# How can one best facilitate the students' study competencies in the first year of study?

The purpose of this PBL developmental project has been to improve the opportunities for teachers and supervisors to support the students' study competencies and thus in a larger perspective, support the well-being, learning opportunities, and retention among the students. 5 areas have been circled out. More details can be found in the online e-publication.

#### WHAT IS COMMUNICATION?

- Communication is often characterised as a situation involving an initiator who is producing a message for a re-
- Communication never happens in a vacuum and the initiator and receiver is mutually shaping the message through various communicative means
- The medium for communication influences the message, as well as the context sets the scene for the entire communication situation
- Communication is complex in collaborative activities in a PBL setting, and something that must be nurtured and cultivated again and again

#### WHY FOCUS ON COMMUNICATION?

- PBL creates a frame for the students to develop skills and competences in communication from being part of a group, supervision activities, oral exams, and status seminars
- Over time the students will learn good skills in communication as a consequence of the different group constellations they will be part of at the univer-
- Communication is needed in all phases of the project – communication skills can make the difference in developing and deciding on the problem, the analysis, and the oral performance at the group based exam

#### HOW TO FACILITATE COMMUNICATION

There are several tools, techniques, and activities for building a better communicative environment in the group. Here we have decided to introduce one tool: active listening. More tools can be found in the e-publication. Active listening is useful for establishing a better mutual understanding of each other in a group, but also useful in the relation between the supervisor and the students. In a communicative situation it is not only the one talking that is doing a job, the one listening is also performing a crucial task in achieving a good and constructive communicative situation. Thus, listening is one of the most important skills you can have as a supervisor and as a member of the group.

To the right is an exercise in active listening, which can support a group in developing a better understanding of each other. The aim is twofold; developing listening skills, and developing skills in stating how you feel about what is being said, and learning to differ between the two.

Talk with each other in groups of three. Distribute the roles 1, 2 and 3.



1st person talks about an arbitrary subject of importance – could be your experience from working in collaborative groups prior to the university

2nd person gives current feedback: Active listening – Mirror, contain, invite: Focus on the other, Be curious, Be empathetic, Let the other speak, Repeat with own words, Ask additional questions Judge or evaluate, State your own oppinion, Give ideas or

good advice, Talk about yourself

about the message – on your behalf and on behalf of the other – start out at an appropriate level for you It makes me curious.. I get excited about... It makes me want to contribute... I like that it.. I get puzzled... I get kind of upset... It annoys me that.. how come..? I feel happy/angry for you.. It makes me sad for you that..

At some point – when it makes sense - convey how you feel

3rd person keeps track of time and notes down comments regarding the tasks of 2nd Person. After 10 minutes 3rd Person gives feedback like this: I noticed.. I might have done...





#### WHAT IS MOTIVATION?

- Two dimensions are generally present in the motivation of young people: mance and quality of work the specific learning context and the • larger societal context
- hotbed from were motivation stems: to subject fields that the young people are what extent does motivation spring from a part of and learning context available?
- purpose of educating young people sult of social relations and meaning-proand the societal task of the education- ducing systems in social and cultural al system: to what extent is motivation contexts. created through utility and use oriented teaching, to what extent is meaning and critical reflection important?

#### WHY FOCUS ON MOTIVATION?

- Motivation is linked to high perfo-
- Research on top motivated individuals underlines that young people's mo-The learning context concerns the tivation are linked to the contexts and
- the experiences, preferences, and inter- As a problem-based learning uniests of the individual or the community versity we are interested in how motivation works in groups. In this context, we The societal context concerns the want to understand motivation as a re-

#### HOW TO FACILITATE MOTIVATION

As a supervisor you can facilitate the discussion and embracement of tools to heighten their motivation. This could be helping them to discuss what kind of motivational understanding prevails in the group, e.g. what gives them kick or teach them about the different motivational strategies that heightens motivation on a group level, e.g. that task structuring and social reinforcing are important for group motivation. An earlier PBL project also yielded case material on how to tackle demotivation in groups that could be shared with the group.

You can teach the students to see differences as opportunities and ask them to nurture confrontations in an engaged and curious way instead of hiding away the academics and other kind of differences. To the right is a table o the three basic types of relational dynamics, developed with inspiration from Mourier et al. The evolving kind of dynamic makes for the best motivational learning environment.

