### Cory Bart

What is curriclum material packaging we have these materials that come in many sizes e.g. problems, quizzes, slides, etc. We want to share.

Cut down on reinventing the wheel.

We are organized under CSsplice, they are agroup dedicated to standards, and protocols for education.

We’re the working group committed to curricular material packaging.

The goals today are to get to talk to this community, what are pain points, what are scenarios we encounter as instructors/researchers/designers.

What tools exist?

Some of us have things we have to solve this.

There are adnvances in this, learning objects. But we can have some interesting contributions with our technical expertise.

CS engage edu, ensemble, trying these repositories. A lot of this is not just another repo, but the idea from our pserspective, what’s a standard? Let’s promote a standard and process for instructor guides, lessons, etc.

This isn’t try to tell you to stop using yoru tools, we want something lighter weight and less invasive. Right now we are talking about a git based repo for courses, that’s what we’ve been talking about.

### Phil Conrad

The thing that brought me here is that a few years ago I was annoyed that evertyiem I was teaching a new course, I’d do search and replace for things like dates, lab 3 before 4, etc. It was just, I looked at what I was doing, and realized I was repeating myself, and took SE ideas and applied it to curriculum. Used Jackal (sp?)and made lecture notes, course calendar, lab assignments. Used it for a while, and shared it with a colleague and used it in one of her courses. And they found they could share material sback and forth, and it’s slowly spreading at our university. Our lower division using this format, we can share materials. It does have a few weird things, like it wasn’t designed but emerged. Michael hitlon and I might take a 2.0 and redo it fromf rist principles and apply SE to that and make it not idiosyncratic to one institution, it’ll be on the cite, kt’s open source and free to adopt. So it works pretty well, but I’d like to hear, maybe we can open after bob and Michael have spoken. What’s pain points, what would you like to see?

### Bob Edminson

I’m a canvas administrator, constaly getting help requests from faculty about moving courses from term to term. My interest here is to hear about ideas for automating not only course creation, but the process for managing course content itself. Because the next thing that I want to be able to offer faculty is starting with CS, but ultimately to everybody, a mechanisms wher ethye can have a course curriculum repo for themselves that they can use to do basically version control on course materials that they can load on canvas, and to the next LMS we end up buying. And to do that we need an agnostic system and a tool that can push it to a new one. What are you rideas for managing your own course content for things that are flexible, transparent and eliverabble.

### Michael

I’m a SE person through and through. We have a program at CMU for junior metnors, and it was this metnroign in a box called mentoring in a box. I wasn’t an expert, but Idelivered a hight qualiy lesson because of the thought put into the curriculum. E.g. lessons, dicussions to be had and when, etc. It wasn’t just power point slides.

It’s the old XKCD problem, and don’t just want another standard. But just thtink about the pedagogical goals and what can we cencourage. So if the structure has LO, it will encourage LO. Beyond just working, it’s also inspiring other people to be better instructors.

One of my goals is content at a finer granual than course. So pair programming or code review units, everyone, but I don’t want people to take my entire ocurse, but can slide it into your own curriculum.

### Craig U Illinoi

2 things that concern me is discoverablity and evaluation. So people can up or down arrow things. It’s hard to evaluate the stuff out there so I build stuff myself

### Armano fox UC Berkley

You just said curated which is overlooked. I’ve borrowed and adapated. Theres a differnec e between what works for my setting, and others that they might work for others. It’s like a script for me vs what I want to present to the world. So sometimes I’d curate it, and go the extra mile. But I think there has to be expectation that howver provides it needs active curation. I don’t want to be using an assignment that hasn’t been used recently. As much time as we put into doing it, we need clear expectations

### Cory

Here’s extra work, what do you want? Time, Money

#### Derich

When I’ve written for undergraduates and highschool, I took assignments that were really good and constructed a curriculum by doing things and stuff. Looking code.org and stuff is that it doesn’t say why is it there.

### Conrad

How many folks ar eusing canvas: 16

How amny moodle: 6

Skai, bright space, open edex, combo of stuff, desire to learn, homebrew, google sites

How many people when you authoer an assignment, how many are using html?

A couple

Markdown: 12 1/3rd

How many do it in an lms 1.5 hands

Some people are using sakai and moodle, but they are doing something else to puload it.

### Shaffer

For programming assignments, it’s weird because writing an assignment, is weird because its programming

#### Conrad

People learn by what they do and are acknowledge and so I put so much thought

#### Shaffer

Orthogonal, there are big programming assignments, the spec, while vague, we put incredible amounts of efforts into these projecst, but the time goes into the reference tests/implementations, etc. and the rubrics. Whenther I wrote the spec document in latex, markdown, etc. That’s trivial. But writing the wbecat tests is hours and hours

### Mara UC santa Barbra

It would be interesting if we use the lms to write the spec if we have standards in how we present that material so we don’t’ have to take someone elses assignment completely but can improve ecause there is a common structure. If there’s a common tool it’s easier to share, but the crucial oint is how we can move towards that structure. That’s because the first thing we see is that document.

### Cory

Meta: there’s another group in splice there’s PEML, this is a subpart of this problem, and there might be another one.

