

CARNEGIE MELLON  
*Community***ThinkTank**

Intercultural Problem Solving for Performance  
in WorkPlaces and WorkLives

# **A Briefing Book on the Experiences and Struggles of Independent Students at Carnegie Mellon University**

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## **An Introduction**

### From Team Creative Consciousness:

As graduate and undergraduate students at Carnegie Mellon University, we were challenged as part of a course called Leadership, Dialogue, and Change to conduct an inquiry into a problem on our campus, interview the stakeholders, and determine an appropriate course of action. Organizing as though we were paid consultants of a think tank, we were given a semester's worth of time to gather relevant information about our topic, record conversations with affected members of the community, and ultimately hold a summit bringing together certain members of administration and the student body that had experience with our issue. After settling on the topic of retention in early October of 2009, we scheduled interviews, either in person or over the phone, with students we had known that had left school for a period of time or for good, or those we knew had strongly considered leaving, as well as relevant members of the Carnegie Mellon staff. When speaking with interview subjects, we asked for great detail so that we could determine the full chain of events and critical incidents that could bring a student to the edge of attrition or beyond, and the thoughts and feelings that they experienced.

Between these interviews and information we gathered through research, a pattern emerged indicating that retention seemed to be lowest among students overcoming economic difficulty to go to school, or those who were the first in their families to go to college. After making this connection, our project appropriately shifted focus, and at our summit, discussion concerned the challenges faced by these students – whom we have dubbed “independent students” to reflect their relative ability to overcome hardship without support – when attending a world-class, but expensive, private university.

For our summit, in addition to gathering interviews and relevant data, we constructed two representative scenarios demonstrating positions of difficulty independent students regularly find themselves in. We also constructed three decision points – component problems for which action is needed concerning our issue – and offered these, as well as the scenarios for discussion. The end results of the interviews, the summit, and our in-group deliberation are the findings contained in this briefing book. These findings offer both options and rival interpretations of possible outcomes that we hope will work as a basis for continued discussion toward keeping more independent students at our University, and getting them the support that they need while they are here.

In order to ensure that the experiences of independent students get the long-term attention that they deserve, this briefing book will be available on Carnegie Mellon's Think Tank website ([www.cmu.edu/thinktank](http://www.cmu.edu/thinktank)) under the Findings section. Additionally, as many of the original students involved in Team Creative Consciousness will soon graduate from the university, we leave our work in the capable hands of Dr. Linda Flower who has been the key supporter of our work from start to finish. Future correspondence regarding these findings can be addressed to her.

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## What's the Problem?

The “Team Creative Consciousness” Think Tank was focused on retention at Carnegie Mellon University, with a particular eye to students who are the first in the family to go to college, and/or who may be experiencing financial difficulties in funding their college experience. As you may or may not know, there are a number of institutions and organizations on CMU’s campus celebrating “diversity,” and Carnegie Mellon’s stated position is that belonging to an underrepresented group may actually provide an advantage in the admissions process. But there are three problems that we see:

- First is that while there are a multitude of popular and supportive groups for ethnic, cultural and racial minorities at Carnegie Mellon, there is as of yet little attention devoted to helping students from economic minority groups (first generation, work study, or low-income) feel like they belong here, or that they are not alone. Independent students tend to feel isolated, and as a non-visible minority, they can encounter difficulty finding students with whom they relate. They need a base of support at school to add to the support they may or may not be getting at home – they seem to need encouragement to the effect that somebody other than themselves care that they are doing well at school.
- Secondly, there is a felt lack of understanding and support from faculty and administration when it comes to the additional pressures independent students face. Students with the added strain of balancing work and school or not having parents to turn to about college problems often need a push in the right direction, or even understanding when it comes to fulfilling their responsibilities and living their formative undergraduate experience.
- Finally, for many independent students, their problems are symptomatic of the conflict caused by attempting to complete a full course of study while necessarily needing to support themselves in some way or another.

## The Question

Our investigation started with a felt difficulty—why did independent students sometimes decide to leave school, or so often consider it? Why did other underrepresented minorities experience less difficulty? How is it that on a campus where hundreds of students from other parts of the world are thriving, the independent students we spoke with so often felt disconnected?

But through our critical incident interviews we saw that the larger question was not about the students leaving, but rather the environment that existed for an independent student – whether they were to leave or not. We asked:

- What are the problems independent students feel most acutely at CMU?
- How are current forms of support working for this underrepresented group?
- What are some options for providing more support?
- How do different stakeholders see the possible outcomes of these actions?

