A Framework for Powerful Student Experiences at the University of Kent: Final Report

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Kathleen M. Quinlan, PhD PFHEA Reader in Higher Education

Director, Centre for the Study of Higher Education, University of Kent with Alina Salmen, PhD Candidate, School of Psychology, University of Kent

I. Background

In July 2017, the Student Experience Board, in collaboration with Kent Union, commissioned a study to develop a framework of powerful student experiences for undergraduates at the University of Kent. The framework follows from the 2016 Education and Student Experience Strategy, which commits the University to working towards, "Co-production with Kent Union and student representatives of a well-supported and clearly articulated framework within which students can construct their own unique student experience." (p. 4) Thus, this framework is intended to:

- 1. provide a coherent, clear set of principles
 - o within which students can construct their individual student experience.
 - that will help the university provide and communicate opportunities to students.
- 2. promote positive, powerful student experiences that help students learn, grow, and become the graduates they, and the University, envision. Enacting these educational principles supports the achievement of the Kent graduate attributes².
- 3. identify Kent's strengths and areas for improvement related to students' experiences.

The framework is built on five main assumptions:

- 1. "The notion of a single student experience which is somehow relevant to all students in a highly diversified institution is becoming outmoded." (Murray & McMahon, Student experience? Does one size fit all? January 2017).
- 2. What students gain from higher education depends upon what they do, how they spend their time and what they want from their university experiences. The university offers opportunities whilst students choose what they need and want, such that student experiences are jointly constructed and individualised. To support student engagement in activities that are most associated with high quality learning outcomes, students need to understand the value of different kinds of learning experiences and the implications of their choices.
- 3. Even as we want student experiences to be positive for their own sake, the University is, first and foremost, a learning environment. As such, student experiences need to support learning. This framework defines learning in higher education broadly to include growth in knowledge and skills, as well as changes in students, such as their

¹ https://www.kent.ac.uk/about/plan/downloads/education-and-student-experience-strategy-2016-2020.pdf

² https://www.kent.ac.uk/ces/kentgraduateattributes.html

- attitudes, confidence and sense of identity. The modifier "powerful" is used to highlight the personally transformative potential of higher education.
- 4. The framework should be informed by relevant existing empirical evidence about what promotes students' learning and development in higher education. (see Appendix 1 for the guiding background paper, June 2017)
- 5. A framework must be developed in consultation with students and staff of the University of Kent through inquiries guided by appropriate educational theories. (See Appendix 1 for the guiding background paper, June 2017).

II. Consultation Process

Consultation³ took place during the academic year 2017-18 and addressed the following overall questions:

- 1. What do students want from and value in terms of their learning/growth at university?
- 2. How do their hopes vary by background, course, and campus?
- 3. To what extent are their hopes fulfilled? What opportunities do they perceive? What are they missing? What are they taking advantage of?
- 4. What are students' most powerful learning experiences and why are those so powerful?
- 5. According to staff, what opportunities do we provide?
- 6. How do staff understand students' perspectives on their experience?

Survey of non-finalists (Questions 1, 2, 3)

1772 students (675 Male; 1083 Female; 1507 Canterbury; 251 Medway; 751 Social Sciences; 581 Sciences; 475 Arts/Humanities) answered open-ended questions as part of the undergraduate (non-finalists) student survey: "1. When you decided to come to Kent, what learning experiences did you want? 2. How has that turned out? Have you had this opportunity? Have your hopes or expectations now changed? How? 3. What is one thing that could be done to improve your learning experience?" Surveys were administered online and were open for two months from early February to early April 2018. Students also answered questions about demographic characteristics (gender, ethnicity, age, fee status, first generation in their family to attend university, stage of study, disabled) and environmental variables, including Faculty, School. Each schools was further coded according to whether it was a pure (55%) or applied (45%) subject. Chi-squares were used to determine differences between sub-groups of students and logistic regression was used to show which factors were most strongly related to the type of learning experience they sought and whether their hopes were fulfilled. Full details of analyses are available from the author on request.

The first open-ended question was coded using a set of 14 codes that emerged from students' responses and a set of 6 further sub-codes for one of the larger categories of responses. Each response was reviewed holistically and assigned a single code. The second open-ended question was coded into 5 main categories according to whether students' hopes had been

³ Research protocols were approved through the Ethics Committee of the Centre for the Study of Higher Education in September 2017.

fulfilled (fulfilled; partly fulfilled; changed; not yet or not sure; not fulfilled). Responses to the third question (suggestions for improvement) were disaggregated by school for distribution as part of school-specific reports.

