Inviting College Students to Reflect on their Collegiate Experiences

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The theme of this conference, “Learning Beyond Measure? Assessing the Liberal Arts,” is one of many indicators of the national interest in educational assessment and assessment of learning outcomes in general, and the assessment of liberal arts education in particular. People in many roles and at many kinds of institutions have a stake in the quality of the conversation about liberal arts outcomes, so it is incumbent upon us to take seriously the opportunities we have to participate in this national conversation, to examine the issues carefully and thoroughly, and most importantly, to act on them as though the success of our students and our institutions depended upon it—because they do!

For the last four years, I have had the opportunity to participate in a number of conversations about liberal arts education and the assessment of liberal arts outcomes through my affiliation with the Center of Inquiry in the Liberal Arts at Wabash College. Today, I am reporting some findings from research done under the auspices of the Wabash National Study of Liberal Arts Education. This study is the source of the student quotes I use throughout this presentation. Through this project, we have asked college students to reflect on their collegiate experiences. Between the pilot cross-sectional and the current longitudinal study, about 5200 students from 19 campuses completed a battery of assessment instruments designed to measure liberal education outcomes, and an extensive survey of collegiate experiences. In addition, a subsample of 450 students completed a one-hour individual interview. This is really a remarkable project, and I am eager to tell you about it and explore its implications for education and assessment. (For a description of a major work on liberal arts education that informed the current study, see Pascarella, Wolniak, Seifert, Cruce, and Blaich, 2005).

Talking to college students about their collegiate experiences can be a very rich source of information about how they understand the world of college: its purposes, how to succeed, what the process of learning is really all about, how they see college as preparing them for the future, and how it both lived up to their expectations and disappointed them. These conversations also provide vivid examples about how students take care of each other, rationalize cheating, feel like the only ones who don’t drink to excess, and rely on their parents to tell them what to do (such as which classes to take).

These conversations provide “insiders’ views” (that is, students’ views) of their understanding of the formal programs in which they participate, of the services they find and may or may not use, and of the informal interactions with faculty, staff, and peers. Most important for our purposes, they also reveal students’ interpretations of the effects of these interactions on their learning and development. Although students seldom call it this explicitly, these interpretations provide their own assessments of their learning. Following are two examples of how students interpret their expectations and experiences.

Example 1

Interviewer (I): What were your expectations coming into college?
Student (S): When I first came, they said, “You’re going to get an experience you’ll never forget, you’re gonna change…” And I’m like, “OK, whatever.”

Example 2
I: Have any of your college experiences affected how you think about ideas other than those you [already] hold?
S: No. I must not be taking the right classes. (pause) I’m a very strong conservative. I guess I really haven’t taken any of the real strong liberal arts [courses].

Some of you may remember the classic TV show hosted by Art Linkletter called “Kids Say the Darndest Things.” Based on transcripts of these interviews, I can also say: So do college students! Interviews lack the visual power of YouTube, but they nevertheless provide powerful images and stories about “the college scene” on their campuses.

In this study, we wanted to learn more than what was happening in these students’ lives (although that is very revealing!). That is, we wanted to find out what they were learning from these experiences: how they interpreted what they saw and did, what lessons they took away from important experiences, and how these lessons learned might affect future decisions. In asking these questions, we are asking what I call Step 3 of the “value added” question. (Step 1, of course, is “Was value added?” and Step 2 is “Can it be attributed to collegiate enrollment?”) Step 3 is “What kinds of experiences add the value, and for whom?”

The Wabash National Study of Liberal Arts Education
The overall purpose of the study is to learn what teaching practices, programs, and institutional structures support liberal arts education and the achievement of liberal arts outcomes. It is examining how students develop during their college years and how key educational experiences contribute to this development. (For further information about the project, please visit the Center of Inquiry, Wabash College website, http://www.liberalarts.wabash.edu/nationalstudy, or the University of Michigan Project website, http://www.soe.umich.edu/liberalartstudy.) There are several distinguishing features to this study.