What we discovered was a complex adaptive problem with three important parts:

- That financial, academic and social problems are connected for the students we spoke to.
- There is a need for more directly targeted and effectively communicated support.
- And there is a need to replace the stigma attached with being 1<sup>st</sup> generation or low-income with a public identity as “independent students,” with new recognition for the extra achievement of students who are dealing with these obstacles.

## Problem Scenarios

“Independent Students and Time Management on the Carnegie Mellon Campus”

**A look at the problems that may affect quality of life and academic well being amongst first generation and low-income students at CMU**

### **The Decision Makers**

#### **Stephanie**

First generation/ Low-income student who is struggling to manage time between her school, work and social life

#### **Ashley/Katie/Michael**

Students of wealthier backgrounds who do not have to work and may have had better preparation from their high schools

#### **Susan**

Stephanie’s mom who did not attend college and is unsure of the support/advice she should give

*The setting is the Hunt Library, located on Carnegie Mellon University’s campus. It is a Friday afternoon. Stephanie, a sophomore majoring in Chemistry at CMU, is sitting at a table, studying for a Chemistry exam. As a first-generation college student, her parents are unable to identify with many of her day-to-day challenges. Stephanie averages between 20-25 hours a week as a supermarket cashier. Her three friends, Ashley, Michael, and Katie, are from wealthier backgrounds and are the children of college graduates.*

*Stephanie is sitting alone at a table*

**Stephanie:** Okay, I have everything together. I will not get up until I go through all of my notes and do all of the practice problems. This will probably take me 3 or 4 hours if I concentrate...not too bad.

*Ashley, Michael, and Katie, who were also in the library, spot Stephanie and approach her.*

**Ashley:** Hey Stephanie! We were just studying together on the 3<sup>rd</sup> floor. We didn’t know you were here...we would have invited you.

**Stephanie:** Oh no it’s okay...don’t worry about it. I need to concentrate anyway. I’m studying for that big chemistry exam on Monday.

**Katie:** The test in 217? That’s easy stuff. You’ll get through it in no time. Anyway, we were all thinking of going out tonight. You know, dinner at the Waterfront and catching a movie. You should come.

**Stephanie:** *Easy stuff? She must be kidding.* Now that sounds fun. But I can’t...sorry. I really need to sit down for a couple hours and get through all of this material.

**Ashley:** Come on Stephanie! You didn't go out with us last weekend and we haven't even seen you this entire week.

**Stephanie:** I know...and I feel very bad about it. I promise I will make it up to you guys. Maybe we can hang out next weekend? I really want to do well on this exam, especially since I did pretty badly on the last one. *Probably because I skipped my professor's office hours to go out to dinner, and I had to pick up so many extra hours at work that week just to pay for it that I couldn't make the TA's hours either. I've never needed this much help before. I just don't know where these guys can find the time... or the money.*

**Michael:** We understand Stephanie, but one night out will not hurt. And it's Friday! Everyone goes out on Friday night. You have Saturday and Sunday to study. Two whole days!

**Stephanie:** No I don't Michael. I have to work tomorrow morning and afternoon or I'll be late on my rent. So I really want to put in some study time tonight.

**Katie:** Well you have a full day on Sunday to study. Seriously, that exam will be so easy. We learned half of that material in high school! One day of studying will be plenty. And anyway, we miss you. We never see you anymore.

**Stephanie:** *I did really well in high school, and I haven't seen most of these concepts in my entire life. It comes so easily to them. Why am I so far behind?* I know...the past couple weeks have been busy. I'm just trying to do well this semester. But maybe I need a break...I'm not sure...let me think about it. Could I get back to you guys?

**Michael:** Alright. Just call us when you make up your mind.

*Ashley, Katie, and Michael head towards the door.*

**Ashley:** I bet you guys that she will say no.

**Katie:** Me too...it's like she doesn't want to hang out with us anymore. *[All three exit]*

*Stephanie tries to get back to her work but is distracted. She is torn between studying for the exam and hanging out with her friends. She calls her mother for advice.*

**Susan:** Hey dear, how are you doing?

**Stephanie:** Not too good. Some friends invited me to go out with them tonight but I really need to study for this chemistry exam.