Student focus groups (Questions 1, 2, 3, 4)

17 students participated in one of a set of focus groups held in Medway and Canterbury. Particular effort was taken to ensure a diverse range of students participated, with representation sought from all faculties, males, females, commuting and residential students, mature students and traditionally aged students, BME and White students, and disabled students. Students were asked to discuss particular experiences – within the curriculum or outside of it – that they thought were most important to their learning at Kent and to discuss the extent to which they had had opportunities to have those desired experiences. They were also asked to respond to a proposed set of principles (see Discussion Paper in Appendix 1). Responses were coded by the 13 principles described in Appendix 1. Positive and negative experiences were also coded according to a set of keywords that emerged from students' own words.

Mini-interviews with students (Question 4)

170 students took part in 2 to 5 minute interviews conducted in public places (cafes, libraries, bus stops, foyers outside lecture halls) around both campuses. Students were asked to describe a particular, significant *learning* experience they have had while being a student at the University of Kent – one they felt was particularly effective or powerful. They were then asked to explain what made it so powerful. Responses were coded according to the 13 principles identified in the background paper in Appendix 1 and according to the same emergent keywords used in the student focus groups. Each response was coded in multiple ways. Analysis focuses on the percentages of students whose answers were coded in a particular way. The codes, therefore, do not add up to 100%, unlike the holistic coding (one code per student) applied to the survey data.

Mini-questionnaires from students (Question 4)

97 students completed mini-questionnaires that asked them to rate on a 1 (strongly disagree) to 5 (strongly agree) scale each of the 13 principles described in Appendix 1 on how important they were to them and whether they have had opportunities for those kinds of experiences. Using simple descriptive statistics, we analysed which were most important to respondents and examined the principles on which there were the largest discrepancies between perceived importance and availability of opportunities.

Staff focus groups (Questions 5, 6)

We held four focus groups in Canterbury for staff, with one for each Faculty (8 humanities; 14 social sciences; 12 sciences) and one for professional services staff (14) and two focus groups in Medway (8 academic staff; 5 professional services staff). Each discussion lasted approximately 1 hour and included a brief summary of preliminary findings from students. Prompted by a self-assessment sheet with the 13 principles highlighted in the discussion paper in Appendix 1, we asked participants to discuss and describe the extent to which they were providing opportunities for students to engage in each of the principles. Discussion then focused on the following questions:

- 1. What are the similarities between what students want and what we are providing? What are the differences between students' perceptions and ours?
- 2. What can be done to address the mismatches?
- 3. How can we enhance or strengthen those principles or practices that students MOST value?
- 4. How might we help students better appreciate and engage with those key principles and practices that have been shown to be effective which are not necessarily the things they most value?

Data was analysed qualitatively through summaries of each focus group, with themes verified and quotes drawn from transcriptions of recordings.

III. Findings

In this section, findings are summarised in relation to each of the key questions. Different sources of data were used to answer different questions, as indicated next to each data source in the previous section.

Question 1. What do students want from their learning experience at Kent?

The first question on the online survey (n=1772) asked students what they wanted from their experience. The most frequent codes were: subject-oriented such as interest or enjoyment of the subject for its own sake, (20% of students), application-oriented such as career or real life examples and connections (16%), nonspecific such as "good teaching" (12%), personal growth such as confidence or communication skills (11.5%), well-rounded including both pure interest in the subject and in applications (10%), peer interaction (8%) and interaction with staff (4%). We concentrate on these seven most common responses, which capture the majority (81.5%) of responses. Small numbers of students also specifically mentioned study abroad (2%), academic community (1.5 %), interactivity without specifying peers or tutors (1.5%), facilities/resources (1%), affective experiences of wanting to be inspired or excited (1%), and extracurricular activities (.5%). Extra-curricular was low because students sometimes mentioned those activities as a route to fulfilling another hope, such as interaction with peers, personal growth, or application-oriented opportunities. In those cases, the comment was coded by the apparent purpose of the extracurricular activity. Each student's response was treated holistically and coded into a single, primary category. Nine percent (9%) of responses did not readily fit into a category, so were coded as *other*.

Question 2. How do those hopes vary by background, course and campus?

As expected, more students in applied (e.g. business, sport science, journalism) than pure subjects (e.g. history, bioscience, sociology) described *application-oriented* hopes. Except for ethnicity, there were few significant relationships between demographic variables and students' hopes for university learning experiences. More black or minority ethnic (BME) students than white students described *application-oriented* hopes. More white students than BME students described *subject-oriented* hopes. As BME students were significantly more likely to study applied subjects, we analysed pure vs applied subject groups separately. In applied subjects, BME students were still less likely to report *subject-oriented*, and more likely to report *application-oriented* hopes than their white peers. In pure subjects, fewer BME students had *subject-oriented hopes*, though there were no significant

differences on *application-oriented*. Overall, male students were more likely to report *nonspecific* hopes.

Question 3. To what extent are student hopes fulfilled? What opportunities do they perceive? What are they missing? What are they taking advantage of?