Finally, you can stimulate the students' desires and interests in the academ ic area and push, acknowledge, and have expectations for them.

		Liquidating	iviaintaining	Evolving
to id	Norm	Difference is a problem	Difference is equalized	Difference is opportunity
a ns	Handling	Rules	Pseudo consensus	Collaboration
ng	Respons	Error-focus	None	Engaged
se :h	Confrontation	Attack/defense	Ignore/suppress	Nurtured
n	Resolution	Backward	Standstill	Forward
ng of	Responsibility	Avoidance	Sacrifice	Action
וכ ח	Sense of reality	War	Denial	Acceptance
al	Mood	Aggression	Anxiety	Vitality
า-	Motto	Me – not you	You - not me	You and me

#### WHAT IS RESILIENCE?

- Resilience tends to be used as syna point in distinguishing the concepts, as robustness is perceived as a matter of being able to "absorb" the challenge, and such perceptions can lead to a belief that if materials, people, or systems do not "break", they are fine
- Resilience adds a development and •
- Research shows that empathy and mutual sensibility is what makes teams move from being well-functioning teams to high-performance teams

#### WHY FOCUS ON RESILIENCE?

- Students can benefit from a discusonym for robustness. There is however sion on resilience in three different states First, when entering a learning experience: students can consider how they will foster resilience
  - Second, during the learning process when students finds themselves in a situation of lacking resilience
- Third, when a learning experience adaption perspective to robustness, and comes to an end, a summative reflecthereby it includes perspectives which tion can be conducted which may lead might in fact be in contrast to "being ro- to the student being able to better cope with similar future situations

#### HOW TO FACILITATE RESILIENCE

To facilitate the student's reflection on which strategies they are using when they meet challenges in their study, it can be beneficial to present some pre-de-they are "good enough". fined coping strategies to have a frame of reference for the discussion. We distinguish four strategies for building and maintaining resilience: Working hard, Reaching out, Applying tools, and Sustaining human resources - to the right is a model of the four strategies.

Typically, all four strategies should come into play. Hard work, the help of others, and the use of tools and methods typically are needed to approach a complex challenge, but it is also a way to build resilience as knowledge, skills, and competences gained can be transferred to other situations. The fourth strategy, sustaining human resources, is however needed in order to sustain and not drain the human resources in the process.

There are different approaches to cultivate this fourth strategy. Dweck has in- for their abilities to select and apply troduced the theory of mind-setting and the idea of changing the ways you think about a challenge from a fixed to a development perspective. The first firmed that they are "good enough". step is however to recognize that the outcomes of a person's actions will not, in itself, make a person resilient in the long run.

This strategy holds as a basic virtue that This strategy holds collaboration as a most things can be solved through hard basic virtue, and is fulfilled by asking for work. When students are getting help and building up networks to assist. acknowledged for their hard work, from When students are acknowledged for peers and superiors, it is confirmed that their interest and the knowledge that they accumulate and carry around in the network, it

Working

hard

This strategy cherishes an instrumen-Applying tal perspective, and methods the ability to make things easier is considered a basic virtue. When students are acknowledged

itize, structure their work etc., it is con-

Reaching are "good enough". out This strategy holds well-being as a Sustaining basic virtue, and the human ability of students to resources accept and clarity

is confirmed that they

boundaries; both the

physical and the psy- chological energy they are able to put appropriate tools and methods to prior- into the process. When students are acknowledged for their calmness and their sensitivity towards the comprehensiveness of the situation, it is confirmed that they are "good enough".





