

Assessment of the Bachelor Programmes in Game Design, Uppsala University, Campus Gotland 2022

Evaluators' report

Introduction

This report concerns the assessment of the self-evaluation of the Bachelor Programmes in Game Design (BPGD) at the Department of Game Design, Uppsala University Campus Gotland (UUCG). The evaluation panel (EP) was given the assignment to evaluate the courses and programmes offered by the department, according to established principles of peer reviewing and guided by the *Model for course evaluations at the Faculty of Arts, Uppsala University 2018–2022* and the *System of Qualifications (The Higher Education Ordinance, Annex 2)*. The EP was presented with an extensive self-evaluation which was followed up by a visit to Campus Gotland on the 5th and 6th of October of 2022. Follow-up interviews with staff were also conducted after the visit. The self-evaluation and the visit was concerned with all the game related educations at the Department of Game Design at UUCG, four bachelor programmes and one master programme. Some information about general structures may therefore be shared between this report, concerning the bachelor programmes, and an additional report concerning the master programme. In the EP's evaluation presented here, the following eleven aspects presented in the *Model for course evaluations at the Faculty of Arts, Uppsala University 2018–2022*, and in *Riktlinjer för Uppsala universitets modell för utbildningsutvärderingar*, have been taken into account:

1. that on completing the education a student should reach the goals set in the Higher Education Act and the Higher Education Ordinance as well as goals specific to the education, i.e. that the actual results of the education correspond to expected ones.
2. that the content and form of the education have a disciplinary foundation and are based on proven experience
3. that the education centres around student learning
4. that the learning goals are examined in a way that is both suitable and follows legal practices, and that progression through the cycles is ensured
5. that teachers have up-to-date knowledge of both the subject matter and pedagogy/didactics, and that the department has enough teachers to ensure quality in their education
6. that the education furthers internationalisation and international perspectives as well as sustainability
7. that gender equality is an integrated part of the education
8. that the education meets the needs of both the individual and society with regard to bildung and professional training, and prepares the students for their future careers.

9. that the students/Ph.D. students can influence their education, with regard to planning, implementation and follow-up.
10. that all students have access to a study environment suitable to their needs, and
11. that the education is assessed and developed continuously.

About the visit

During the 5th and 6th of October 2022 the EP met with staff and students during sessions concerning different topics, such as staff at certain programmes, leadership, administration, and student representatives of the education. The approach of the EP was to systematically invite the staff and the students to present what in their view was the strongest points of their work, and to reason about what improvements could be made.

Evaluation Panel

Alma Jonasson: Second year student at the Bachelor Programme in Objects Conservation at UUCG. Student representative.

Martin Pichlmair: Associate Professor and Co-Head of the Games Programme at IT University of Copenhagen. Experienced game developer with a PhD in Computer Science.

Mirjam Palosaari Eladhari: Associate Professor (Docent) at the Department of Computer and System Sciences at Stockholm University in Sweden. Taught game design since 2004 at various universities. PhD in Computing Science. Research areas include AI based game design and interactive narratives.

Ylva Ekström: Senior Lecturer in Media and Communication Studies at the Department of Informatics and Media (IM), Uppsala University. Former Pedagogical Director of Studies at IM and Educational Developer at UU.

The four bachelor programmes - general assessment

The Department of Game Design offers four bachelor programmes, all of them sharing the Game Design major but offering different minors. One of the programmes is the “Open Minor” and the other three are “Game Design and Graphics”, “Game Design and Programming” and “Game Design and Project Management”. Due to their different demographics, their different histories, and their different teachers the three tracks are facing unique challenges but each has their unique strengths, too.

The programmes seem to generally work well. As always, there are opportunities to make them stronger but there is definitely no indication of big flaws that are not already dealt with by the department’s already well-developed system for continuous assessment and development (in accordance with aspect 11). The general enthusiasm and professionalism of the teachers is impressive, and the teaching staff in all are highly qualified and experienced in regards to the subject-matter (related to aspect 5). There is a balance between highly relevant educational backgrounds and as relevant working experiences, many teachers have both. They further keep themselves up-to-date through working parallelly in the industry or further educating themselves. In the self-assessment, however, there are indications that they are not as

strong in terms of pedagogical qualifications. From discussions with the staff members we learned that most teachers have been offered to take the basic university pedagogics training offered by UU (or elsewhere they have worked before), but that there are difficulties getting the time to take further pedagogical courses due to lack of time and because most of them are offered in Uppsala.