The majority of students (69%) commented in ways that suggested that their hopes were *fulfilled* (53%) or *partly fulfilled* (16%). Sixteen percent (16%) indicated that their hopes were *not fulfilled*, while 7% were coded *not yet/unsure* and 3% *changed* their hopes.

Only two demographic variables were associated with *unfulfilled* hopes. Specifically, BME students were more likely to have *unfulfilled* hopes. When disaggregating by subject group, though, this trend only held for pure subjects, not applied subjects. Environment was not significantly related to whether hopes were fulfilled, with campus, faculty, and pure/applied subjects all non-significant. Disabled students also were slightly more likely to have *unfulfilled* hopes than students who were not disabled.

The nature of the desired learning experience was more important to whether students' hopes had been fulfilled. Those with *subject-oriented or well-rounded* hopes, or desire for *personal growth* were more likely to report their hopes were fulfilled than those with other hopes. Those who wanted *interaction with staff* were more likely to be disappointed than those who did not emphasise that hope.

Question 4. What are students' most powerful learning experiences and why are they so powerful?

Student mini-interview responses were coded according to the 13 principles laid out in Appendix 1. First, more than a quarter (26%) of students interviewed described an experience that involved active involvement in learning and thinking. Such experiences included explanations like, "people debate a lot during the class" and "I could basically ask any questions of my teachers and if I disagree, they invite me to discuss it" or "creating and presenting information to a group of people is more effective than writing essays." Students also commented on laboratories, such as, "During our practical workshops we work with equipment which is used in actual laboratories" or "computer sessions tied together with stats lectures. The lectures give the theory and the computing sessions put them into practice."

The second most common category was learning that is relevant to students' interests and goals (22%). Comments included references to co-curricular opportunities such as participating in the dance society or filmmaking societies, as well as specific topics such as "there was a lecture on tumour cell growth that was really engaging" or applications "in my accounting class, the teacher gives examples of how knowledge is used in real life. I have a friend running a surfing business in Cornwall and I have been helping him with his accounting."

Many students (14%) discussed scenarios that involved interaction with academics, such as helpful, personal conversations including one-to-one feedback from an associate lecturer, asking questions of a lecturer, or conversations that helped them in making important decisions such as changing a course. These interactions were summed up by a student feeling like they were "cared about as a person, not just a statistic."

Support from various services was also noted by 12%, including such things as well-being support and computer programming assistance. Interaction with peers characterised 9% of the powerful learning experiences, while 9% described a sense of belonging and a further 6% specifically described interactions with diverse peers who offer different perspectives. A

further subset (6%) described what have been called in the US"high impact practices", such as involvement in placements, seminars, and field experiences⁴. The importance of seminars and associate lecturers came up repeatedly during the mini-interviews, with 28 students (16%) of interviewees specifically using the word "seminar". Seminars were valued because they are a space where students can clarify things they don't understand, are "forced" to speak, hear a range of perspective and ideas about a subject, and go in greater depth on key topics. The individualised assistance they receive from tutors who actually know them is greatly appreciated.

In addition to coding based on the 13 framing principles, mini-interviews were also coded according to keywords determined through a bottom-up analysis. Seven percent (7%) of students interviewed described experiences related to sports, which were appreciated as ways of making friends, overcoming shyness, and learning new things about themselves. Educational facilities were mentioned explicitly by 5% of interviewees, including libraries and specialised facilities such as sound studios. Work-life balance was mentioned as important by 4% of students, the employability scheme by 3% and good explanations provided by lecturers by 2%. Three students mentioned each of the following: online learning, lecture recordings, and volunteering.

The focus group discussions, with 17 students, were consistent with the miniinterviews and online surveys. Students spoke about wanting career applications, needing or wanting to study a degree either for career preparation or out of interest in the subject, seeking challenge together with support to meet those challenges, and wanting to interact with diverse peers. There was also discussion of the appeal of a particular location or campus, sometimes because of proximity to family. Some had sought specific opportunities such as a year abroad.

In terms of opportunities available, focus group discussions highlighted the merits of the Employability Points Scheme, support from teachers and other university services, interactions with diverse peers and positive comments about educational facilities.

In the focus groups, students also commented on shortcomings in the opportunities available or problems they had encountered. There was an extended discussion in one focus group on financial problems and a lack of support in resolving a particular financial problem. This issue was one of several examples of difficulties related to knowing who to talk with and where to go (e.g. School of University, Medway or Canterbury) when a student concern or problem arises. Some minority students experienced a lack of inclusivity. Mature students in Canterbury, for example, conveyed a sense of being "out of place" and lacking social opportunities. Some students, particularly in Medway, lamented the campus infrastructure, , but even in Canterbury, students wanted more study spaces on campus "that you actually want to be in".