1. It is a large-scale study of 19 participating colleges and university and 4500 students.
2. It is investigating liberal arts education on a diverse array of campuses (liberal arts colleges, community colleges, regional state universities, research universities, as well as those with high proportions of minority and first-generation students from across the nation).
3. This study draws simultaneously on two large bodies of research, the college impact literature (e.g., Pascarella and Terenzini, 1991, 2005) and the college student development literature (for a comprehensive sourcebook see Wilson and Wolf-Wendel, 2006).
4. It is longitudinal: Participants from the entering class of 2006 will be followed across four years of college.
5. It uses a mixed method design: All students participate in a quantitative assessment of liberal arts outcomes and collegiate experiences, and 300 of these students will participate in annual one-hour interviews.
6. In addition to exploring whether and how much students develop because of their collegiate experiences (Steps 1 and 2 of value added assessments), it also explores why
and how this development takes place (Step 3). In my assessment, these why and how questions are essential and provide fertile ground for assessing the liberal arts, ground largely missing from other large scale national research projects and national conversations about assessing collegiate learning (such as those that rely solely on grades as measures of learning).

The purpose of the interview portion of the study—the focus of my presentation today—is to determine how key educational experiences affect student development and contribute to the achievement of liberal arts outcomes.

**Liberal Arts Outcomes**

As I noted above, much is expected of the liberal arts; indeed, it is sometimes presented as though this type of study provided some great antidote to ignorance and as if liberal arts education were the inoculation needle. Indeed, the broad vision that is commonly associated with a liberal education does have potential: It’s what grounds our investments in and commitment to the liberal arts. Consider this description by Nancy Thomas (2002):

> A quality liberal education leads students to reflect on their place in the world and locate themselves historically and socially…. Graduates of a liberal education need to be people of integrity possessed of a sense of responsibility to society. These qualities require a sense of humanity as well as a commitment to the common good with a conviction that there is something more important than oneself. (p. 30)

Consider, too, Parker Palmer’s (2002) description of the purpose of liberal education: “To lessen smallness of mind, rightness of heart, banality of spirit, frenzy masquerading as efficiency, and myopic views of reality” (p. xiii). Unfortunately, the public isn’t convinced by this eloquence and passion alone, and to their credit, neither are accrediting agencies. Instead, evidence is needed.

In order to measure the achievement of liberal arts education, we first needed to identify liberal arts outcomes, and decided upon the following: integration of learning, moral character, effective reasoning and problem solving, well being, inclination to inquire and lifelong learning, intercultural effectiveness, and leadership. We use the term “wise citizenship” to reflect the whole cluster of liberal arts outcomes under the twin purposes of wisdom and citizenship. These are displayed as an atom in Figure 1. (For a discussion of these outcomes and the process of selecting them, see King, Kendall Brown, Lindsay and Van Hecke, in press). You will quickly note that this collection of outcomes has a different focus than those that emphasize the content of courses or general education areas, such as knowledge of history and cultures, mathematical reasoning, and understanding of at least one artistic form. These areas are certainly important; however, instead of being connected to disciplines or fields of study, we took a different tack. Our approach was to identify a set of outcomes that reflected the kinds of broader attributes of a liberally educated person that have persisted over time from the rather large body of literature on liberal education (for historical reviews of the liberal arts see Kimball, 1995, 2003).

Further, as part of joining the research on college impact and student development, we attempted to look at each outcome from a holistic perspective by identifying three foundational components of maturity in which each outcome is grounded: seeing the world in complex, multidimensional ways, drawing understanding from an internally grounded sense of self, and having respectful,
interdependent relationships with others. These are the three complementary dimensions of Robert Kegan’s (1994) construct of self-authorship, having the mature capacity for knowing, being, and relating to others. This mature capacity provides a guiding perspective or outlook through which one interprets experiences, makes meaning of them, and learns from them. As Kegan put it so eloquently, only being self-authored enables one to “be the author (rather than merely the theatre) of one’s inner psychological life” (Kegan, 1994, p. 31). Kegan used the terms “subject” and “object” to capture the process of learning to interrogate one’s guiding assumptions, especially as one learns to differentiate one’s beliefs from oneself, to literally and figuratively hold them “at arm’s length” for examination, and deciding which parts to pull back inside to define oneself. Further, Kegan claims that with maturity comes the capacity to apply one’s skills. (Doing so in changing contexts is arguably the strictest test of educational success.) These are powerful claims, and worth examining more closely.

Self-Authorship as the Foundation for Achievement of the Liberal Arts Outcomes
Being self-authored requires developing the mature capacity to think and act in ways that are consistent with a complex and well-grounded belief system, value system, and relational system; taken together, growth on these dimensions reflects the evolution of “complex systems of mind” (Kegan, 1994, p. 9) that guide behavior. Each of these three dimensions is described below.

