning and monthly”
“I estimate how long time each task requires in order to reach my personal goals. “Then take it day by day and take help by my fellow students”
“By keeping me updated in order to get control of courses demands”
“I plan lectures and tasks Monday to Friday, and work with the tasks on weekend if time has run out”
“I actively work with my weekly planning in order to know when I have to be focused and when I have free time”
“Note the tasks and prioritize by deadline”
“Have a Filofax but need help with actual planning”
“I don’t have a weekly planning”
vi. How do the students value their studies?

<table>
<thead>
<tr>
<th>Not important at all</th>
<th>Fairly important</th>
<th>Important</th>
<th>Very important</th>
<th>The most important in life</th>
</tr>
</thead>
<tbody>
<tr>
<td>x</td>
<td>x</td>
<td>xx</td>
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**Figure 7.** The result shows that two respondents answered “important” to the question, nine students think their studies are “very important”, even if there is a slightly difference on the scale. The conclusion made is that the students in general have an opinion about that their studies are very important.

vii. Do you think your planning is helping you to reach your goals?

The open answers to this question are:

“Yes, without planning it is difficult to control the result of ones work.”
“I do not have explicit plans but to plan a little helps the flow.”
“The one I have done earlier helps.”
“I don’t have any plan.”
“My planning helps me with everything in life.”
“No.”
“Not enough.”
“Yes, I think so.”
“Yes, I think it does.”
Discussion and Conclusions

One conclusion from Henningsson and Fredriksson (2018) is that planning is essential. However, it seems to be difficult and the students need help with how to set desirable goals and plan to reach them.

A desired goal has a different meaning for each student, but it should be reachable. When it comes to setting new desirable goals the respondents’ answers varied, but no one used a systematic way or described how to reach the goal. The questionnaire showed that there are a large variation between students and how they work with the planning of their own learning and desirable goals. Mapping the time the student uses weekly on studies shows that time varies from ten hours up to 60 hours. It is important to know here, that it is full-time education programme in question. Can the expenditure of time affect students’ results or is the difference among the answers a sign of the variation of students’ ability of perception? Some individuals learn faster than others do. However, the expenditure of time can be connected to Learning repertoire in the model for human development, in such way that the student need to self-reflect upon spending time. The emphasis should be on preparation; how the student work with setting goals, planning, and reflection in learning. When planning and working systematically the time is more efficiently used.

The investigation showed that some of the students reflect to some extent, both individual in the portfolio and then in discussion with others. The respondents describe their work with planning through to-do lists, estimation, using Filofax and notes. However, these can be seen as parts of planning. The answers in the investigation show a need for help with what to plan and how to plan. Planning needs to be added to the pedagogical competence development, but also how to implement the plans.

Mostly respondents think that planning is important and helping in reaching desirable goals. One conclusion is then, that since the majority of the students value their studies as “very important” planning is worth working with.

The students’ commitment together with the reflections made in the portfolio connected to learning activities imply that the students are activated in a systematic and strategic way. This can lead up to an insight about the personal learning process, how the student maybe need a change and how the individual can try again (go through the PDSA-cycle again). One observation in all reflections during the investigation is that some of the students do not understand the own individual responsibility for their studies and personal development. The student has the largest responsibility in the performance of the studies. As Elmgren and Henriksson (2016) state students are learning by doing, which includes actively planning and implementation. However, to include coaching in the portfolio, together with suggestions of tools made in this paper, the students can be supported by its systematics while learning.

From the open answers it is interesting to see that no connection is made by the students between the systematic methodologies and tools they have learnt in different courses, for their own use on individual level. In Quality Management there are several systematic methods and tools possible to use striving for improvement also on individual level.

Work with continuous improvement in Quality Management, where planning is essential, due to the systemic view and pro-active approach, PDSA-cycle can be a useful tool. This tool can be used both on organizational level and on individual level. During the plan-phase the student can plan desirable goals, how to reach them, how to implement using time schedule.
Here can for instance, a goal be high score and the “road” is to read the book; attend to lectures; and to do assignments. One suggestion for helping students with planning, doing, reflect and act can be the PDSA-cycle, which also is one tool in the portfolio. Here, the authors want to highlight the PDSA-cycle and give suggestion to the students of how to use it.

The PDSA-cycle is a tool in the portfolio but can also be connected to Berg’s and Karlsen’s (2012) coaching model with the three basic questions. Firstly the present situation, “where are you now?” can be asked in the plan-phase, study-phase and in the act-phase. Secondly the desired situation, “What do you want?” can be placed in the plan-phase and the act-phase. Thirdly the implementation or action, “How are going to get there?” can be place in the plan-phase and the study-phase, i.e., study if the methods and tools were the proper ones.

During the do-phase the student “simply” do accordingly to plan. During the study-phase the student can reflect upon results, methods, get insight about the learning. Lastly, in the act-phase the student can re-set goals, change methods etc or continue to work according to plan.

In the Coaching model for human development PDSA-cycle can be seen as part of the action repertoire used as a tool in the toolbox. It can also be seen as part in Learning repertoire as method for self-reflection and feedback, i.e., in the phase of study and act.

**Figure 8.** The figure shows the authors’ suggestion of how to use the PDSA-cycle in planning work as a help to students on individual level. The tool already exists in the portfolio and it is worth-while for students to use it in individual learning process.

**Further Research**

A suggestion for further research is using the extension of the integration of portfolio and coaching model. One conclusion in this paper is the importance of emphasizing the use of PDSA-cycle with what and how to plan, also how to implement the plans. Students using the
extended portfolio can be investigated in order to map the students’ commitment using Astin’s theory (1999) in their personal progression. In current discussions of pedagogy the students’ engagement is a topic. One investigation can be done together with first year students and a comparison with third year students can be done and see if their competence in planning and insight have changed. Also, see if there is any difference in taking personal responsibility for their studies.
Referenser


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