Some students who took part in the mini-interviews also spontaneously commented on shortcomings related to their overall learning experience at Kent. Students expressed

⁴ Kuh, G.D. (2008) High impact practices: what they are, who has access to them and why they matter. Washington, DC: Association of American Colleges and Universities. Kilgo, C.A., Ezell Sheets, J.K., Pascarella, E.T. (2015) The link between high-impact practices and student learning: some longitudinal evidence. *Higher Education*, 69, 509–525 Miller, A.L., Louis M. Rocconi, L.M., & Dumford, A.D. (2018) Focus on the finish line: does high-impact practice participation influence career plans and early job attainment? *Higher Education*, 75, 489–506.

dissatisfaction with class sizes, lack of consistency between lectures, lack of one-to-one feedback, lack of support or that the subject was "too theoretical."

The 97 questionnaires collected in public spaces around campus showed that the most important principles were "learning that is relevant to students' own goals and interests." and a "challenging but supportive environment." The largest gap between importance and opportunities to engage in activities were for "Learning that is relevant to their own goals and interests", "timely, specific feedback that gives guidance about progress and how to improve" and "opportunities to engage in 'high impact' educational practices."

Question 5. According to staff, what opportunities do we provide?

Across all the focus groups, there was general agreement with the 13 principles proposed and described in the discussion paper (Appendix 1). Some principles resonated more in particular areas than others, but all areas contribute in some way to creating opportunities for students to have the experiences described in the principles. Given the variation across areas, staff were wary of a set of uniform guidelines. While students may point to inconsistency between lecturers as a problem, staff point to different conditions of teaching, asking "Well, what is feasible and reasonable with 300 students?", suggesting that we "don't engage students in that discussion" or communicate well with students about what is reasonable to expect.

Staff described a number of high impact practices (see references in the footnote on p.6) that are commonly embedded across academic programmes. In the humanities, for example, study abroad is common, as are practice-based modules that culminate in performances or exhibitions. Final year dissertations or creative projects and work placements are also common across the university. In vocationally oriented courses (e.g pharmacy, computing, business), students benefit enormously from work placements. However, uptake can be spotty. For instance, some 50% of students do not take part in placements in computing.

There are also differences between professionally-oriented programmes, in which students are career-oriented, and less applied fields (e.g. humanities) where students study subjects out of love of the subject and "knowledge for knowledge's sake." Academic staff thought there was a danger in both extremes – an applied field without any further engagement beyond the subject risks not being *higher* education at all. Likewise, students in pure fields could benefit from some of the high impact practices commonly offered in professionally oriented fields (e.g. the BA in physiology/pharmacology could draw on some of the strengths of the professional pharmacy programme). These particular high impact practices are a foundation for high graduate employment rates.

In many cases, these high impact opportunities were "back-loaded" as "capstone" activities for more senior students. There were fewer such opportunities for first year students. That said, the humanities and social sciences offer small group seminars that provide opportunities for students to interact with Associate Lecturers and peers from the first year. In small programmes with interactive activities (such as journalism), students have a great deal of contact with peers and staff.

In addition to academic programmes, professional services staff play a key role in ensuring that students receive the support they need to rise to academic and personal challenges during higher education. They also provide opportunities for students to connect with peers and experienced staff members and to create a sense of belonging in an academic community.

Examples of high impact experiences offered by staff or students on the project were showcased at the Annual Teaching and Learning Conference in June 2018. These included

Bringing the "Real World" into Class with Research-based Simulations, by Professor Jane Reeves, Centre for Child Protection; Creating and Managing a Supervised Space for Practice: The Sports Ready Clinic by Karthik Muthumayandi, School of Sports and Exercise Science and Students in the Community: Art, Resistance and Politics, by Dr Stefan Rossbach, School of Politics and International Relations. Two presentations also focused on practices designed specifically for first year students, when students are most likely to discontinue their studies: Making the Most of Advising through Content-Focused Tutorials, by Dr Bas Lemmens, School of Mathematics, Statistics and Actuarial Science; and Teaching with Strong Experiences in First Year Theatre Studies, by Will Wollen, School of Arts. Presentations about many of those initiatives are available at: https://player.kent.ac.uk/Panopto/Pages/Sessions/List.aspx#folderID="0c6b6a42-7208-4e83-beff-4f6841220970"

Question 6: How do staff understand students' perspectives on their experiences?

Staff were frustrated when they provide opportunities for enrichment and support that students don't take up. Staff tend to send emails to students about events and services and have the sense that students don't read email. Thus there is a shared concern about reaching "hard to engage" students, and some staff hoped that this project might help "crack that problem."

