



Aalto University

**PED-131.9000**

**Teaching assistant as a learning instructor**

*Different approaches to learning*

*Aalto University Learning Services*

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# Schedule

- 9.00-9.30**      **Practicalities, summary of observations + group work**
- 9.30-10.45**    **Group working: Different student profiles.**
- 10.45-11.30**   **Analysing the groupwork, theory of approaches to learning and studying**
- 11.30-11.45**   **Study counselling services at Aalto**
- 11.45-12.00**   **Collecting development ideas and feedback about teaching assistant work**

**Break included in the programme**

# Learning objectives

**After the course you will:**

- **be able to observe the environment from the learning perspective and identify aspects to support students' learning process.**
- **recognize ways to how to supports students' study motivation**
- **identify your role as a learning instructor and find ways to regulate your behavior adjusted to students' needs.**

# Different student profiles

# Tim

Tim noticed in the morning that he should do the course assignments. He felt somehow anxious and restless so he decided to do his laundry first and while waiting for the washing machine to be done, he checked if there is anything interesting in Netflix. After four hours he felt even more anxious but anyhow picked up the course materials. The first assignment was difficult and he tried to look for a similar kind of example in the materials. He did not really understand the idea and was wondering why he had to study so demotivating things.

Next day he went to exercises (laskarit) and noticed that he didn't really understand what the assistant was talking about. For a moment he thought that it would be a great idea to ask if the assistant could explain the main idea more clearly. Then he noticed that everyone else were taking notes. He was glad that he didn't ask anything so the others didn't notice how stupid he was.

# Lisa

Lisa woke up early in the morning because she knew that this day would be very busy. She was worried about her math assignments. She had allocated two hours for the assignments and knew that it is too short time for such a complicated assignments. But she also had to prepare for two coming exams, attend to an important meeting of her guild board, take her dog to the vet and write some summer job applications...

She ended up to spend one hour with the math assignments and tried to look for something helpful in the course materials as quickly as possible. She felt bad about herself because she really would like to do well in her studies. Math is important in her field and she knows that. She blamed herself for bad time management.

Next day she went to exercises (laskarit) and asked for some help. She didn't understand what the assistant was talking about because she couldn't remember what some of the key concepts mean. "Too much information" she thought but didn't say anything.

# Anna

Anna found math assignments very interesting. She had attended all the lectures and even read some extra materials she found while she was looking for some interesting materials on some websites related to the topic. She had a good routine for calculating but one of the assignments was particularly difficult. She had some ideas in her mind how to solve the most difficult assignment but she didn't know how to proceed.

Anna went to exercises (laskarit) and took a seat in the back row. She had always been shy and was a bit worried about if the course assistant was paying attention on her. She didn't really know other students in the class room because she preferred to study on her own. She was hoping for that someone else would ask the same questions she had in her mind.

# Ted

**Ted had always been interested in natural sciences and thought that the assignments on the course were quite easy. He spent some time calculating the assignments but skipped the last one because he thought it was a kind of stupid. “Why should I know those type of details anyway? And there are so many other interesting things to do...”**

**Next day Ted came to exercises (laskarit) and noticed that the course assistant was one minute late. Ted was talking with some friends or browsing Facebook most of the time. The assistant asked Ted to write one solution on the blackboard and Ted asked if it really was necessary because the assignment was so simple. When the assistant was explaining some details of the last assignment, Ted interrupted him/her and asked if the assistant really understood what he/she was talking about.**



# Group work

**Read through the student profiles and mark the most important things on them. Think about the learning approaches (the read pre-task) as well.**

**Share your ideas in the group and concentrate on**

- Have you met some students who might be somehow similar? (don't take them too literally or do not go into details...)
- How do they act and succeed on the math / physics /CS / NBE courses?
- Have you been able to help or solve problems with them, how?
- How could you support their motivation?

**Be prepared to share your ideas/discussions with the other groups**

# Sharing ideas

Collect your group's joint findings about:

- Questions and challenges
- Ideas to help and support

according to each student case you read.

Please *come and add your ideas* to the flip-chart-papers in the front of the classroom.



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# Approaches to learning, theoretical findings

# About approaches

- A lot of research in universities since ~1970's all over the world.
- Were found when researchers were trying to understand and explain WHY students' **learning outcomes** differ so much.
- Approaches were at the beginning considered to be quite stable and inert differences. Nowadays understood to be also situational, changing and able to be influenced in the learning situations (teacher, subject, group, requirements..)
- It means: We tend to approach a learning situation on certain way (depending on previous experience, self-picture, interest, motivation...) BUT we also decide or react in the situation and choose (consciously or unaware of) certain way of behaviour.