The Cognitive / Epistemological Dimension. This dimension focuses on how individuals understand the basis for their beliefs and belief systems, how they use their assumptions about the nature, limits, and certainty of knowledge in deciding what to believe. (For a sourcebook on theories of cognitive development in the college years, see Love and Guthrie, 1999). They judge others’ arguments in light of evidence relevant to the context, acknowledge multiple ways of framing issues, and ground their own arguments and beliefs in evidence. They are aware of actively constructing their beliefs, reevaluating as evidence changes or becomes available; these criteria then form the basis for an internal, self-authored belief system. The following statements were made by a first-year student reflecting on the 2004 Presidential election and illustrate the reasoning of a student who is starting to examine the basis of her belief system.

S: Another big thing for me was the election. That was just different for me to hear all the people [ask] “Well, why do you believe this and…why are your views that way? It was kind of like, “OK. Well, why DO I think that way? And is it just because my parents brought me up that way? I didn’t want to be one of those people that just voted because that’s how they were raised.”
(She had been raised in a Republican family, and later explained that she’d never before had a conversation with someone who was “Democratic.”)

Another student turned his own logic back on his new awareness of perspectives guiding his beliefs:

S: I actually started to pledge a fraternity which was kind of ironic because incoming to the university, I was completely against anything that had anything to do with fraternities or anything…. [People would ask,] “Are you going to join a frat?” My…immediate answer was “No, never.” I was never going to join anything like that. But the thing is, the fraternity that I found was…the type of fraternity that went against all the stereotypes that I had of fraternities and it’s because of those stereotypes that I didn’t want to have anything to do with fraternities. So because…they kind of slapped me in the back into reality saying that,
“Yes, we [have] a Greek foundation whatever, but, it doesn’t mean that we’re like anybody else.”… When I was thinking about whether or not I wanted to do it, it was a struggle for me because I was saying to myself, “Do you realize what you’re doing? You’re pledging for a frat. You were always against that. You said that you never wanted to do anything with that.” So that was a struggle for me to realize that, um, it was…I felt as if I was being a hypocrite because I was doing something that I fought against. But then when I realized that I was applying the stereotypes that, they were proven wrong to me…. Me, myself, I fell victim to my own stereotypes…. If I became part of a Greek organization, that the stereotypes that I had against them are going to be put on me. So it was like I felt as if they proved me wrong. So I want to…be part of them to help them prove everybody else wrong as well, since they proved me wrong, ’cause I’m most the extreme anti-fraternity guy known to mankind.

This student was able to reflect on his own assumptions and make an intentional decision to discontinue using them since he didn’t want to continue to believe his own stereotypes when he realized they were not true. He made his stereotyped beliefs “object.” This provided a necessary step to being able to locate himself socially, as Nancy Thomas (2002) called for, and take advantage of the benefits of this distinctive fraternity.

The Intrapersonal Dimension. This dimension focuses on the foundation for one’s identity, integrating various aspects of one’s identity into an informed, honest, coherent sense of self. Those with a self-authored value system have reflected upon and chosen or affirmed values that reflect who they are and want to be; they are aware of others’ hopes and expectations for them and take these into consideration without simply assimilating them. In doing so, the internally grounded identity they create provides a foundation that guides their understanding and actions. The following excerpt illustrates how one student, a senior, came to grips with this process for making her own decisions in college.

I: Can you give an example of a change you’ve made?
S: The change that occurred was my willingness to step back and decide that I was going to make decisions about how I felt, about what I was doing, and what I wanted to do. And not so much look to others, whether it’s my parents or my peers or my professors or to grades or to numbers, to so some sort of evaluative approach, and sort of decide that I was just as valid a person to judge as anyone else.

By contrast, consider the following response from a first-year student:

I: Did you have any expectations for ways that you would change or grow over this first year? Did you anticipate that you would change?
S: I don’t know…it would be nice to know if you grow, but I don’t know. You really don’t know if you grow yourself. Like…it’s how others judge you. It’s how others see you.

This second response is illustrative of an external orientation, where even a judgment about personal growth is dependent on how others judge you. He was “subject” to others’ judgments about his growth, and therefore could not render an independent opinion about his growth.

The Interpersonal Dimension. This dimension focuses on how individuals relate to others. They have the capacity to be interdependent in relationships, show respect for others by showing they
are aware that others come from and hold different perspectives and opinions, and are able to negotiate these differences and complex perspectives to engage in genuinely mutual relationships. A self-authored approach to relationships shows how to be true to self and others at the same time, despite many possible differences and pressures to serve either one or the other.