"It might be that we're not framing the opportunities correctly and that may be, obviously, the purpose of the project, but I think one of the key elements here is I think all schools are seeing major issues in terms of academic engagement and it seems to be getting worse year on year. Some of that is coming from, perhaps, changes in delivery and assessment of curricular in FE and the schooling environment, but clearly university needs to make some transition. It needs to make some adjustment, but it can't fully adjust to that process because otherwise it undermines the whole essence of independent autonomous learning. I think that's the biggest challenge that most of us face. So, at Stage 1 a huge amount of resource goes in. You provide additional resources because some students want it, but there's still a huge selection mechanism and you end up with maybe four-fifths of the students not engaging with all these additional curricular activities, non-curricular activity."

Thus it was suggested that students need to understand that they are expected to engage in independent learning and that university is about "challenge." Staff noted that the gap from secondary school to university is growing:

"It's a massive gap. Whereas secondary education has changed, university education hasn't necessarily kept up with that, and I'm not saying that's a bad thing but students come to university having experienced A-Levels and have the expectation that they will be spoon fed."

In school and college students are directed to exactly what they need to be doing, are not offered choice about those matters, and are taught using structured templates and rubrics and even given guidance about how much time to spend on writing an essay answer. The need to independently navigate in an environment with many more choices and options and different standards is a big leap. One staff member described how she had worked with a small group of students to steer them toward particular co-curricular activities that they

wouldn't have taken up without her "holding their hand." Students may experience this sudden free range as "overwhelming."

"Staff are struggling to find the right level of balance between 'challenge' and 'support.' In some cases, staff think they need to revert to A-level approaches of specifying very clearly which sections of which chapters students need to read. On the other hand, that level of 'spoon-feeding' seems to defeat the purpose of higher education."

Another argued:

"one way of going is to stress the challenge of university. It's to stress the difficulty. It is meant to be difficult. It is meant to be hard. It is not meant to be a walk ... I mean if it's easy why come to university? You're not learning anything if it's easy. You already know it. So, I think I really find that stressing the amount of effort and difficulty that it involves is actually a way forward that will engage them rather than disengage them. But then the problem is am I just speaking to the strong students? That is the danger."

There was considerable discussion about how staff can communicate that message in constructive, motivating ways that will resonate with a diverse student body. Various examples were given. Staff thought that students may not always see the long term picture of why something is important to learn. Students then become myopic, focusing on grades and short term outcomes rather than skill-building for the future. Staff don't want to fall into the "old, paternalistic" university that assumes staff know what is best for students and students should just "shut up and learn". On the other hand, staff, with their greater life experience, often do know more about what is good for students in the long run. Sometimes, for instance, students don't like a given module while they are taking it, but only appreciate its importance and relevance once they are in professional practice after graduation. Thus, how staff position themselves in relation to students, in an era of egalitarianism, partnership and consumerism is not clear to them. (See principle 3 in Section IV below for an example of how one teacher navigated this tension to create a powerful learning experience for a student.)

Relatedly, staff identified a potential tension between an individualistic, competitive focus (e.g. standing out from the crowd so that each individual can get a job) versus focusing on belonging to and contributing to a cooperative academic community.

"employability is about having your own experiences and standing out from the crowd, and being able to get the best type of graduate job when you finish and all these sorts of thing. So that almost promotes quite an individualist approach to your time at university. So it's almost like there's kind of two stories, there's two approaches to your time at university. Are you there because you're collectively part of the community that believes in a broader concept? Or are you there for yourself to do your best to get the best grades, to gather as much experience as possible, in order to then stand out from your peers, who you've tried to then build a relationship with? It's a kind of double edged sword, isn't it, for them."

Several groups expressed concern about a lack of sense of belonging in an academic community or described efforts to create such a sense of community.

IV. Framework for Powerful Student Learning Experiences at the University of Kent: Re-imagining Core Experiences

Based on priorities and concerns of student and staff, the original 13 principles (Appendix 13) have been condensed here into six main principles that emerged as most important during the consultation. A short discussion is provided for each principle to show how it plays out in the Kent context. As a framework, it provides an explicit recommendation that **all Kent students should experience:**

1) Learning that is relevant to their goals, interests, and ambitions.

This principle sums up more than half of the responses on the online survey to what students' want from their learning experience. Students who reported wanting to engage with their subject for its own sake (coded *subject-oriented*), those who mentioned enjoying the subject along with an interest in how it is applied or connected to the real world (*well-rounded*) and those who explicitly sought personal growth were more likely to have their hopes fulfilled than those who had other hopes for their experience. This finding suggests that we are doing well in supporting those whose interests are primarily academic. Notably, though, one of the largest categories of survey responses captured students who sought *application-oriented* experiences, including, but not limited to career preparation and networking.

On the 97 gap-analysis questionnaires collected around campus, this principle of "relevance to goals and interests" was rated as one of the most important yet had the largest gap between importance and perceived opportunities. Given the importance of *application-oriented* hopes to BME students in particular, as revealed on the online survey, efforts to create more opportunities for real-world connection are recommended. Relevance and usefulness of key concepts and skills can be woven into existing curricular designs through discussions of real-life connections in lectures, seminars and labs. They can also be a feature of co-curricular opportunities.