# Deep approach

|                            |  |
|----------------------------|--|
| <b>Typical motivation</b>  | Understand and follow own interest   |
| <b>Learning strategies</b> | <b>Building knowledge</b> , finding similarities and differences in between theories and concepts, trying to <b>understand</b> themes from wider perspective (but also in detail).   |
| <b>Difficulties</b>        | To know one's own limits and what is enough. To get things done "well enough" and proceed to other tasks. Get stuck with (or find and try to solve) too difficult questions (might get frustrated or missatisfied to ones own behaviour) |
| <b>Support</b>             | To find relevant extra information, help to share interest to other students, <b>set the "well enough"</b> goals, explicate the allocated workload, positive feedback on learning efforts  |

# Surface approach

|                            |   |
|----------------------------|---|
| <b>Typical motivation</b>  | <b>Pass the course</b><br>(reason for not setting higher objectives can vary from not-interested to no-chance-to-succeed)   |
| <b>Learning strategies</b> | Rote learning, seeking for hints, <b>passive receiving</b> , not proactively creating links between course contents, knowledge seems to be <b>fragmented and irrelevant details</b>                   |
| <b>Difficulties</b>        | To concentrate on <b>what is important</b> to learn, to <b>start doing</b> things and trust on one's own possibilities to succeed. To find own interests.   |
| <b>Support</b>             | To believe in own skills, positive feedback on things already done, help to build bridges between the contents, setting the goals, find appropriate (basic enough) exercises, <b>to start working</b> |

# Strategic approach

|                            |  |
|----------------------------|--|
| <b>Typical motivation</b>  | <b>Optimize</b> and get "good results" (grades), may be interested in practical matters: skills and knowledge which can be used in the future (work) |
| <b>Learning strategies</b> | Getting aware of <b>requirements</b> and assessment criterias, monitoring and planning own studies but dependent on teacher's goals                  |
| <b>Difficulties</b>        | Optimazing grades, but <b>forgetting own interest</b> and learning, sometimes overestimating own skills?   |
| <b>Support</b>             | <b>To concentrate on learning</b> and find the meaning, challenge to set "deeper" goals  |