**Susan:** Right. Are they going to a party?

**Stephanie:** No, just a dinner and a movie.

**Susan:** Well, that sounds like fun. And you have been stressing out over this exam for a while now. Maybe you could study when you back from the movie? And then you have the rest of the weekend to study.

**Stephanie:** Well I probably will be too tired to study when I get back and I am working tomorrow.

**Susan:** Stephanie, I don't know how you do it all. Aren't you taking on a little too much? I want to see you do well, but I never saw you work this hard in high school. I wish that I could do more for you.

**Stephanie:** It's not your fault, mom. I knew that I would have to work a lot when I decided to come here. It's just that the coursework is much harder here, and I need a lot of extra help.

**Susan:** Sounds like what you really need is some time to relax. Schoolwork isn't everything. Making friends is important, too. Isn't that how most grads get jobs after college? And anyway, I want to see you have some fun.

**Stephanie:** I know mom...you are right. I will take a break tonight. I will give Michael a call right now.

*Stephanie called her friends and went out that night. She was unable to get much studying done on Sunday and received a poor grade on the exam.*

## **The Story Behind the Story**

### **Whose Problem is This — the Student's, the Teacher's, the School's?**

#### ***A student says:***

Stephanie probably feels inadequate because her friends find all their work very easy but she is struggling. She's probably also stressed because she has to find time to work while still doing well in school. Even though Stephanie is responsible for her work, it would be nice if the working-student was given extra support.

#### ***An Administrator says:***

Stephanie thinks that she can socialize with her friends and also have time to study and work, but that isn't the type of school CMU is. CMU requires students to dedicate the majority of their time to academics. Stephanie must take responsibility for her actions if she decides to go out rather than studying.

#### ***A Professor says:***

If Stephanie was having trouble with the material, she should have started to study earlier in the week. She could have received extra help with the concepts and ensured that was prepared for the exam. Any student who is struggling and starts studying only a few days before the exam is going to have trouble.



## “Professor and Student Scenario: What’s Going on Here?”

### An Additional Scenario

*The setting is Baker Hall A19. It is Thursday and Professor Matthews has just announced that there will be an exam on Tuesday. Mark is a low-income student who has never asked the Professor for help. He is doing fine in the course, but he is nervous for the upcoming exam because he doesn’t think he will have enough time to study. He must work this weekend, both Friday and Saturday night, in order to make a payment on his loan the following week. He is worried he won’t be able to adequately prepare for the test, but if he fails the course, he could lose his scholarship.*

**Mark:** Hi Professor Matthews. I know that we have been discussing this material for the past couple of weeks, but I’m still feeling iffy about it.

**Prof Matthews:** Okay, well do you want to go over the material in my office hours before the test?

**Mark:** I’m not sure I have time. Um, so do you think I could— or is it possible— never mind, I’m sure I’ll be fine. *He’s never going to give me an extension I don’t really deserve one because I should have been looking over the material over the past few weeks. I know I will do much better on the exam if I had more time to study, but why would he care.*

**Prof Matthews:** I’m sure you will too. I know you’ve been having trouble, but you have this entire weekend to study and I think if you dedicate yourself to learning the material you’ll do just fine. *Mark is a fine student. If he studies this weekend, he’ll do fine on the exam.*

**Mark:** Yeah, thanks Professor Matthews. *Maybe I can just ask my boss for time off.*

*Mark leaves the classroom, still stressed because he doesn’t know when he will have time to prepare for the test. He wonders why he didn’t just ask to take the test at a later date. Since it’s too late now, he decides he will call off of work so that he’ll have time to study. He will have to sacrifice a bigger pay check.*

**Mark:** *(on the phone with boss)* Hey Dave, I was wondering if I could take this weekend off. I have a tough exam and I really need to focus.

**Dave:** You took off last week. *Mark is lazy. He never wants to work and it’s hard to find a replacement for him.*

**Mark:** I know but I was really sick last week.

**Dave:** Is this going to become a usual thing because I can find someone to take your place?

*Knowing he could not afford to lose his job since he is working to pay off his loans, Mark quickly replies,*

**Mark:** No! I’ll be there.

*Once at home, Mark contemplates how he can make the best out of this situation.*

**Mark:** I have to work. I have to study. I can do this. I'll just study before and after I go to work, even though I'm working 10-hr days. I'll also wake up early on Sunday to make sure I am familiar with every concept. I don't need an extension, or the day off. I can do both and still get paid and get an A.