A substantial proportion of students are not specific in their hopes for their university learning experiences, offering vague answers such as "good teaching", "I didn't know what to expect", "high quality education", or "engaging lecturers". Such answers suggest that it would be useful to prepare students for what to expect and consciously educate them on the nature of learning in higher education. Such educative efforts need to go beyond an initial lecture during Fresher's week. Michele Morgan, the keynote speaker for the 2018 Learning and Teaching Conference on this theme recommends an extended induction and continued reinduction, in which students are oriented to opportunities and expectations at each stage of study (see https://player.kent.ac.uk/Panopto/Pages/Viewer.aspx?id=7a56c896-4cc0-4ffb-b4b9-f9cae433e197).

2) Practice with and feedback on intellectual skills and active engagement with key ideas.

This principle was the most common theme across powerful learning experiences described in mini-interviews and focus groups. Learning is an active, not a passive process. Learning happens when students read, talk, write, explain, make connections between ideas, try things out and observe the results, analyse, evaluate apply, and organise their knowledge in

meaningful ways. Good instruction engages students in actively processing and using new ideas and skills rather than just listening to or watching their teachers.

Feedback was one of the two themes with the largest gaps between importance and opportunities on the in-person questionnaire. Feedback is known to be a concern on the National Student Survey, and staff suggested a broader view of feedback would be useful. Feedback cannot be provided when students are passive. Students must do something on which to receive feedback. Students need opportunities to practice key intellectual and technical skills. When they do, it opens opportunities for self, peer, teacher or audience feedback, as well as consequent feedback (e.g. engineering students asked to build a maze-solving robot can observe how well their robot navigates the maze.) Thus, enhancing feedback requires creating instructional opportunities for students to actively engage in practicing those skills that are central to the discipline, employability and students' own goals. Considering how to create more opportunities for students to actively engage in their learning, thus creating more opportunities for formative feedback in its various forms, is recommended.

3) A challenging, supportive, inclusive environment.

Twelve percent (12%) of students' most powerful learning experiences involved support they had received. Focus group discussions also referred to support from lecturers or professional services staff. For example, one student described a small group session on essay-writing skills in the first year. The session addressed how to start an essay and was followed with another session in the second term on referencing. Although she said, "a lot of it I'd already done in college, it was good to go over it again. And the writing style here is a bit different." She described a fun game that broke the ice so she got to know other people in her class, too. Thus academic integration was combined with creating a more inclusive environment that supported social integration.

In contrast, a third year student in another subject said that much of the time, "I don't understand the expectations." She praised a third year lecturer who "started by telling us how to address the assignments. She was clear about expectations and support through submitting drafts of an introduction for feedback before final submission." The student said, "I know where I stand." When queried about whether this was unusual, the student said it was the first time she had experienced it. While this student undoubtedly had opportunities outside mandatory class activities where she could have sought assistance (e.g. Student Learning Advisory Service, an academic advisor, individual appointments with a lecturer or associate lecturer), it is telling that both of these examples of support were integrated into required components of a module. These examples suggest the importance of integrating clarification of expectations into core module activities, rather than expecting students to seek them out on their own.

These student experiences are consistent with discussions during staff focus groups about challenge, the transition from school to university, and the implications of changing school practices for the support students need at university. Higher education is rightly challenging and involves higher expectations. Students didn't object to that premise. Rather, their stories suggested that they need guidance about what those expectations are and how they can rise to them.

Assuming that many students come from a highly structured, "spoon-fed" previous schooling experience, it is reasonable to assume that they will struggle in an environment where greater independence is expected on many levels. Kent offers new freedom of choice amongst a plethora of opportunities that are optional, require initiative to access, and whose

overall purpose and connection may be unknown to the student. This project alone revealed co-curricular opportunities (from boxing to the Krishna Consciousness Society), employment preparation (from the Journey Programme to the Employability Festival), work study and work placements, and various support offices dealing with study skills, well-being, religion and finance. Many excellent programmes have acronyms (KEW-NET, VALUE programme) that will be meaningless to newcomers. Some activities are organised within Schools, some by the Kent Union, and others by various different university offices. Each has its own communication stream, overwhelming students' in-boxes when they may not yet have the skills to organise in-boxes and prioritise among competing opportunities. While some students have clear goals and are able to construct an overall experience that takes in activities supporting those goals, many students seem to disengage. Switching off may be a natural response when they don't know which – of all this mass of new stuff – is most important.

