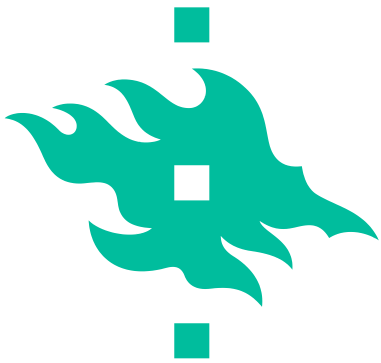


Constructive Alignment in Specialisation Studies in Industrial Pharmacy in Finland

Anne Mari Juppo, Nina Katajavuori

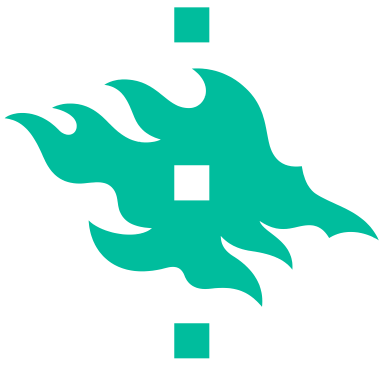
University of Helsinki

Faculty of Pharmacy



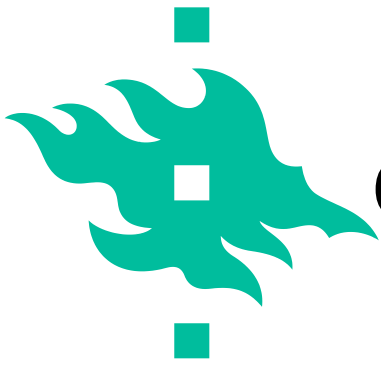
Background

- Pedagogic research done on teachers, teaching and students in Faculty of Pharmacy, University of Helsinki (since 2003)
 - Teaching is content focussed
 - Assessment methods traditional
 - Students tend to have more surface-level learning approach

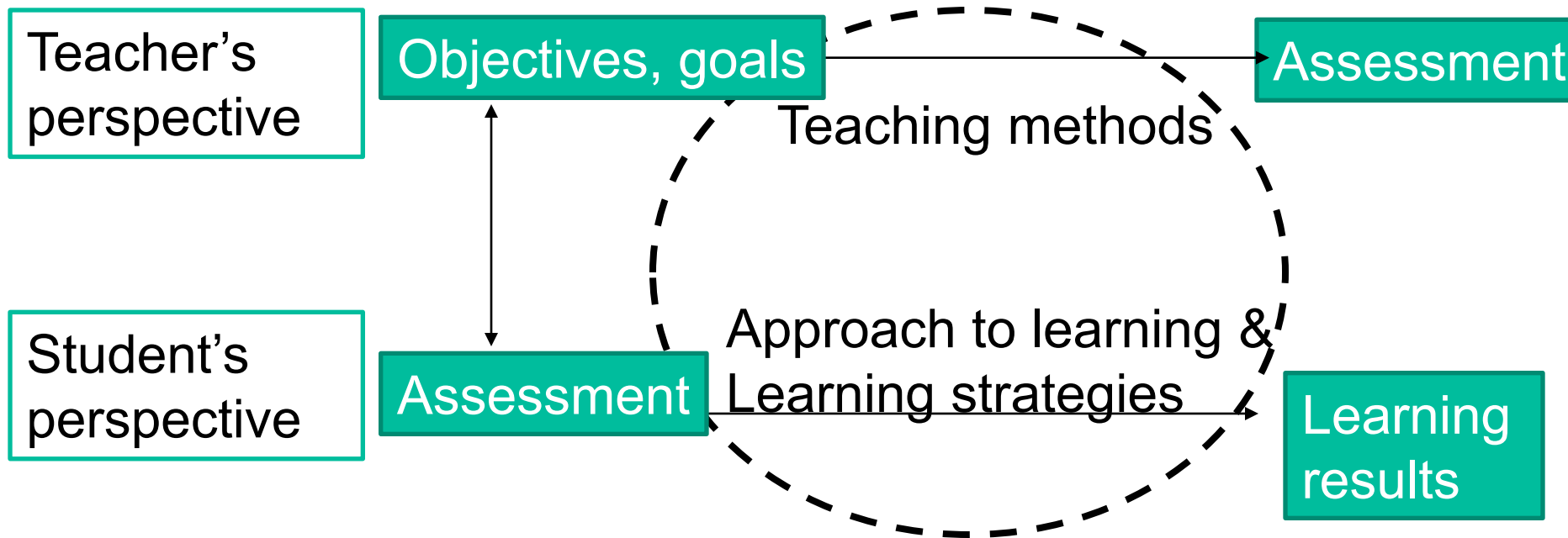


Strand-based modules, which run through the whole curriculum:

1. Scientific thinking and professional development, 40 ECTS
2. From molecule to drug preparation, 54 ECTS
3. Patients and medical care, 40 ECTS
4. Medicines and society, 12 ECTS
5. Interaction and communication, 14 ECTS
6. Optional studies, 18 ECTS



Constructive alignment

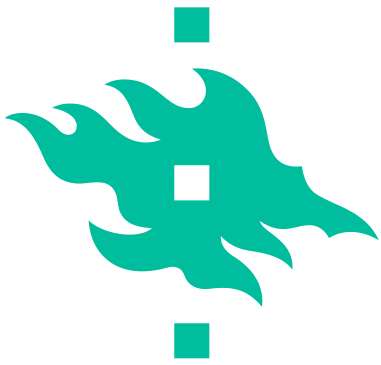


(Biggs 2003)



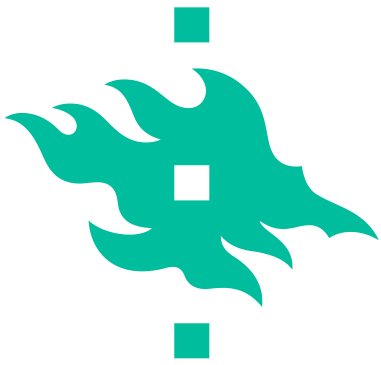
Industrial Pharmacy

- Manufacturing, development, marketing and distribution of drug products including quality assurance of these activities
- Specialisation studies for pharmacists working full time in industry (for B.Sc. and M.Sc.)
- Since 2008 full discipline (Ph.D.)
- Two courses taken from the curriculum as examples:
 - Formulation I (conventional oral solids), 5 ECTS
 - Leadership of Experts, 4 ECTS



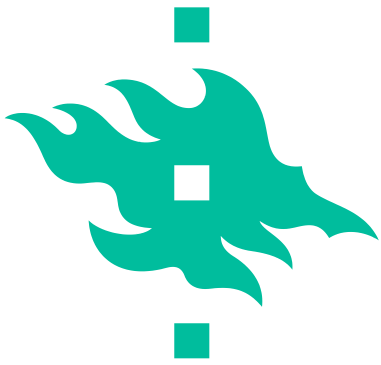
Formulation I

- Basic science that has to be applied for formulation problems
- Objectives and learning outcomes: e.g. student understands the importance of preformulation and can choose the parameters that need to be measured
- Teaching methods: traditional lectures supporting problem-based team work mimicking real industrial life and literature assignments and oral presentations
- Assessment: oral and literature assignments combined with traditional examination with questions measuring the ability to apply the knowledge



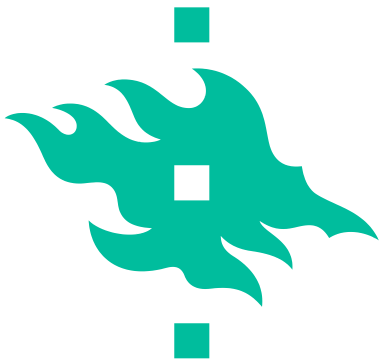
Leadership of Experts

- Objectives and learning outcomes: aims for deep understanding and practical use of the leadership tools based on leadership theories
- Teaching methods: lectures combined with DISC test, pair and group training
- Assessment: study diary, including three theme assignments and written feed-back section



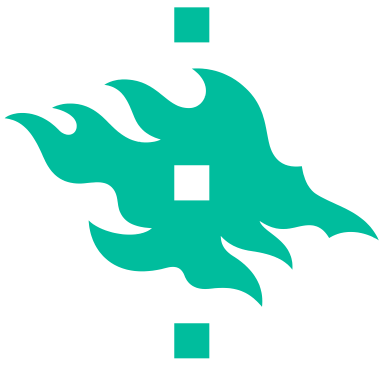
Conclusion

- Constructive alignment can give invaluable help in constructing education that takes into account the students' perspective, fosters deep level learning and thus, it results in desired learning results



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**Thank you for your
attention!**

See you at the poster # 21