The student in the following example was angry at her parents for limiting her choice of majors. She discussed her grades as resulting from their relationship:

“My parents hate my B average, but I’m like, ‘Hey you forced me to do it, so this is what you’re going to get, ’cause I’m not motivated to study.’ It’s not like I’m going to work extra hard to get those A’s, you know.”

Needless to say, this does NOT reflect an internal value system, not the successful negotiation of differences or quality of decision making that are consistent with the goals of a liberal arts education.

In the next quote, the student is reflecting on the experience of participating in “The Game of Life.”

It wasn’t playing the board games, it was they simulated the Game of Life, where…we were given various cards with different disabilities, you know. Either you were a multiracial couple, or you were handicapped in some way, or you were, um, an addict of some kind, or you were part of the quote, unquote, uh, majority, [or] minority, or you were a different race. And then they had different people sitting at different tables, being part of like the scholarship fund, the government, different government agencies, and what have you. And they had us play the game, and…depending on who you were, you had different obstacles you had to go through in order to survive the month, the week, whatever it may be. It was a definite eye opener…not being who I was…just being different, and knowing what it’s like for people with disabilities, people with advantages, people with different backgrounds, or different races, and what have you having to make it through society. So, it made me appreciate what I had, and it also made me want to…be more active socially-wise.

This experience had a profound impact on this student, how gaining greater awareness of the experiences of people from different backgrounds caused her to reevaluate her “standing” or her position in the world and to become more socially active.

Looking across the three dimensions, self-authorship reflects the culmination of a process of figuring out how to think, what kind of person to be, and how to relate effectively with others. The focus here is less on the content of what to think than it is on the underlying assumptions that guide these decisions and choices. The evolution of assumptions reflects truly transformational changes in worldview. Like the high aspirations associated with the achievement of liberal arts outcomes (such as Thomas’ [2002, p. 30] description of “people of integrity possessed of a sense of responsibility to society”), the potential that could accrue if students were to graduate as the authors of their lives is similarly high. Marcia Baxter Magolda and I (King and Baxter Magolda, 2005) have argued that lack of self-authorship could explain the mixed successes and failures associate with efforts to promote intercultural maturity among college students. It will be very interesting to see whether being self-authored is a prerequisite
for achievement of these outcomes, a question we’ll be able to answer from this data set in about three years.

Figure 2 offers a graphic portrayal of the developmental capacities (the three dimensions of self authorship) that underlie liberal arts outcomes. Defining development by reference to these three dimensions is one way in which our approach attempts to be holistic. Another way is to acknowledge multiple influences on the developmental process leading to the achievement of the outcomes. As noted in Figure 3, the conceptual model for the interview portion of the study includes students’ background characteristics, their educational experiences, and how they interpret the experiences. (For a description of this model, see Baxter Magolda and King, 2007.)

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**Measuring Self-Authorship**

I turn next to that most interesting and pressing dilemma, how to measure student development toward these goals, and in particular, how to measure development defined as self-authorship. Thankfully, there are good and thoughtful colleagues across the nation who are also tackling the question of how to assess deeper learning in a way that captures both the kind of foundation that Kegan inspired when he introduced the construct of self-authorship and the attributes of a liberally educated person.

Several scholars around the country are turning their attention to the assessment of self-authorship (Abes and Jones, 2004; Baxter Magolda, 2001, 2004; Baxter Magolda and King, 2004; Creamer and Laughlin, 2005; Creamer, Lee, and Meszaros (in press); King and Baxter Magolda, 2005; Meszaros, in press; Pizzalato, 2003, 2004, 2005). A symposium was held on this topic at the Fall 2006 annual conference of the Association for the Study of Higher Education, and an international conference is being planned for 2008. Clearly, this is a construct that is gaining national and international attention.

For purposes of the Wabash National Study, my colleague Marcia Baxter Magolda and I developed a new interview protocol. (For details see Baxter Magolda and King, 2006.) This protocol is designed to yield information in three areas: a) each student’s developmental level (progress toward self-authorship); b) experiences that promoted students’ development; and c) experiences related to achievement of the seven liberal arts outcomes. In each, the focus is on experiences the students identify as relevant to their learning and development. The interview consists of three parts: 1) How do students’ entering characteristics affect their achievement of the liberal arts outcomes? 2) What educational experiences do students regard as key to this development? Why? 3) How do students make meaning of (interpret) these experiences? Here are some of the stimulus questions we use:

- What did you expect it to be like to be a college student here, and how did the reality compare with your expectations?
- What has been your most *significant* experience so far?
- Have you had interactions with people you perceive as *different* than you?
- Have you had to face any *difficult* decisions?
- Has there been a time when what you wanted and what others wanted from you conflicted?
- How do your experiences and the way you’ve interpreted them shape who you are?
What are the consequences or implications of your first college year for how you think about things? for how you see yourself? for how you relate to others?