*Although Mark did get paid, he wasn't able to study as much as he wanted because he was so exhausted. Mark ended up getting a C- on the exam.*

**Professor Matthews:** You should have come to see me Mark. We could have gone over these terms and I would have helped you learn these methods. I expected a lot better than this. *I guess he didn't take anytime to study this weekend. He must not have thought it was important.*

**Mark:** I'm sorry, Professor. I'll be sure to do better next time. *If I can ever find the time to study.*

## Options and Outcomes for Independent Students

### **Decision Point #1:**

First Generation and Low-Income students must learn how to cope with additional pressures in order to succeed in the CMU environment, often without a support network or other necessary resources.

### **Option #1:**

Establish a funded priority through CMARC to identify, support, and acknowledge this under-acknowledged minority.

#### **An Advisor says:**

We offer all kinds of collaborative resources to see students through to graduation. If students aren't using them, I can't see a reason to put more money into creating additional ones.

#### **A Student says:**

Sometimes I know what resources are available, but sometimes I don't. I didn't really know who my advisor was until a friend told me my sophomore year. I can appreciate the school's efforts to be collaborative, but sometimes being sent from person to person in different departments feels more like being ignored. With all of my additional commitments between work, school, and friends, it's hard for me to find the time to figure out the system and get the additional help I need.

#### **The Think Tank says:**

Many of these students struggle to find additional resources and then work them into their schedule. It is often more difficult for them than it is for the average student. As of now, the university lacks a way to identify these students and provide them with targeted support.

#### **An Advisor says:**

It is difficult to go about identifying students who are either low-income or first generation. We are often hesitant to single them out – some might not want their peers to know.

#### **A Student says:**

Some of my peers don't want anyone to know, but I know that I don't like feeling like I'm the only poor kid at CMU. And anyway, it would be harmless to give students the option to self-identify anonymously.

#### **A CMARC Advisor says:**

Our office successfully works with minority students every day, and there is no reason why we couldn't do the same for this minority. Having one place to go for information would really limit some of the pressures on first generation and low-income students, and so many other minority students have already benefited from the strong network CMARC creates.

**The Think Tank says:**

These students often work harder than the average CMU student, and feeling disconnected from the community at-large has been a common theme. It likely contributes to students' decisions to drop-out. By providing a way to create a campus community of underrepresented students and acknowledge their hard work, the university may be able to make them feel more at home.

**A Successful Low-Income/First Generation Student says:**

It is difficult to make it here, and I thought about dropping out my first semester. There are challenges adapting to the campus culture. When it comes down to it, each student is responsible for him or herself, but there's no reason to not make it a little easier. I can't expect my friends or my parents to relate, and they simply cannot understand what it takes to be successful here. A way to acknowledge us, especially as independent students who face unique obstacles, would help me feel a little prouder and more like I have a place on this campus.

**Option #2:**

Administration should remind students of academic support, via email and through their professors, multiple times throughout the semester.

**A Student says:**

This would be very helpful. I'm not paying attention to opportunities for academic support in the beginning of the semester because I don't need academic support then. If I were reminded in the middle of the semester, it would be more relevant and more helpful.

**A Professor says:**

I offer a lot of support through my office hours and my TAs. I also make myself available by appointment. If students took advantage of the support I offered specifically for the class, they wouldn't need outside help, so why should I have to make announcements about even more support opportunities?

**The Think Tank says:**

Students often feel like "nameless faces" inside large classes. They don't feel personal support from their professors, so they don't feel comfortable asking for help. Outside help might be more accessible to some students, but it will still be up to the students to take advantage of the help.

**The Administrator says:**

Students rarely take advantage of support opportunities. I don't think sending more emails will help because asking for help is not a part of the campus community culture anyways. Students don't ask for help, no matter how much we tell them it's available.

**A Student says:**

Sometimes I don't take advantage of the help because there is a stigma attached to asking for help at this school. It makes me feel unworthy and incapable when I'm asking for help and none of my peers are.

**The Administrator says:**

CMU does have a very competitive culture and many students feel it is hard to ask for help. No matter how often we remind students of academic support opportunities, it will not dispel the common opinion that CMU students shouldn't need to ask for help.

**The Think Tank says:**

Why not offer help in as many different forms as possible? Maybe students aren't responding to help, because the method in which they were reached doesn't work for them. We can try to reach all students by using many different media. If we offered help by email, through professors, online and through TAs and tutors, not only could we reach a wider range of students, we may also be able to make asking for help more of a norm in the CMU community.