#### WHAT IS STUDY TECHNIQUE?

- Learning styles can be classified in should be defined, combined, and how vents stress, and supports resilience many there are
- The Index of Learning Styles (ILS) operates with four dimensions: sensing/ intuitive; visual/verbal; active/reflective; sequential/global This can be categorized as four study •
- techniques: Visual Preference (show it), Auditory Preference (**tell it**), Tactile Preference (by taking notes/reading), and Kinesthetic Preference (**by doing**)

#### WHY FOCUS ON STUDY TECHNIQUE?

- Good study habits are important for many ways and there is no consensus the student's personal learning outcome about the ways in which dimensions and it trains memory and learning, pre
  - reading academic texts and therefore university students need teaching and supervision for the sake of developing strategies and learning
  - It is quite important that teachers at first year know how to explain things considering the students' different learning styles so that new students don't feel misplaced or stupid as a result of not being aware of the discrepancy between their prefered learning style and what is being taught

### HOW TO FACILITATE STUDY TECHNIQUE

The problem when addressing good study habits is that students often do no realize that they need them. Before a course, the teacher could help the stu dents by using the above tables for reading and taking notes to help the stu dents understand the various ways in which their studying could be improved · At a university, a primary task is through the way they read and take notes. It could be by writing a reading guide in Moodle for the first courses. Like this: Get an overview of the whole book. Spend 10 minutes writing what you already know about the subject(s) Read chapters 2 to 5 using normal reading. Read page 45-52 using intensive reading. Take notes in a system that suits you, taking your learning style into consideration. Follow up and evaluate when you see the students in class Some students might argue that taking notes and writing is too time consum ing. On the other hand, even the reading is a waste of time if you cannot remember any of it when you need it.

To the right is a table of different ways of reading, their purpose, and how to facilitate them.

	Way of reading	Purpose	How
ot u- u- ed	Overview	To get an <b>impression</b> about content and assess how difficult the book/text is. If relevant, assess if it can be used for the purpose in question, usually a project	You only read title, back page, chapter headings, preface, ab- stract, index, and maybe a conclu- sion
le s). ve to	Scanning	To get <b>information</b> about content and the main structure in the text.  To find parts you wantv to read more intensely or for finding information you need	You read fast and superficial scanning the pages. You only focus on the important words and don't read whole sentences
n- e-	Normal reading	To understand and compre- hend content, meaning, argu- mentation, structure, problems in question and the results	You read everything
to	Intensive reading	To <b>learn details</b> , collect precise information, learn by heart, repeat nuances	You read everything word by word

#### WHAT IS LEARNING OBJECTIVES?

- One of the challenges that face first to develop
- ues, and knowledge is conveyed within the study programs at AAU are through learning objectives
- Learning objectives and study regulations are essential in moulding the student from an uncertain and insecure first year student into a competent and confident graduate

#### WHY FOCUS ON LEARNING OBJECTIVES?

- By assisting the students to better year students is to figure out not just comprehend where they are, and where how to study, but also what to study - they are going, we give them an opporand wether both facets correlate with tunity to re-examine, mould and intethe skills and beliefs they already pos-grate a logic of the study program that sess and the ones they are presupposed seems so natural to us teachers that we more or less take it for granted
- The structure by which thoughts,
   This reflexivity can help to more perceptions, conducts, interests, val- firmly legitimize AAU's and PBL's practices and presumptions

## HOW TO FACILITATE LEARNING OBJECTIVES

The logic of learning objectives and study regulations are answering the question why, posted to the what and the how, that faces the first year students. Uncovering and taking possession of this answer is necessary for the development of the students' character.

First, the interface between the elements in the study regulation. How do they fit together? What do they represent? When do we evaluate what? Second, the role of courses in PBL and theory of science. Why are they impor-

tant? How should they be presented and applied? How are they integrated in the study program? And third, the projects and supervision. This is a key element for the logic of our programs. Here, both AAU, PBL, and science meet in a shared and unique

form at each individual program. How do we design projects at first and second semester, that can teach, or better said make explicit the logic of the program? How does supervision make use of PBL and theory of science? As these focal points indicate, much of the work is reflexive. This is important, because this reflexivity is also what can connect the faculty and the students in the joint effort of comprehending the logic of our mutuality.

141. When we first begin to believe anything, what we believe is not a single proposition, it is a whole system of propositions. (Light dawns gradually over the whole.) 142. It is not single axioms that strike me as obvious, it is a system in which consequences and premises give one another mutual sup-

port.

– (Wittgenstein On Certainty)

§89 ...it is, rather, of the essence of our investigation that we do not seek to learn anything new by it. We want to understand something that is already in plain view. For this is what we seem in some sense not to understand.

– (Wittgenstein Philosophical Investigations)