Here is an example of an excerpt from an interview that shows how the interview unfolds:

S: I think what I have learned, and what has been emphasized for me the most here is probably politics, and… not become close minded to people of different political views is the hardest thing, and what I’ve learned the most here, and (pause), it’s still challenging.

I: What have you learned in that domain?

S: That politics is a very personal issue, and that you should never try to argue with people about it. No, but just that to be open minded, and to accept people for who they are, even when they think exactly the opposite [as me]…

I: Have you had challenging experiences [in this regard]?

S: A few, yes, especially at, like, work and stuff. But that’s hard to deal with.

I: Can you describe those? Or describe one?

S: OK….at work…I’ve had long, long debates. They just go on for days…a lot of them are about gender issues, I think, for me. And, just surprisingly, they’re with males (laughs). I mean, just the way that some people can’t see things from a certain point of view, and I mean, for me, trying to come up with ways to communicate my ideas—I guess that’s something I’ve learned how to do better, but not very effectively. But to also respect them in the end, and let it go. So…

I: How do these political discussions affect you?

S: They challenge me in a lot of ways into thinking of different ways because having somebody that you know and interact with daily, and respect them in a sense, and then having them have completely opposite opinions—they just, it just makes you see the issue in a different way. And so, you don’t discard it as easily as you might otherwise. So, you have to reevaluate it—reevaluate your ideas. And I think the political discussions have been very informative for me, because they help me flesh out my own political thoughts and ideas, and what I could do, and how to change society, I mean, ideologically.

When given the opportunity (and prompting) to reveal her thinking, this student moved in this excerpt from saying that “you should never try to argue with people about [politics]” as the lesson learned to one that is much more nuanced. In doing so, she showed how she learned from this challenging experience, explaining how she used such discussions to understand other points of view, to refine her own thinking, and then to apply her own political thoughts and ideas to much broader political goals (“to change society…ideologically”).

As these examples show, a self-authorship interview requires “digging deeper” to give the student the opportunity to explain in more depth not only what happened, but how it affected him or her. Doing so provides information (“assessment data”) not only on the content of the experiences, and not only on student attitudes, but they reveal the student’s explanations of the experience—how they made meaning about their life experiences. (These include but are not limited to their collegiate experiences.) These deeper explanations also revealed the assumptions underlying their meaning making: assumptions about the world and what and how one knows, about oneself, and about relating to others, assumptions that provide that guiding perspective or outlook I described above when introducing self-authorship.
Throughout the interviews, we focused on those experiences that made a positive difference (such as the “Game of Life”) because we reasoned that these were the experiences most likely to illuminate the educational and developmental processes underlying the achievement of the liberal arts outcomes. Students reported lots of significant, interesting, and challenging experiences, but not all positively affected the development of their mature capacity for knowing, being, or relating to others. In other words, we focused on those experiences that made a difference, those that added the value. We call these “developmentally effective experiences.”

Data Analysis. As you might imagine, analyzing the interview transcripts is a complicated process (there are a lot of words to keep track of!). We use a two-phase process. The first phase is to summarize the transcript, identifying the developmentally effective experiences (DEs), assessing the student’s level of meaning-making level for the three dimensions and linking these judgments to specific quotes in the text. This provides the relevant information for the second phase. This phase involves the following steps: 1) sort the summaries by developmental level and record each developmentally effective experience within level; 3) group the DEs by type of experience; 4) identify common themes of effects; and 5) map and compare effects across developmental levels; these levels give an overall picture of the developmental journey that is progress toward the achievement of liberal arts outcomes. Thus, the focus is on understanding the types of experiences that made a difference by listening to students’ underlying assumptions about knowledge, oneself, and relationships.