The students appear dedicated and happy to be studying in their programmes, and there is a satisfactory involvement of students in all forums and councils on different levels of assessment, development and decision about the programmes (in line with aspect 9). The balance between a mass education – overall, the size of the programmes together is quite large – and an elite education – this is not a programme students can study in many other places – seems to be good. The level of internationalisation is high – both in regards to the students on the programmes and teachers teaching the programmes – and that is a huge asset of the programmes (aspect 6). This leads to courses on the programmes being taught in English, and makes international perspectives an integral part of the programmes. This is further strengthened by a number of partnerships with universities abroad offering the students to go on exchange.

All bachelor educations are very practical and focussed on directly usable tools for the job they are educating for. This gives the students professional training, and prepares them for their future careers in line with aspect 8, and is normal for bachelor programmes in game design. It however seems to be even more prevalent in the Department of Game Design at Uppsala University due to its history of initially being a games design education which due to Campus Gotland's merger with Uppsala University has transformed to an academic education. This history also leads to a large body of teachers who have no education as researchers. A couple of them are either taking, have taken, or are contemplating to take a PhD education and we are happy to see that that is supported by the institution, as this is of importance for both aspects 2, to safeguard that the education has a disciplinary foundation, aspect 8 with regard to *bildung*, and 5, ensuring teachers have up-to-date knowledge of the subject matter.

Only a few students continue to the master programme, which is potentially a challenge to aspect 4, “that progression through the cycles is ensured”. This might also be related to the above-stated fact that the very practical bachelor education does not entice students enough to strive for the more humanist master education. We have the impression that this perceived disconnect is the result of a lack of communication more than of an actual thematic disconnect. When the master has run for more years it will be clearer to bachelor students what it has to offer. Having more teachers teach in both, the bachelor as well as the master, might help too, and this may also contribute to strengthening the academic training and education in the discipline's theory and methodology the students need for their bachelor theses, and consequently to ensure the education meets the goals of the the Higher Education Act and the Higher Education Ordinance (aspect 1). The lack of applicants for the master coming from the offered bachelors might also just indicate that the students come for a practical education and learn the skills they need to find a job immediately after education. It might be seen as a seal of quality. Further data would be needed to gauge if this is the case. However, as the programmes in their current form offer education and skill in different areas it may be inherent that the programmes would cater to different demographics of students, so unless the faculty wishes a closer connection, this might not necessarily be a problem.

Students seem to face the same challenges they would face in any other programme of a similar kind. They are dedicated to their specific discipline and willing to learn. They put more time into group projects

(which happen to be mostly situated in the major classes) than into classes where they have to work individually, which conforms to aspect 3. This leads to some of them falling behind in their minor. This problem can be tackled by supporting exchange between students even when they are working individually or by introducing group-work to classes where they traditionally would work on their own. Some universities hire teaching assistants to help out with offering tutorials, social, and extracurricular events to foster exchange between students and create spaces where they can catch up.

After graduating, the majority of students move away. This makes hiring part-time teachers as well as finding placements for students in their internships harder. There is only a tiny games industry on the island comprising 17 companies, only 3 of them having more than 5 employees. The newly introduced internship course seems to work well, gauging from what the teachers told us, but there would be even more potential to collaborate with the games industry if there was more of it around. Technical and art educations are uniquely suited for creating an associated industry around a university and we would love to see an incubator, a cluster, or other kinds of steps that develop a local structure. This might require collaborating with the local government or finding a source of money that is intended for modernising rural areas. The Dutch Game Garden¹ could be an inspiration.

We have the impression that there is constant development work being done (conforming to aspect 11). This is good for the long term development of the programme but usually comes with the caveat that it creates feelings of insecurity for students. We have found no indication of such feelings, though, which is good.