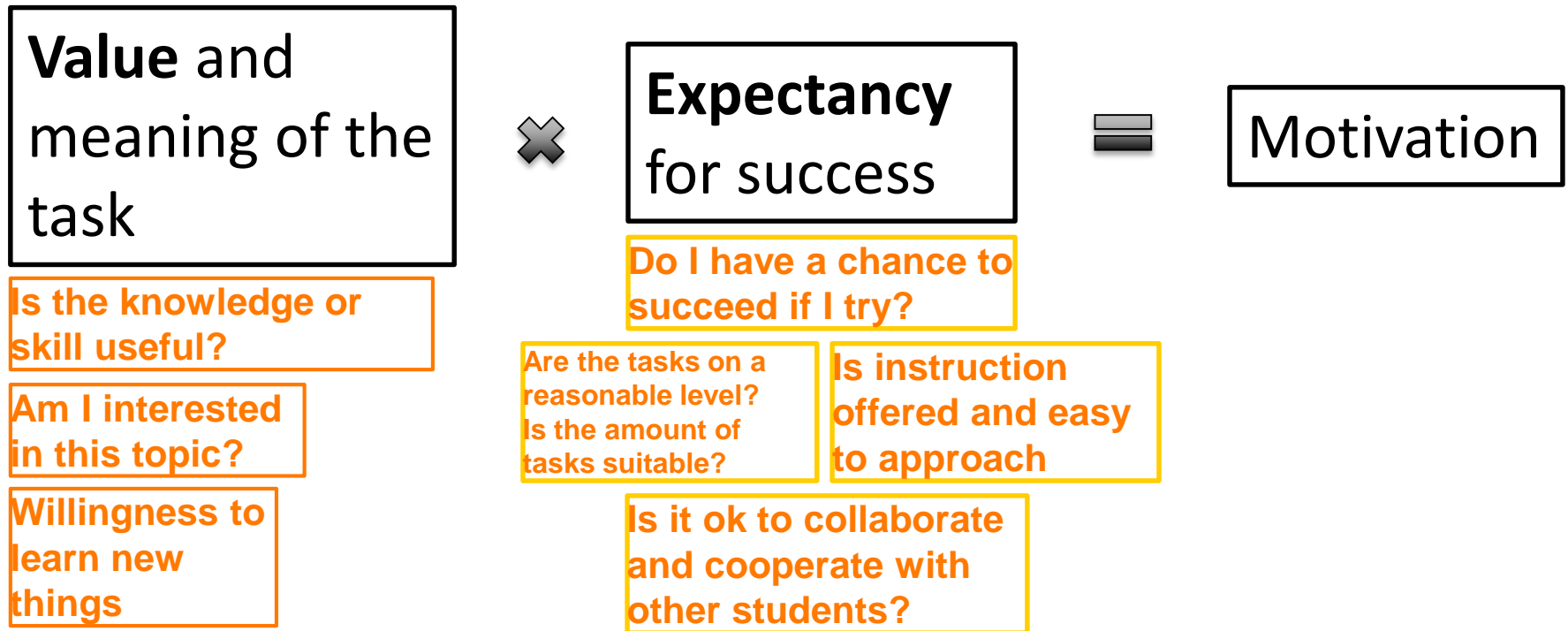
# Approaches to learning

## Entwistle (1988); Marton & Säljö (1976)

| Orientation | Objective                 | Action                          | Consequence                                 |
|-------------|---------------------------|---------------------------------|---|
| Deep        | To understand for oneself | Active processing               | Actively interesting (get lost too deep in) |
| Surface     | Pass criterias            | Repetition, passing             | Difficulties in understanding and anxiety   |
| Strategic   | Good grades               | Systematic planning and actions | Awareness of criteria                       |



# Expectancy-value –theory of motivation



# Motivation is not ON/OFF

## Motivational orientations:

- **Mastery goal orientation: learning new skills**
- **Performance goal orientation: showing competence**
- **Avoidance goal orientation: avoiding failures or humiliation**
  
- **Internal motivation: learning is rewarding**
- **External motivation: external rewards or punishments**
  
- **Emotion regulation skills (coping with failures), personality and situational factors affect on motivation (among other factors)**

# How to support motivation

- **Creating safety zone: encouraging and friendly communication**
  - Safe to make mistakes, safe to ask questions and to collaborate
- **Giving positive feedback, noticing progress**
  - -> self-efficacy believes (I can do this)
- **Helping to set achievable goals: e.g the next step in problem solving**



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# Mental health problems

# According to FSHS mental health problems are the biggest health issue among students



- Students who have problems with mental health need special care.
- They are often gifted and get by, but their ability to study is temporarily compromised.
- According to FSHS one student in five has problems with mental health and one in ten needs immediate care.  
(FSHS = Finnish Student Health Service)
- Typical problems: depression, anxiety, panic disorder, eating disorders, addiction problems, bipolar disorder, personality disorders, crisis and traumas, sleeping problems

# Listening to the student always helps

- It's often more important to be heard than to have the problems solved:  
Was I taken seriously? Does my teacher/instructor think that my problem is real?
- Bringing up the issue can sometimes be difficult: Anxiety can make it difficult for the student to express himself/herself, compassion and helping questions are needed
- Student often has in mind a suggestion for solving the problem
- "I want to be like others." "If I tell, will it be difficult to find a job later?"
- Many students still find it relieving that the issue was brought up.
- Students can always contact FSHS (YTHS) or study psychologist

Paula Pietilä, University of Turku

# Stress related anxiety, exhaustion

## What is it?

- Prolonged stress or significant life changes can cause anxiety symptoms
- Prolonged study-related stress can lead into a burnout in studies
- Fatigue, cynicism, feeling of inadequacy

## How can we help?

- **Goals and demands must be in right proportion to student's strengths and to the support available**
  - *Supporting the development of studying skills*
  - *Guidance, conversation about goals*
- **Schedule that enables sufficient recovery (breaks, free days)**
- **Temporarily slower study pace**
- **Solving conflicts**

[http://www.terveyskirjasto.fi/terveyskirjasto/tk.koti?p\\_artikkeli=dlk00681](http://www.terveyskirjasto.fi/terveyskirjasto/tk.koti?p_artikkeli=dlk00681)

# How depression disturbs studying

## What's going on? Main symptoms:

- Depressed mood
- Inability to feel interested in things or to feel pleasure
- Inability to enjoy life
- Strengthlessness, feeling tired, being less active
- There are different levels of depression: mild, moderate and severe.
- In severe depression performance is low – it's hard to get out of bed.

## Other symptoms

- Ability to focus and concentrate deteriorates.
- Self-esteem and self-worth diminish.
- Feelings of guilt and worthlessness
- Scarce and pessimistic view on future
- Self-destructive and suicidal thoughts
- Sleeping disorders
- Decreased appetite



# How can I support a depressed student?

- Confidential, open, safe and hasteless atmosphere
- Encountering students individually
- Encouraging and supporting students
- Being available, listening and supporting
- Unambiguity and predictability of teaching
- Positive, constructive and realistic feedback
- Emphasizing what the student already can
- Student-teacher cooperation
- Encouraging to support a fellow student
- "Kaveria-ei-jätetä". "No man is left behind."

Source: Hannu Lampi, 2012. Opiskelijan masennuksen tunnistaminen ja pedagoginen tukeminen Metropoliasa.

# Anxiety

## What is it?

- In studying, anxiety is typically related to writing, exams or other evaluation situations.
- Generalized anxiety disorder is an illness where anxiety is long term and excessive under circumstances.
- Anxiety may paralyze ability to function so that a student is not capable of achieving goals or is underachieving.