What Kinds of Experiences Were Developmentally Effective?
The quotes I have used for today are all from one campus in the pilot study of the Wabash National Study, which is a large university with a vibrant liberal arts college (among several other colleges). The collection of transcripts for this campus was fascinating, and many students reported significant experiences that were developmentally effective: They caused students to change in the way they see the world, themselves, and their relationships with others. (Unfortunately, there were also students who, in their own words, had wasted their collegiate opportunities. Those were heart breakers for educators to read.) Here were the themes of the DEs from this campus: Interactions with Diverse Others; Interactions with Friends/Social Environment; Housing/Living-Learning Community; Employment; Courses; and Co-Curricular Activities.

In other words, the developmentally effective experiences that students reported clustered into each of these six areas. Let’s look more closely at one of these: Interactions with Diverse Others. Recall that all the transcript summaries were first sorted by developmental level (external, mixed, and internal), and that an internal grounding is required for self-authorship. Here is what students whose whole transcripts revealed reliance on external orientation to knowing, being, and relating to others said about the effects of their interactions with diverse others, that is, what they learned from diversity experiences.

- Felt discomfort about how to respond; not sure how to think about diversity issues
- Now see reasons underlying differences
- Became more open-minded

What follows below is an example of a student comment whose approach reflects an external orientation.
S: I know a lot of my friends were like, “Well, my parents are Republican. If I don’t vote Republican, they’re going to be upset with me. And I can, I mean, I can understand!… So you have to decide, Whose views do I believe more? And that’s what I think I’ve learned more too with the election and everything was…A lot of my friends, the girls across the hall were—are Democratic and they’re like, “Well, why do you believe this?… It’s not that I don’t like Bush, but I just believe more of Kerry’s things.” And I was like, “Well, I understand.” It’s not like in high school where it’s like, “Oh, my gosh, you’re Democratic. I can’t talk to you.” Because [here was]…a person that I don’t agree with at all where it was like, “OK, well, this is why I believe” and they actually could defend their reasons. And so it was cool for me to be able to see that and be able to think about different aspects of different religions, different political views, everything…. I’m not a big politics person. I don’t really care to do research on topics. It’s just like what you hear is what you believe. But I felt like I want to be more informed about what I’m doing. I mean, if someone that is running the government, the nation, I want to make sure that it’s…that I feel it’s the right choice.

By contrast, students who used a mixture of external and internal frames of reference reported a different set of effects from the interactions with diverse others, as follows:

- Gained understanding and respect for different others
- Saw my own background more fully
- Overcame political stereotypes

Here are two examples of developmental experiences of students who operated from an orientation that was a mixture of external and internal frames of reference. The first is from a student who moved to US from Korea when he was 15. He said:

S: [During my] freshman year, I was studying at the…library. And this guy who looks Black to me, you know, was studying Korean. So like wow, why is Black guy studying Korean? So I [found] it very interesting. And I came up to [him] and I was talking to him…. Why you’re studying Korean?… It’s like me studying, I don’t know, Swahili (laughter). I sat on his table with his friends. And I get to talk to him and actually he was like half Korean and half Black and grew up in [the nearby city]. I get to know his friend, who is another, he’s a Black guy. I was talking to him and he was telling me about how it’s like growing up in the city…. He told me that his school district was so poor that he didn’t even have textbooks and teachers, like they don’t really care…. I just learned a lot, like how it is to be Black. I never realized how tough it is to be a person of color in this country.

A second student was an international student from South America who reflected on the difficulty of going back home after having studied abroad:

S: When I got back home [for a visit], I started to feel as an outsider… and that’s something that perhaps was the goal—one of the goals that my parents sought in getting me an education abroad. Because a lot of the people who stay there—like many of the people who have stayed here—have a very defined perspective. Very similar. And their worlds shrink.

An effect of his experiences with diverse others was to better understand the limitations of a narrow perspective and how that could result from lack of exposure to different cultures. He realized further that this insight came at the cost of losing that comfortable feeling of being an insider.
Students who used a more internal, self-authored perspective reported yet another set of effects from their interactions with diverse others:

- Became more aware of how background affects one’s identities
- Learned to value people for their differences
- Acknowledged the need to work hard to understand and be respectful

Here are two examples of students explaining what they learned from their diversity experiences in college.

I: How have these experiences and the way that you interpret them shaped who you are right now?
S: I think I am more prepared for things in that I know about the different ways things exist. You know how to confront them a little bit more, or you’re prepared for…change more, prepared to be open-minded, whereas if you’re not exposed to a lot of these different ideas, and different influences, then it just seems like you would be caught off guard, and thrown for a loop in a lot of situations. So I mean like that—in any social environment that would apply, especially in city life, and work…like personal interactions between people I think is what I got most out of my experiences here—how to approach people let people … be open minded to them, be open minded to things other than obvious differences. And judging them, valuing them for that, for their differences, in a positive way.