LTI doesn’t offer standardization of qui format and the like

### I’m from google

How do we get better feedback from what industry want’s from higher ed and how we can feed back that into whats in the curriculum, and I’m working with Michael, How do we make whatever tools we have, how do we collaborate from external sources. It’ s not just university or departments, it’s also companies. How do they engage, how do we advertise the need to engage, how do get people engage, provide tools to allow them to engage. So hopefully the tool is dynamic. So how dos that content evolve and how can practitioners do this? The outcomes, successful sutdents in industry, how do we get the students there, and that’s the goal we should think about broadl

### David HOovermyer College of Penn

Tow thoughts. One, we don’t know how to adopt someonesles curriculum, and that’s why we reinvent. One fo my ideas is that we need to get together who are open of using other’s curriculum and make it a social group, so everyone contributes one of their best assignments, and then everyone has a mkaret place, and basically we consciously get together to try it, and all these technical challenges sound like the easy stuff. How to make this part of the way we make it work is the problem

### Phil

I like this idea, and we’ve been able to do this at UCSB because we are doing the same courses and rotate, and we have that community. But I remember before common format and it didn’t work because one wants them in word, latex, etc. and that conversion and weding things in was hard. Having the common format makes it a lot easier. So the names and dates are vairables, means I can take her assignment, and drop it in.

#### David

There is a thing where we do need common stuff, but I agree

### Shaffer

I taught a formal languages for the firs ttime I had the luxuary of having susan roger stuff, and my department person. If you got a willing partner they give me a dump of all their files. These two competent people didn’t give me a course, just files, even though everything was as good as it could have been because of format

#### Conrad

A pile of files is not a course, how do we get there?

NOwing how pieces fit together, and these are the notes related to it and figure out how they are and make a pile of bones instead of a skeleton

### Susily hider from Utah

Some assignments are really well known, e.g. nifty, or CMU’s stuff. As they become more renouned, they become solved on the internet. We need to balance sharing vs. cheating. We also need balance between projects vs. small assignments and

#### Cory

Trying to create a taxonomy is important

### Mike zemancy Newyork

I’m really a high school and concerned with that. I think back to one of my principles who was a lousy teacher. But he’d have a lesson plan each semester and copy because each lesson was different. Some people don’t grow from the script because they didn’t know why/ I want courses or components, I want it organized dump of files.

For them it’s about ABC, and I’m trying different concepts from it’s avery nice recursion problem. I’t not ask this question/exercise, it’s not a learning bojective, because we’re not doing the deeper concept. I can assemble my course

### Santabarbra

What we are looking for is a document for the instructor that explains why it’s organized this way and break it down on a weekly basis, what are the goals, and all of the things that aren’t student facing

### Armando

You just got to an upper bound, we made a book , atuograders, notes, reference exams, instructors guide, et.c that’s the upper bound. One of the thigns cooper did was “If you want people to adopt it, the thing you put out there has to just work” People who enjoy it will customize, but you need in the unit, you need something that just works, you need the reasoning behind it. So I waonder if talking about assignments is nit the right granularity. So maybe for each module you need LOs and a narrative. It’s hard to pick up an assignment in vaccum and integrate it

### May gray, cornell tech New York

What you said abou the instructor facing documents, I’m in a n education work group with PFS, we aren’t just educators, contributors on both text and education side, problem is we get great materials, but to get them to educators, they don’t know how to make sense of this, they need a schema, a format. And also, the people whoa re contributing need to know “This is what an educator needs” Let me help you organize your thinking around this, that’s my need. What you were explaining.

### Craig

Prerequisistes for a module might be useful or a dependencey graph might be useful. In addition to learning objectives

### Michael

I like using active learning, so usually it doesn’t help that much with slides because I don’t have a good transfer of knowledge in the classroom

### Hairo google

We don’t want to force anything, but I want standards, there are two competing things. The stanards beam we don’t have to recreate, but if we want ot share, we need to be flexible

### ???

Tape yourself doing it. Some e text books I can watch it as it’s taught and that’s why I adopted it. Because I saw it being taught and know that’s why it’s there.

#### Cory

FERPA?

Response: Ou rlaywers are on that

### Kat eform UCSB

This morning I talked about a repo for people doing SE. I got a canvas. Phil pointed me to a github. Here’s my reasoning fo an assignment, and that points two a repo that we can modify it and seems like a way of sharing

Would it be useful to throw up one of our sites, and it was simple as cloning the repo. And while I didn’t necessarily have the why, there were links. If I wanted an extra column, it’s comfortable.

### Tanuki form brave?

I’d eb interested in a repo that was Concept or LO indexed. But often I’m reteaching a course, but how are others doing it. Here’s skills, assessments, pedagoidges, etc. I’m not interestd in teaching a whole new course, but concepts

### Phil

Here’s the course kate is teaching now, and this git is the dump of files, and that’s not a course. This is more of a course because each of these directories has a role, and tehre’s a common structure that all of these course have agreed upon. What we’ve done is minimum viable course management out of jackal and git pages, and it’s very flexible. Free are syntax highlighting, math formatting. Here’ it changes in one place, and it propagates. Cory can’t edit, but he can fork it, and he can change the date and it’s changed on the calendar

### Cory

Running out of time, whwat’s concrete?

Next steps:

We gave you that url , go to it and it has sthings on it, there’s a google group, there’s other things, phil’s work, a python course I wrote, and hopefully that will influence our design if you critique it. One of our concrete plans is a google form to gather pain points, find tools, etc. Hopefully you have time ti type it up.