There are four larger issues we have encountered:

- The first issue is that at least the first two years are very practically oriented. To fully live up to the Higher Education Ordinance, students should start studying theory and method explicitly earlier than in the third year. We would like to see efforts to bring the programme in conformance with the Higher Education Ordinance. We acknowledge that there are efforts being made in this regard and that a part of this criticism comes from a lack of making the theoretical teaching explicit.
- The second issue is that the percentage of students who do not identify as male is very low. According to the opening presentation it's between 75% and 90% in the different bachelor programmes. Measures should be taken to strengthen the number of non-male students. We have seen very little data on other aspects of diversity. More measures would help to understand how diverse the student body is. Gladly the teachers agree that diversity is a huge strength for this education and should be fostered. We agree and would like to see a focus on diversity, especially in terms of gender, that attracts a wider range of students and develops strategies to then successfully work with the challenges that come from increased diversity. If there is any strategic work being done in the near future this should be one of the focus points.
- The third big issue is that while the existing teacher body seems to be excellent, the department is understaffed. It seems to be hard to attract the right people to the Gotland campus and the hiring

¹ <https://www.dutchgamegarden.nl/>

process seems to be very removed from the people working in this education. Having a more direct way of hiring additional faculty, and having the resources for that, would support the efforts of the programme greatly. Not only would additional teachers help to shoulder the high teaching load but they would also free resources to make important reforms to the programmes. We will write about this challenge in more detail in another part of this report.

- There is a mismatch between the capacities of the teaching facilities and the size of the Game Design major. In short, the class does not fit into the largest available teaching room. Either the existing structure of having the fully overlapping major can not be maintained, bigger facilities have to be found, or the size of the programmes has to be reduced. There are arguments for as well as against each of these strategies. Offering the course content online in parallel to in-class can only be a stop-gap solution because it creates a two-class education.

The Game Design Major

As mentioned above the biggest issue we found in the major is that its class size is larger than the size of the biggest lecture hall. Apart from that students as well as teachers agree that the major is running smoothly. The amount and quality of supervision seems to be outstanding. The fact that the teachers are very hands-on and dedicated is obviously elevating the course. The course structure itself seems reasonable. The fact that students spend too much time in the major and too little with their minor seems to affect all minors. That there is a similar problem does not necessarily mean that the solution has to be the same for all of them.

Despite the qualities of the programme we would suggest strengthening the following two goals of the master education through introducing theory and methods earlier (in effect, by making it more scientifically grounded): "that on completing the education a student should reach the goals set in the Higher Education Act and the Higher Education Ordinance as well as goals specific to the education, i.e. that the actual results of the education correspond to expected ones." (aspect 1) and "that the content and form of the education have a disciplinary foundation and are based on proven experience" (aspect 2).

The Graphics Minor

This popular minor has a history that is longer than the existence of the games programme. It has the biggest teaching body and maybe focusses even more on craft than the other minors. If that focus in craft gets transformed into a focus on developing a personal practice of work this can be a huge asset.

We were told that there is a wish among the teachers for a graphics major. While there are a lot of art universities offering graphics majors the uniqueness of this minor comes from how it is embedded into the Game Design major. That students get educated to work in a team on games projects from the first semester is rare. Especially being able to work with experts from all major disciplines that make up a games team. We think there are a lot of arguments for maintaining the major/minor setup for graphics. That being said, nothing from our side speaks against an additional Graphics Major that is offered on the same level as the Game Design cluster of bachelor programmes. A potential hindrance for creating a graphics major could be that the department does not have the necessary examination rights in the subject.

The Programming Minor

A lot of students pick this minor. It is also the one with the most obvious staffing issues and that prevents it from being developed further. The existing teachers simply do not have time to restructure it but it seems like there is a need for exactly that. The existing structure seems a bit outdated in that the minor offers a programming course inspired by professional training (aspects 2 and 8). This also leads to it attracting a rather uniform type of student. The students themselves proclaim to be open about diversity though. The minor seems to be strongly affected by the dynamics that students spend an exorbitant amount of time with the major. The fact that the majority of assignments in the minor are individual exacerbates this dynamic (yet it is rooted in aspect 3).

We recommend that additional long term full time staff is hired to support redesigning this minor. An ideal candidate contributes to a better gender balance in the teaching body.

We also recommend reforming the programme. A starting point for a reform could be that the courses are turned around in that they are motivated by what is to be achieved with a certain technology instead of building a partial understanding of programming in an additive way. The word “partial” is used here because unlike in full computer science degrees, the part of the programme usually dedicated to mathematics, theoretical informatics, and hardware is replaced with the major in this education. Questions like what programming language is taught in what course should be answered based on the learning goals of the course. In the long run a programmer should not be bound to a specific language but equipped to teach themselves any programming language for the rest of their lives. Examples of educations that have increased the number of women studying are the University of Waterloo² and Durham³. There is a lot of research available but building structures that change the demographics of a study programme requires time and mental space. A common starting point seems to be to build the curriculum from a shared interest instead of additively adding up courses. Mathematics is often picked as the starting point but in a games context, game technology is a more logical choice.