**Option # 3:**

Low income, working, and first generation college students will be scheduled for regular meetings with advisors once a semester to make sure that they stay on track, and to build a relationship with the person who recommends their academic moves.

**A Student says:**

If this is built around my schedule, this could be extremely helpful. I feel like the majority of my older friends waited until registration for senior year to start paying attention to 'what counts for what?' and I do wish a lot of the time I had somebody to talk to about what I'm doing with my life. As of right now, advising seems pretty impersonal.

**An Advisor says:**

This is going to quadruple our workload, and I don't know that there's a real outcry from the students for this. We're free for appointments at any time as it is, and I feel as though students don't take advantage.

**A Professor says:**

I see these kinds of students fall through the cracks all the time. I'm not opposed to anything to help keep them on track, unless it consumes a disproportionate amount of resources.

**An Administrator says:**

The framework is already there for students to get help, but our retention is the worst among the top 25 universities, and I know that factors into our rankings. If this could make a difference without a dramatic increase in cost, I would support it.

## **Decision Point #2:**

Students who enter as first generation or low-income students feel alone in their struggles. They do not know about their advisors or other opportunities on campus where they can find resources.

### **Option #1:**

The University manages the situation by placing a web link on Carnegie Mellon Student Website that directs students to financial aid workshops, jobs offered on campus, and advisor centers such as CMARC that they can go to. The website is a great way of organizing useful information for students to access at any time.

#### **A Student says:**

I would really appreciate a web link on Carnegie's website. I think the main reason why I rarely seek help is because I do not know who to go to if I have a specific problem, and part of me feels embarrassed about asking too.

#### **A Professor says:**

I will support anything that will make it easier for my students to get the academic support they need. Many students do not take advantage of CMARC, and I believe that advising is crucial for a student's success. If the problem is that students are unaware of CMARC, then maybe a link on the university's website would get their attention.

#### **An Administrator says:**

We feel that our website is very user-friendly and accessible. There are already tabs for student employment, financial aid, and academics. We really do not find any need to make any adjustments.

#### **The Think Tanks says:**

While a website is helpful, it cannot replace face-to-face contact a student may need. This is, however, a good start for de-stigmatizing the statuses of first-generation and low-income college students, because a web link on the main page will imply that the information underrepresented students seek is needed with frequency, and hence not out of the ordinary or strange.

### **Option #2:**

The administration and Student Life manage the situation. A support group is developed for students who self identify as low income or first generation. The support group will provide a space for students to meet one another outside of class as well as different topics to talk about, but will similarly applaud students for their ability to handle adversity, granting the underrepresented with an appropriate designation such as "independent students."

**A Student says:**

I think that the administration might assume that students who come from a low-income family or are a first generation student might be too embarrassed to join a support group. However, if anyone told me there was a club for poor kids, I would be the first to join! My time at Carnegie Mellon would be a lot easier if I knew that there were other students who share my experiences. I often feel like I am the only student who comes from a low-income family and therefore tend to isolate myself. It would be great to know that I am not alone.

**A Professor says:**

Because we professors are very busy with teaching and doing research, it is hard for us to find the time to address the emotional needs of our students. I think the support group would help students who are overlooked by advisors and professors.

**An Administrator says:**

We are not sure that it would be beneficial to isolate low income or first generation students. We want to create an environment where students from different backgrounds are developing relationships and exchanging ideas.

**The Think Tank says:**

A recurring theme in interviews with underrepresented students was the feeling of extreme isolation, which a support group would most directly address through the sharing of common experiences and struggles. The main problem with the idea of the group for some of the students was the stigma that may come with self-identification as first generation, low-income, or work study. Thus, it was determined to be of the utmost importance to stress the positive bent of the group – that the students are being applauded for their efforts, and the name and stated purpose of the organization reflects as much.

**Option #3:**

The admissions office handles the situation. Within the welcome package sent to all admitted students at Carnegie Mellon, there is a DVD with a menu option specifically for first generation and low-income families. The DVD explains some of the hurdles the students and parents may face during college. The DVD will point out services that help with loans, places the student can go for advising, and other support systems dealing with family issues.