The following actions may help the university in moving forward on this principle. First, programmes could integrate more support activities into core requirements. For instance, an employability module is part of the first year business programme, as described at the 2018 Learning and Teaching Conference (see:

https://player.kent.ac.uk/Panopto/Pages/Viewer.aspx?id=6c7c12bb-4c61-45c1-804f-a96d01024f13). Other programmes offer credit bearing modules on core skills and expectations, such as "Skills for Bioscientists." Study abroad is integrated as a requirement into a four year programme in modern languages. Where some programmes merely "offer" a year-in-industry, this option might be made mandatory to ensure those who need it the most benefit from it. Automatically enrolling all students in their relevant academic society is another example of where programmes have been made more inclusive.

Second, the academic advising system could be made more robust. A separate report from the Student Success project has already highlighted gaps in that system and efforts are underway to enhance that system. Well-trained, dedicated academic advisors integrated into particular schools could help students with self-assessment, goal setting, connecting with relevant services and navigating through the wealth of opportunities available at Kent. Such advisors might have an overall sense of a "map" of the undergraduate years and key milestones along the way. An example of an enhanced advising system in SMAS was presented at the 2018 Learning and Teaching Conference and can be accessed here: https://player.kent.ac.uk/Panopto/Pages/Viewer.aspx?id=ae14747a-6ff6-4085-96d7-a96e009980d9

Third, inclusivity is a responsibility of all members of the community. As the next principle highlights, peer interactions are a vital part of the learning experience. The environment is more inclusive when both students and staff create opportunities that are welcoming for all, regardless of age, nationality, ethnicity, marital/family status, gender, religion, sexual orientation, disability or social background. Some focus group participants felt that "typical" social opportunities, often those revolving around alcohol, for example, were not welcoming. Promoting social integration amongst our diverse students can be built into the design of a range of activities inside and outside of the classroom.

In sum, educators (both academic and professional services staff) at Kent can integrate support into core activities so students must engage with it, enhance the advising system, and design for social integration.

4) Interactions with diverse peers that support them in learning about their subject, becoming familiar with other cultures, appreciating different points of view, and developing communication skills.

Many students in the online survey (8%) explicitly sought experiences with peers. Some comments focused on friendships or expanding friendship circles. Others especially "expected to get to know other cultures" by "meeting people from around the world." Some saw it as a way in which they could learn more about a subject of interest, by seeing different points of view or working together to make sense of a topic, while others wanted to develop skills in working with groups. Many students saw extra- or co-curricular opportunities as vital to developing these relationships.

In an increasingly digital world, students may have less experience of face-to-face socialising and peer learning. Educators may need to develop new strategies to draw out students and teach them how to interact effectively with people they don't know. Teachers may also need to explicitly spell out the benefits of doing so to help in linking peer interactions to students' goals (as in principle 1). For example, one Black British social work student described how students tended to racially segregate in the classroom. Her teacher pushed them to sit in different places to discuss topics with peers and, although the student said it was uncomfortable at first and that she "didn't expect to have to mingle", she is now more comfortable with talking with anyone. She attributed the effectiveness of this strategy to the teacher's explanation of why it was important to interact with a variety of people, particularly in the social work profession. In sum, educators may need to devise strategies to draw out students, to require them to mix with people they don't know, and to explicitly spell out the benefits of doing so.

5) Meaningful interactions with academics, staff or mentors.

Some students (4%) specifically hoped for *interaction with staff* as a part of their learning experience. Of the 170 powerful learning experiences collected from mini-interviews, 14% of them referred to interactions with staff. For example, one student described how an associate lecturer took him aside when it was clear he wasn't enjoying his seminars. She talked with him about his interests and experience and helped him to complete paperwork to change degree courses. He is now enjoying and thriving in the other degree course, grateful for the personal assistance "during his confusion". He described other staff who simply said, "here are the forms [to change course]" as "useless". From an individual perspective, this interaction transformed this young person's life. From an institutional perspective, it allowed Kent to convert a student, rather than lose him from the university entirely. While these experiences are powerful, many students do not have such experiences. In fact, based on the online survey data, wanting high quality interactions with staff members was more likely to be unfulfilled than other hopes.

As with principle 4 above, staff can be proactive in providing such opportunities. For example, rather than simply making office hours available for individual consultations, staff could schedule particular times with small groups of students to discuss particular pre-set questions. Those questions might be specific to the content or skills of the module or more general, such as "How would you describe what the module is basically about? What is most interesting about the module so far? What do you wish we were doing/studying that we're not? What is the muddiest point? What is least interesting?" Embracing this principle could

commit us as an institution to ensuring that each student makes at least one meaningful connection with a staff member during their time at Kent.

Although several staff members in the focus groups spoke about needing to strengthen the sense of academic community, the phrase "academic community" was not commonly expressed by students. Many of students' hopes and experiences that referenced interactions with fellow students and with staff, though, imply a sense of belonging within an academic community. Therefore, staff may find it helpful to embrace this larger purpose when they structure opportunities for students to interact meaningfully with others around the discipline or a shared interest.