We finally also recommend adding support structures for group work. The above-mentioned teaching assistants who facilitate social learning activities are one potential way to go. Generally encouraging and facilitating group forming, even if assignments are individual, is valuable too. Switching some individual assignments to group assignments can also help.

The Project Management Minor

This minor is younger and smaller than the two above. It is very focussed on practical tools for project management but offers a good set of courses that teach leadership too. There are some very good materials used in this minor, for example the group contracts. The tools taught are industry standard, for example the software Jira is used for version control. The strong integration of those tools into the classes leads to a system where those tools are used for oversight. There is a danger that the focus on measuring

² <https://uwaterloo.ca/math-alumni-newsletter/math-eties/feature/more-women-are-studying-computer-science-waterloo>

³ <https://www.dur.ac.uk/news/newsitem/?itemno=42597>

the performance of students using tools leads to them performing well in the measurements but does not necessitate them performing well in relation to their personal and professional competences. We are sure the teachers are aware of these issues and neither use the tools too much as surveillance tools nor neglect the individual development.

Our only recommendation for this course is to continue to focus on contemporary and ideal future leadership styles and not prepare students for an outdated mode of running teams or working in them. You are building the future of the games industry, after all.

Recommendations

Our recommendations are concerned with how the university can support the staff at the department in continuing to improve their work, which we see is of high value to Uppsala University. Overall, the bachelor programmes are all good educations. There is always room for improvement and the need to keep an education for a highly dynamic area continuously up-to-date. The main challenges the educations are facing come from challenges with hiring faculty. This is an area where a lot of steps can and should be taken.

We have mentioned many specific recommendations in the text above. Here are our general recommendations:

- Take temporary measures to ease the process of hiring immediately necessary staff. It appears it is difficult to recruit staff for two reasons. First, it was reported that it is difficult to recruit people to move to Gotland. Second, there is a scarcity of people that match both having the practical expertise required for game development, and the academic requirement of a doctorate degree. Therefore we suggest that the UU makes an exception in their recruitment policy for a small number of recruitments (3 - 5) over a set period of time (5 years) in order to solve the immediate staffing problems. For positions at the MPGD exceptions might be made for hires who have a master of fine arts. For hiring to the bachelor's programme, it appears of paramount and immediate importance to hire staff with industrial expertise of game development and education in computer science (but not necessarily a doctorate degree) to the Bachelor Programme in Game Design and Programming. The department has an excellent track record in encouraging and making it possible for existing staff to further their academic credentials, a recent example being that of Dr Nataska Statham succeeding in acquiring a doctorate degree. Hence we assess that an endeavour with hiring exceptions as outlined below does not pose a risk for lowering the formal academic credentials of the department as a whole.
- Increasing the number of students taken in on masters level and decreasing the number of students admitted to the Bachelors Programme. This could potentially create an improved balance of workload, allowing the staff to reiterate and develop the bachelors programme, and scaling up the masters programme. If this is implemented it might also solve the issues of the university not having large enough lecture rooms for the bachelors students.
- Increase the accessibility of teacher training for the staff located on Campus Gotland. Some general pedagogical training courses are only available at the Uppsala Campus. It would benefit the staff to have equivalent education available at the Campus Gotland. For more specialized,

area specific training, we recommend that the faculty actively supports their staff with time and costs needed for training.

While not recommendations, we recommend looking into the following ideas:

- Game Design could be the minor and the different existing minors could be the majors if there was enough staff with a PhD in each of them. We are aware that this would require a lot of work in restructuring everything. We don't recommend making the switch to that setup but want to mention that we have the impression that the minors are strong enough to be able to be developed into full programmes.
- Another solution could perhaps be to integrate the minors into the major, and call them 'strands' or 'specialisations' in the major instead. But that would require the students to take another minor, instead, which would further reduce the hours students have available for the core of the education. It is imaginable that either would attract a different demographic and also offers the chance to define new entry criteria for applicants. It would potentially also prevent the big group projects from dominating the time and attention of students. It would come with its own risks, though, so it is a step that should be considered carefully.
- Another idea could be to fully share the first year of education between all students and only specialise in respective disciplines a bit later in the programmes. The implication would be that there is more of a common ground to build on, more shared vocabulary and reference space. And also a slot for a course that teaches important non-technical topics like ethics. The downside of this idea is that it would limit the time students spend in their minor even more.