**A Student says:**

I do not think the current package sent to admitted students addresses the specific needs of lower income or first-generation students. I think that the administration clumps us with the rest of the students who may not need as much help or direction. However, as a first-generation student, it would have been extremely helpful to watch a DVD that featured current students who were also first generation students and gave me more information about academic and emotional support. The university needs to realize that first-generation students have absolutely no idea about what to expect when starting college.

**A Professor says:**

I think a package would be a great idea for incoming first year students. The better prepared these students are before they arrive on campus, the easier it will be for them to adjust to a more rigorous course load and seek help as soon as they face academic issues. Most of the time, students wait until the last minute to seek help in their classes, and by that time it is sometimes too late. I can only imagine how difficult it is for a first-generation student who may not know when to ask for help or who to go to for help. The administration needs to offer them a lot more preparation than the average student.

**An Administrator says:**

We feel that we do address the needs of all incoming first-year students. We send a package that gives details regarding financial aid, academic support, and social life. Furthermore, more information and support is given during orientation. Lastly, our website will direct a student to the appropriate office that will address their needs.

**The Think Tank says:**

It is extremely important to remove the stigmas underrepresented students may feel about their situations and about asking for help. By adding this information specifically for first-generation and low-income students along with the rest, an important statement is being made, and that is that underrepresented students need not feel ashamed or out of the ordinary – their admission was not an accident, and CMU looks forward to their arrival.

**Option #4:**

Students handle the situation. Older self identified students can offer to help younger students adjust to college through a mentorship program. Older students may recommend classes, places in Pittsburgh to go and ways to save money.

**A Student says:**

I think that a mentorship program would have been beneficial as a freshman. There were many times when I was overwhelmed with my course load, especially since I also had to work. It would have been great to know that there were students who shared the same background and how they were able to balance school, work, and friends.

**A Professor says:**

A mentorship program is a great idea. Although we professors and advisors are here to support students, it may be difficult for us to identify with students coming from a low-income background, especially if we do not come from that background. Through this program, these students would be able to identify with each other and rely on each other for support.

**An Administrator says:**

Should we find that students from a low-income background are in need of additional emotional support, we would definitely support a mentorship program. However, we feel that we do offer adequate support services for younger students.



**The Think Tank says:**

A similar program takes place at Yale for all students, not just underrepresented students. Yale's attrition is practically non-existent.

**Decision Point #3**

School and work can compete for a student's attention and it is not always clear what should take priority.

**Option #1:**

CMU could support more paid research opportunities for work study and low-income students.

**A Student says:**

A job on campus, meaning no commute, and an employer that understands my finals schedule? Sign me up! I wouldn't have to choose between school and work, and this could benefit my education.

**A Professor says:**

If we're talking about more research grants, I'm all for it, but if you're talking about giving me more student assistants, it sounds like a lot of people will end up getting paid to sit on their hands.

**A Grad School says:**

This will take much legitimacy away from applicants who have research experience, just by virtue of the fact that it will be a less selective endeavor.

**An Administrator Says:**

All complaints of faculty or considerations of the legitimacy of the work aside, there just isn't the money for this in the budget.

**Option #2:**

Students can attend Carnegie Mellon as part-time students.

**A Professor says:**

On the one hand yes this could work for a student who needs the extra time. However I think if a student could study full time they should. I've noticed part time students are more likely to leave school without a diploma than full time undergrads.

**An Administrator says:**

The University offers part time courses and evening classes that students can take to work towards a degree. For students who don't have the time, are currently in a career, or have a family to support this can be a great option.

**A Student says:**

I guess that could work but then I would be a student for so much longer. I would be balancing work and school for a longer part of my life and when I got my degree I would be way behind in my career compared to full time students who graduated before me. Not to mention I may still have to take out loans and stretching them out over that length of time could keep me in debt for longer.

**A Student's Parents Say:**

Well this could be a problem, as it would have an influence on our health insurance policy. Also, we thought that the sooner our son/daughter graduates from college the sooner he/she could be making a regular salary and help us pay off the debt we've incurred to send them to school.

**Option #3:**

Carnegie Mellon University can offer more online courses for students that require a flexible schedule.

**A Professor says:**

I don't know about this option. I know we could work on a learning package using the blackboard facility at CMU however I don't think there is a substitute for a classroom teacher. Every day I am asked a question from a student that probably at least three more in the room need an answer to also. These questions are answered much better in person when we can have a dialogue rather than through emails.

**An Administrator says:**

Departments would have to work on it themselves and organize an effective program for students to study off-campus. Although it could reduce the cost of courses that are particularly labor intensive we would be worried this could harm the standing and reputation of the University.