This student reports that college helped her be “prepared to be open minded” and understands this effect in a way that not only reflects an awareness of differences, but of differences that may not be initially apparent, and in a way that differences are valued. Further, she can see how this awareness could play out in a variety of contexts. Note how her meaning making associated with being “open-minded” (i.e., “to things other than obvious differences”) is qualitatively different from that of students using an external orientation, where being open-minded reflects a more superficial awareness of difference. Here is a second example.

S: Coming to college has been positive in the fact that I’ve learned to get out of my comfort zone. My best friends in high school were [also] kids [of] military fathers who traveled all around the world as well, and didn’t really fit into the stereotypical American culture. ’Cause I don’t feel like I do, either. So it was better to hang out with people like that. Whereas coming to college, where to find such people would have been difficult, especially in such a big university, I’ve learned to get out of my comfort zone, and to really interact with different people. I feel like I’m a little more open to different lifestyles, different attitudes, you know, ways of lives. It’s reinforced a lot my—the values that I was raised with, I would say.

I: How has it impacted [sic] how you see yourself?
S: That’s a tough question. I guess I’m a little more confident, a little more comfortable with whom I am—my background—that fact that I have a slight accent that nobody can ever place. So I would say I’m more comfortable with the person that I am, the person that I grew up to be. And overall, it’s good, yeah.

This second example within the internal orientation describes developmental effects as understanding the limitations of looking to like others for friends, of needing to leave the comfort of familiarity, but acknowledging that such openness to different lifestyles and attitudes is consistent with her family values. Further, her foundation for comfort now resides within herself.
Taken together, these comments reveal major developmental differences in how students come to understand their experiences with diverse peers. Similar patterns are apparent for each of the other themes of developmentally effective experiences.

**Summary of Key Findings**

First, students who participated in these interviews reported that they welcomed the opportunity for in-depth reflection about their collegiate experiences—and found it unfamiliar. Several noted informally that they had never been asked these kinds of questions, and were eager to be asked again. This may shed light on another finding, that few of the developmental experiences they reported included reference to faculty or staff members who were involved in their lives as mentors or guides.

Second, most students relied on approaches that were externally grounded or that reflected a mixture of external and internal orientations. Few students (<10%) used a self-authored orientation, even among the seniors.

Third, the developmentally effective experiences occurred in both curricular and co-curricular contexts and varied widely in content, context, and timing. In fact, the same contexts had very different effects on students, and these effects (lessons learned) differ by developmental level: That is, different value is added for students who make meaning from different developmental levels. For example, the effects of a study abroad program on students who used an external orientation were to appreciate sampling new foods or to wonder why people drove on the “wrong” side of the road in some countries. By contrast, the effects for students who used a more internal orientation were to more deeply understand how the United States is perceived abroad and to question why U.S. citizens tend to have such a limited understanding of the history of other nations. These effects are much closer to Thomas’ (2002) vision of the effects of a quality liberal education as one that “leads students to reflect on their place in the world and locate themselves historically and socially” (p. 30). Indeed, it is likely impossible to achieve the outcomes associated with a liberal education when using an external orientation, and arguably impossible to fully achieve these outcomes using a mixture of external and internal orientations.

**Implications for Educators**

Educators have explored several ways of using a self-authorship lens to understand and promote learning and development among college students since Robert Kegan introduced the concept in 1992. For an in-depth introduction to this construct and its relevance in higher education, see Baxter Magolda (2004). This introductory chapter is followed by a series of detailed educational interventions in both curricular and co-curricular settings that illustrate how self-authorship can be promoted among college students by creating learning partnerships (Baxter Magolda and King, 2004). Since the focus of this conference is on assessment rather than on educational practices *per se*, I will not explore these implications in depth. Instead, I offer two major suggestions.

First, even though students’ meaning making structures may not reflect the kinds of orientations to knowledge, self, and relationships that we would hope for by graduation, it is nevertheless very important to respectfully acknowledge their current meaning making. This IS how they see the world—including how they decide whether and how to invest in the educational
opportunities we offer. Strategies such as simply saying “Don’t feel that way” or “Don’t believe that” will probably not be effective. Instead, encourage students to examine the basis for their actions as well as for their beliefs and conclusions.

