

Program Planning Checklist for Undergraduate Cognitive Science

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Vision

Cognitive science programs shouldn't be started unless the faculty has a clear conception of the field and what they wish to accomplish in offering it to undergrads. A strong vision will see the group through local hurdles and allow it to secure funding and contribute to national dialogs on cognitive science.

- What is our conception of cognitive science?
- What is our conception of cognitive science as an area of undergraduate instruction? What do we want students at various levels to learn? Will we make a genuine contribution to liberal education at our institution?
- What are our special strengths? What is the nature of the curricular and educational contribution that our program will make to the home institution, to relevant geographical regions or local consortia, or to cognitive science education nationally?
- Have we written a proposal that expresses intellectual energy and excitement and that demonstrates the commitment of the faculty?
- What are our answers to reasonable, or hostile, questions about why do cognitive science here?

Students

Cognitive science attracts relatively small numbers of majors at most institutions. Realistic projections should be made. Faculty should be willing to take on the burden of working to attract majors.

- How many majors do we expect to get with little special effort? (It is usually possible to identify a flow of students who would definitely major in cognitive science if it were available.)
- How many majors must we have to survive or prosper within our institution?
- Does our group have any special strengths that would attract students (e.g. a charismatic teacher, an attractive ongoing research project, expertise in an accessible applied area, etc.)?
- How are we going to make the field accessible and exciting to beginning students?
- What impact will the proposed requirements for the major have on the number of students who elect it? (e.g. programs with strong formal-mathematical core requirements often draw fewer students than programs with multiple tracks or menus.)

- What are some possible extracurricular efforts (e.g. a student organization, public lectures, a physical meeting place, a bulletin board, a newsletter, a website, t-shirts)?
- Will our faculty and courses attract women and minority students?
- What will our graduates go on to do?

Structure

There has to be at least one feasible way of implementing cognitive science within the institution. The implementation should be more than a list of existing courses.

- How can cognitive science be institutionalized (e.g. department, interdepartmental program with a major, etc.) ?
- Can we participate in the distribution requirements for the B.A. or B.S.?
- How will the major (minor) be structured? (This issue is covered in depth in the NSF report on undergraduate cognitive science: <http://home.hampshire.edu/~nasCCS/nsfreport>)
- Which existing courses can be part of the program?
- What new courses are needed to express our vision of the field? How can we get the resources to create these courses?
- What courses can we offer to beginning students?
- Can we offer integrative advanced courses?
- Can we institutionalize faculty cohesion and culture? Will we have regular program meetings, brown bags, a commitment to co-taught courses, etc.?

Resources

Planning, establishing, and running a program requires resources. The process of applying for resources, and success, when it comes, help to establish the planning group's legitimacy and vision.

- Do we have a critical mass of faculty who are committed to teaching in the program?
- Have we applied for internal support to develop our program, e.g. faculty development funds or funds for lecture series?
- Have we applied for external support for either curriculum development or collaborative research?
- Does the program we envision need a faculty director with some release time. Have we proposed and can we get the release time?

- Will the program need operating or capital budgets? Is there any institutional mechanism or precedent for establishing budgets for interdepartmental programs?
- Are there open or new faculty slots that could be defined as cognitive science positions?
- Will the program need staff support, such as part of a secretary's or administrative assistant's time?
- Will our program need its own space?

Politics

Planning groups usually face institutional inertia and sometimes active opposition. They therefore need support from outside and unity, energy, and leadership inside.

- Do we have the support of key upper administrators? What is the nature of any opposition?
- What are our relationships with relevant established departments, e.g. psychology, computer science, biology, philosophy, anthropology, linguistics, and education? Does our group include faculty members with appropriate savvy and influence in the relevant departments? Do we need to expand the group or cultivate more support? Will the contributing departments allow program faculty to teach the cognitive science courses that they want to teach?
- Have we resolved disagreements within our group about how cognitive science will be institutionalized and taught at our institution?
- Does our group have one or more leaders who are willing to do the work to see our proposal through and who are willing to chair the program when it is established?
- Will the work of junior faculty members in the program be appropriately recognized when they come up for tenure or promotion?

Monitoring and evaluation

Interdepartmental programs tend to live a somewhat precarious existence, particularly during their early years. Doing a good job contributes to prosperity. Planned evaluations allow the program to find out how well it is doing and provide the administration and faculty at large with relatively objective evidence of success (one hopes). Arranging for the administration to pay for an external visiting committee after three or five years can be very useful in keeping the program faculty motivated, documenting successes, building the case for more resources, and increasing external visibility. Curriculum development grants from the NSF or from private foundations can also include funds for evaluation that is collaboratively planned by program faculty and outside professional evaluators.

- Do we have a plan for evaluating our performance and making necessary changes?
- What is the institution asking for in the way of evaluation or review? What is our response?