**A Student says:**

This option could really help me as sometimes my work schedule makes it horrible to attend classes at the times scheduled by the University. My concern would be that I wouldn't be speaking with my professor and getting everything I could from face to face contact. Perhaps if I could have regular meetings with the professor that fit my schedule to go over any problems I may have.

**A Student Advisor says:**

This could solve the student's problem with their workload but in students from low income and first generation college backgrounds I've heard complaints that they feel isolated from the culture on campus. I'm not sure taking them out of the traditional classroom environment and having them work in solitude would be the best way to combat this issue.

## **Critical Incident Interviews and Think Tank Participation List**

- Helen Wang, House Fellow and adjunct professor
- Sean McMillan, student who has taken a leave of absence
- John Lehmann, first-gen student
- Scott Rosenfeld, CMU student, friends with student who left
- Andrew Robb, CMU student, friends with student who left
- JJ Johnson, brother of CMU student who dropped out
- Andrea Solomon, low-income/first-gen CMU student
- Anna Rasshivkin, employed student
- Justin Wasser, student forced to leave school for financial reasons
- Lynna Martinez, CMARC academic advisor
- John Lanyon of Academic Development, employs students, former 1<sup>st</sup> gen student
- Mara Iverson of Housing and Dining Services, employs students, former 1<sup>st</sup> gen student
- Jenna Peterson of Housing and Dining Services, employs students, former 1<sup>st</sup> gen student
- Mary Glavan, student who left school, fully employed during undergrad
- Emily Ferris, low-income CMU student
- Tokiea Fitzgerald, low-income/first-gen CMU student
- Ruth Ann Ferris, parent of low-income CMU student
- Jordan Rosenfeld, CMU student, friends with student forced to take time off

## **Fact Sheet**

### **Predictors of Difficulty and Success (Staying in College vs. Dropping Out)**

The following variables may be predictive of when a student will not complete his or her college education (as drawn from the sources below):

- Low socioeconomic status
- First Generation College Students
- Minority
- Unstable/difficult living situation/personal or family crises
- Lack of support (financially or academically) from parents or guardians
- Working long hours
- Lack of needed financial assistance from university
- Lack of support from college peers
- Lack of college preparation in high school
- No support from community at home
- Discrimination on campus or in surrounding community
- Difficult major
- Athletics

### **Labels/Definitions**

**Retention:** Carnegie Mellon University defines retention as “The percentage of enrolled students who return to the university during a specific time frame. For example, first-year retention is the percentage of students who return for their sophomore year” (Carnegie Mellon University Factbook 2008-2009).

**Low Income Students-** Students who have demonstrated financial aid to the University. These students (or their parents) must rely on loans, scholarships, grants and working to pay for their education. Often times, they must work to pay for tuition, to pay back loans, or to have extra spending money. Some must focus on work as much as school because of their financial situation.

**First-Generation College Students-** Students who are the first in their immediate family to go to college.

**Total Financial Need:** Cost of Attendance – Expected Family Contribution = Financial Need  
In 2008, Carnegie Mellon met 82% of financial need of full-time undergraduate students who were awarded any need-based aid (including first-year). This leaves an average of \$7170 per year for students to make up in tuition alone.

**Financial Aid:** Carnegie Mellon University lists the following as sources of scholarships/financial aid to undergraduate students:

Carnegie Mellon Endowed, Carnegie Mellon General Unrestricted, Carnegie Mellon Gifts and Grants, Federal-Pell, Federal-SEOG, Other Grant Resources (different from those already listed), Other State Aid (states other than Pennsylvania), ROTC, and State Aid-PHEAA. Loans and work-study are classified as Self-Help sources of financial aid.

To determine financial aid, Carnegie Mellon uses Federal Methodology (as do most other institutions). It uses parental and student total taxable income, equity in assets, size of household, and number of children enrolled in college to determine a student's Expected Family Contribution.

**Federal Work Study:** Federal Work-Study is a need based self-help award. If a student has been awarded FWS, their FWS award is the total that they can earn during the academic year as a work-study student. In 2008, the maximum FWS award at Carnegie Mellon was \$1,551. In order to retain their award, a student must maintain a minimum number of units and a minimum QPA (as determined by college). Total gross earnings cannot exceed the award amount.