Second, invite new ways of making meaning about beliefs, values, and relationships. For example, offering and examining frameworks for understanding the value and purpose of distribution requirements gives an alternative to the common advice to simply “get them out of the way.” Encouraging (even requiring) students to attend campus events (student organization fairs, performances, guest lectures) and then discussing their purpose and value as part of a college community or as a reflection of collegiate values provides insights into alternative frames of reference that may not be available from their peers or parents. Assessing the degree to which institutions act as learning organizations in inviting new ways of making meaning would provide powerful assessment information.

As noted above, the effects of students’ significant experiences depended on student characteristics, how they “engaged” the experience, and the meaning making assumptions they used to interpret the experience. Clearly, one size (i.e., one intervention) does not fit all.

Implications for Assessment
I have argued here that the major purpose of a liberal arts education is to promote students’ full capacity to apply their knowledge and skills in multiple contexts (work, family, community). To capture this, the assessments of this learning should be comparably holistic in orientation. Deep assessment of liberal arts outcomes calls for a holistic approach across multiple contexts for learning, using multiple measures, and assessing how students connect their learning to broader contexts beyond the immediate college community. Deep, holistic assessment also calls for assessing multiple dimensions of development (not just cognitive). The cognitive dimension is certainly important (it has captured my own scholarly interest for 30 years!) but is only one dimension of self-authorship. Unfortunately, we could probably all think of examples of otherwise bright people whose maturity in other dimensions (e.g., lacking self-confidence or a moral compass) precludes them from making positive, productive contributions to their communities or their professions.

Further, deep learning associated with liberal arts education calls for deep assessment. Measures of satisfaction are just that; they don’t reveal the basis of the assessment. For example, students could be dissatisfied because their ways of thinking were disrupted and the assessment occurred before they reorganized their thinking in new, more effective (and satisfying) ways. Relying on measures of satisfaction may produce “false negatives” if given while students are still uncomfortable and haven’t yet reached a more adequate way of resolving the issue at hand. Or they may yield “false positives” if students are not being asked to give their own interpretations and explore the basis for their actions and beliefs or conclusions. Deep assessment calls for measures that reveal the foundational assumptions that guide how students respond to these and other assessment tools.

Conclusion
Learning is a mysterious and wonderfully complex phenomenon. One day I hope we can develop assessments that reflect this. I once had a conversation with a faculty member about his quest for
an assessment instrument to measure critical thinking, but one that accounted for changes in
cognitive complexity over time. As he put it, “I’m looking for an instrument that doesn’t
embarrass me to recommend to my colleagues because it’s too simplistic.” I believe these
conversations with students about their developmentally effective experiences will help us
address this concern by focusing on how students learn to think and act, which reveal the basis
for their judgments about the world, themselves, and their relationships. They provide a great
deal of insight for educators and administrators who are designing and implementing programs
for students to address liberal arts outcomes, and for those who have responsibility for assessing
student learning.

I typically close a presentation like this with an inspirational quote. But today, I’d like to close
by sharing with you some numbers associated with the stories I’ve shared today.

- 22,895—minutes of interviews in Year 1 of the longitudinal study (Fall, 2006)
- 12,660—miles traveled by interviewers in Year 1
- 4,501—students who completed surveys and outcomes assessments in Year 1
- 2010—final year of data collection
- 315—students in interview sample in Year 1
- 28—transcribers of Year 1 interviews
- 4—years of longitudinal interviews planned
- 4 principal investigators (PIs)—Charlie Blaich, Wabash College; Patricia King, University of
  Michigan; Marcia Baxter Magolda, Miami University (Ohio); and Ernest Pascarella,
  University of Iowa
- 3—dissertations using project data from the pilot study (so far)
- 1—team of researchers committed to improving liberal arts education!

Thank you.


College Students.” *Journal of College Student Development* 44(6): 797-812.
Figure 1. Conceptualizing the Integrated Relationships among Liberal Arts Outcomes

*Source:* King, Kendall Brown, Lindsay, and VanHecke. (in press).

Integration of Learning

- Effective Reasoning
- Problem Solving
- Well-being
- Leadership
- Moral Character
- Intercultural Effectiveness
- Inclination to Inquire and Lifelong Learning
Figure 2. Self-Authorship Foundation for Liberal Arts Outcomes.
Figure 3. Journey toward Wise Citizenship.