Using Reflections in a Program Integrating Course
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What is a Program Integrating Course (PIC)?
• Runs over several years (3 in our case)
• Shows the main thread of the program
• Enables students to become more professional in handling their studies
• Consists of reflection seminars, 4 times a year, in small cross-grade groups with a professor as a mentor.

10 functions of PIC
1. academic introduction
2. increased understanding of the program
3. connections between teachers and students
4. exchange of experiences of students from different years
5. training in written and oral communication and reflection
6. covering subjects that other courses are not covering
7. information about elective courses and studies abroad
8. follow-up of academic results
9. education of the professors involved
10. quality enhancing evaluation of the program

How PIC has spread
Inspiration came from a similar course given at the Media Technology program at KTH. Now PIC has spread to 15 programs at KTH and Linköping University, see below.

Reflection seminars
A reflection seminar on study techniques. The rest of the seminars (4 each year) are in cross-grade groups of about 14 students.

Popularity of the topics of the seminars

<table>
<thead>
<tr>
<th>Seminar topic</th>
<th>Percentage</th>
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<tr>
<td>46% Study motivation and study techniques</td>
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<td>19% Quality in education</td>
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<td>29% Studying and working abroad</td>
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<td>13% Generic competences</td>
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<td>15% Student influence</td>
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<td>65% Procrastination</td>
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<td>19% Life-long learning</td>
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<td>35% Master programs</td>
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<td>21% Learning outcomes, criteria and assessment</td>
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<td>31% Plagiarism and responsibility</td>
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<td>23% The professional life as a CS engineer</td>
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Evaluations with 100% participation
Since one of the learning outcomes of the course is about the ability to evaluate the education, we have mandatory evaluations each year. Here are some examples of questions from the evaluations 2013 and 2014:

Improving the reflections
Before each seminar all students have to write a text reflecting both on the topic of the seminar and their recent studies. The reflection documents are read by everyone in the group before the seminar. In order to encourage the students to improve their reflections we are using the four levels of reflection defined by Hatton and Smith (1995), both in the given questions and in the mentor’s assessment of the reflection documents. We urge the students in the second and third year to reflect on level 3 and 4.

Level | Example of question at the procrastination seminar
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1. Descriptive writing, no reflection | Do you procrastinate? How? When?
2. Descriptive reflection | Why do you procrastinate?
3. Dialogic reflection, considering alternatives | Choose, from the list of 50 anti procrastination tips, one that you should promise to try for 60 days. Motivate your choice and suggest methods ensuring that you keep your promise.
4. Critical reflection from a broader perspective | Reflect about how your and others’ procrastination could effect you and/or others, for example while studying in groups or in project work.