**The Role of Demographic and Social Factors in Retention:** A student's status as the first generation of his or her family to attend college has an observed correlation to retention. According to a study from the National Center for Education Statistics, "First-generation students persisted in postsecondary education and attained credentials at lower rates than their non-first-generation counterparts."

The need to work while attaining a degree can add significant stress to the educational environment, and can affect the ability to stay current on coursework. A study published in 2002 by the U.S. Department of Education cited that nationally, students who considered to be working at or near full time while attending school left college within the first three years at a rate of 53.8% without returning or having earned a degree, including Associate's programs in the measurement. Comparatively, nonworking students from the same institutions left school without returning at a rate of 26.7%, or less than half.

Students for whom the cost of attending a four year institution is a source of concern may consider the school environment exceedingly stressful, and may have trouble finishing on time or at all. A study published in 2004 by the National Center for Education statistics showed that 39.4% of beginning college students in the lowest income quartile had discontinued schooling within 4 years, and only 15% had completed a 4-year degree within that time. Comparatively, 41% of students in the highest quartile had achieved a 4-year degree in the same period, and 29.2% had discontinued.

## Websites

“Does Working Work?”

([http://www.umbc.edu/oir/cpp/Does%20Working%20Work\\_National%20AIR%20Conference%20Presentation.pdf](http://www.umbc.edu/oir/cpp/Does%20Working%20Work_National%20AIR%20Conference%20Presentation.pdf))

University of Maryland Study of the effect of working on retention

Working Class Students: Lost in a College’s Middle Class Culture

(<http://www.aaup.org/AAUP/pubsres/academe/2005/JA/Feat/case.htm>)

Article on the diversity of University campuses and how this can occlude the needs of working class students who cross all minorities

Office of Federal Student Aid

(<http://www.nasfaa.org/Annualpubs/Journal/Vol37N2/MacCallum.PDF>)

Study on the effects of financial aid on enrollment, retention and success

## Relevant Readings

Bürgenmeier, B(1992) *Socio economics: an interdisciplinary approach: ethics, institutions, and markets* Translated by Cook, K Norwell MA: Kluwer Academic Publishers

Discusses the social aspect of economics and with a focus on ethics

Thomas, L & Quinn J (2006) *First generation entry into higher education: an international study*

Open University Press

Focus on defining terms such as *First Generation* and *Retention*

Levin, M & Levin, J. (1991) A critical examination of academic retention programs for at-risk minority college students. In *Journal of College Student Development*. Vol 32(4), Jul 1991, (pp. 323-334)

Gerdes, H & Mallinckrodt B (1994) Emotional, social, and academic adjustment of college students: A longitudinal study of retention. In *Journal of Counseling & Development*. Vol 72(3), Jan-Feb 1994, (pp. 281-288)

Study with two goals: Describing the academic and emotional adjustments in college science programs, and whether these related to the students account of their relationship with their parents and teachers.

Deberard, M; Spielmans, G; Julka D (2004) Predictors of Academic Achievement and Retention among College Freshmen: A Longitudinal Study. In *College Student Journal*, Vol. 38, 2004

Lotkowski, V; Robbins, S; Noeth, R(2004) The Role of Academic and Non-Academic Factors in Improving College Retention. ACT Policy Report. In *American College Testing ACT Inc*

## Additional Reading

Jones, L(2001)*Retaining African Americans in higher education : challenging paradigms for retaining students, faculty, and administrators* Sterling VA: Stylus

Focuses on key issues surrounding African American students at predominantly all white universities

Etzioni, A(1999) *Essays in socio-economics* Michigan: Springer

Hull E (1997) *Student workers: earning and learning* Perth:Murdoch University Press

Brotherton P (2001) "It Takes a Campus To Graduate a Student": A Look at Seven Academic Retention Programs and What Makes Them Effective. In *Black Issues in Higher Education*, Vol18(18) Oct 2001 (pp. 34-39)

## Additional Websites

US Dept of Labor

(<http://www.dol.gov/dol/topic/youthlabor/StudentWorkers.htm>)

Page in relation to youth workers

Working-Class Students Increasingly End Up at Community Colleges, Giving Up on a 4-Year Degree

(<http://chronicle.com/article/Working-Class-Students/2406>)

Article by Stephen Burd from The Chronicle of higher education

"Gains made, but CMU graduation rate for blacks is lowest among elite schools"

(<http://www.post-gazette.com/pg/07011/752918-298.stm>)

Post-Gazette article