## How can we help?

- Flexible evaluating methods: conversations, portfolio, learning diary, project work, exam based on study material, home exam, group exam, participants teaching each other
- Student may need help studying for an exam – recognizing weaknesses in reading or calculating techniques, guidance

Hyppönen ja Linden: OPETTAJAN KÄSIKIRJA – OPINTOJAKSOJEN RAKENTEET, OPETUSMENETELMÄT JA ARVIOINTI (2009) (<http://urn.fi/URN:ISBN:978-952-248-063-7>)

Virtanen, Postareff & Hailikari: Millainen arviointi tukee elinikäistä oppimista:

<http://lehti.yliopistopedagogiikka.fi/2015/03/27/millainen-arviointi-tukee-elinikaista-oppimista/>

# Supporting a student suffering from test anxiety or stage fright

- A student can also bring up anxiety him-/herself. They might come and say that they're not able to participate in a class because there are presentations
  - The most important thing is that the matter is taken seriously and dealt with confidentially in a manner that is comfortable for the student.
  - Someone who is anxious does not benefit from being able to pass the course with less work than others.
  - Being aware of acceptance, alternatives and support will get one further."
- (Esok.fi, korkeakouluopiskelijan jännittäminen)
- Encouragement
  - Video recordings of lectures, in evaluation: remote working or learning diaries.
  - Can a presentation be held in a smaller group, only to the teacher or can it be recorded for the teacher?
  - Do group work methods and performing together help?
  - Does the student have a suggestion how he/she would like to complete the course?
  - Referral to anxiety group

# If you get worried about a student

- **You can bring it up with the student**
  - *By asking "how are you?"*
  - *By bringing up your observations about the student's behaviour, e.g. "I've noticed that you've been absent for a long time", "I got worried when you said..."*
- **It is important to listen, you don't have to solve the problem**
- **You can always contact psychologists at Aalto ([into.aalto.fi/opintopsykologi](https://into.aalto.fi/opintopsykologi))**



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# Learning difficulties

# Typical learning difficulties with university students

**Dyslexia**

**Autism spectrum disorders**

**ADHD**

# How are difficulties manifested?

- **Conduct problems**
- **Difficulties in adjusting to new situations**
- **Difficulties in mastering social situations**
- **Communication problems**
- **Problems with attention and focusing**
- **Problems with executive functions**
- **Time management**
- **Figuring out future plans**
- **Increasing self-knowledge and ability to self-regulate**
- **Difficulties in making choices, getting stuck**

# Autism spectrum

**Abnormal functioning of the nervous system**

**Difficulties in planning, executing and stopping an action**

**Difficulties in perceiving relations between big picture and details (central coherence)**

**Hard to interpret other people's communication**

**Facial expressions and gestures inappropriate in the situation**

**May be mathematically gifted**

**Own, specific interests**



# ADHD and ADD, 7 % of Finns

## Attention Deficit Hyperactivity Disorder

- Inattention
- Hyperactivity
- Impulse

- ADD
- Inattention disorder

# How to help in the class room?

- Speak clearly and cover one topic at time
- Tell at first the structure or main points of the session
- Materials in advance if possible
- Minimize external distractions e.g. noise
- Clear instructions
- One (sub)task at time
- Keep some breaks
- Tell about all kind of changes (e.g change of schedules or rooms) well in advance
- Possibility to choose own method of studying (e.g. in groups, in pairs, on their own)

# Supporting executive functions

## Clear and structured instructions

- Same instructions in different places
- Instructions divided into smaller pieces
- Monitoring performance and intervening early on in case of problems

## Support and guidance with time management

- Setting goals
- Dividing goals into concrete tasks
- Using a calendar
- Monitoring goal achievement

# Psychology Service

# Psychology Service: Individual Meetings

**The psychology service for students offers counseling and support for**

- study skills and learning
- motivation
- self-regulation, e.g. time management
- coping with stress

**You can book an appointment by e-mail**

- 1-5 appointments (45 minutes each)



**Service is available at Otaniemi, Töölö and Arabia campus**

# Psychology Service: Workshops

- We offer workshops on different themes, eg. self-knowledge, social anxiety, mindfulness
- Usually 3-8 sessions per workshop
- Small groups, 10-15 participants
- You'll find more information on the services on the web site <https://into.aalto.fi/display/enopintopsykologi/Homepage> or [into.aalto.fi/opintopsykologi](https://into.aalto.fi/opintopsykologi)



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# Feedback and development ideas

# Sharing experience and collecting feedback

**Please enter the address:**

**<http://presemo.aalto.fi/courseassistant201704>**

**You can start independently and answer the questions by your own pace. When ready, start to share your thoughts in a group.**



# Thank you!

**Thanks for your participation, happy Vappu and enjoy your work as a teaching assistant!**