6) At least one "high impact" practice that integrates Principles 1-5, such as a work experience, independent project, public exhibition/performance, study abroad, or series of interactive seminars.

Some educational opportunities such as work experiences, independent projects, public exhibitions/performances, study abroad and interactive seminars combine the power of the preceding principles, creating "high impact" practices (see references in footnote on p.6). Work placements, hands-on projects, and seminars were often cited by students, with justifications for their significance capturing multiple principles. In the staff focus groups, it seemed that most programmes had at least one of these "high impact" practices built into the curriculum. A number of these practices were highlighted in the June 2018 Teaching and Learning Conference, including the School of Psychology's Research Experience Scheme, the the Sport Therapy programme's Sports Ready Clinic, simulations in the Centre for Child Protection, and experiments in art, resistance and politics in political science. In general, these particularly powerful experiences tended to occur later in students' experiences, which may contribute to the 7% of surveyed students who reported *unsure/not yet* about whether their hopes had been fulfilled. Given that most attrition occurs in the first year, programmes could consider integrating these principles to create short "high impact" practices in the first year. Seminars are the exception, in that students in the humanities and social sciences experience those from the first year. Considering the importance of seminars to students in the critical first year, focusing attention on the quality of seminar instruction is vital. Recognising and rewarding the contributions of the associate lecturers who lead seminars is also important as an institutional strategy.

V. Next Steps

Each of the principles above serves as a call to action. The discussion of each principle contains further suggestions for enhancing practice related to the principle. There are synergies among the principles, coming together into high impact practices that have the potential to transform students' lives. Thus the principles can be used to map opportunities across Schools and to self-assess curricula, programmes, and services as well as structure professional development opportunities.

School-specific reports have been prepared based on the online survey data and will be distributed to educational leaders and student representatives of each school. These reports will support schools in identifying areas for local enhancement.

While the primary audience of the present university-wide report is University of Kent staff, a parallel communication needs to occur for students in an appropriate form, such as a video sent as a welcome message and then repurposed as a reflection tool during the

winter break. Through experiences that embody these principles, students will make the most of their time at Kent and prepare themselves well for the future (see Appendix 1 for some relevant syntheses of literature). Therefore, ongoing education of students across the University should emphasise the importance of these key principles.

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Appendix 1

Developing a Framework for Powerful Student Experiences at the University of Kent:

Discussion Paper June 2017

Kathleen M. Quinlan, PhD PFHEA
Reader in Higher Education
Director, Centre for the Study of Higher Education, University of Kent

VI. Introduction

This discussion paper builds on Rory Murray and April McMahon's January 2017 paper, "Student Experience? Does one size fit all?" which states the goal of ensuring that students have the opportunity to have a world-leading experience at the University of Kent. While past discussions about student experience have suggested a uniform vision of *the* student experience (a one-size-fits- all approach) and have placed the University as "providing or delivering that experience", the January 2017 paper critiques both of those assumptions:

"Recognition that the notion of a single student experience which is somehow relevant to all students in a highly diversified institution is becoming outmoded. The Education and Student Experience Strategy shifts away from the idea of the University delivering a student experience, and instead commits us to working towards 'Co-production with Kent Union and student representatives of a well-supported and clearly articulated framework within which students can construct their own unique student experience'." (p. 1)

Murray and McMahon propose a process of engaging key stakeholders (academics, students, and professional staff) across the multiple campuses of the University of Kent to define a new vision, framework or set of principles within which students can construct their own experiences. They pose a number of questions, which I suggest reformulating here as openended questions that can guide a series of focus groups such as those proposed in the January 2017 paper. First, though, I offer a brief summary of key literature related to powerful student learning experiences in higher education.

While we want student experiences to be positive in and of themselves, the University is, first and foremost, a learning environment. Thus a framework for students to construct their own experiences needs to be designed to promote learning and growth. As such, we need to start with what we want students to learn. Thus, the experiences students have at Kent should support them in becoming the kinds of graduates we (and they) envision. The employability agenda dictates that we want students to be prepared for graduate level employment. The graduate attributes agenda frames the purpose of higher education more broadly (e.g. graduates who have confidence, creativity, global/cultural awareness, integrity and accountability, intellectual curiosity, resilience, and are critically reflective⁵). These attributes are important because, "Higher education does more than give students the skills and capacities to be productive members of the workforce. It gives them the confidence, self-esteem, and sense of purpose that will enable them to find meaning in their lives and careers."

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⁵ These examples are illustrative.

(Finley, 2016, p. 15). Finally, students have their own purposes, motivators and expectations that bring them to the University that need to be heard, honoured and addressed. I use the modifier "powerful" to denote that the aim is to create a framework in which students can learn and grow.

VII. What does the literature tell us about powerful student experiences?

Existing research can guide us about the kinds of experiences that promote learning and development in higher education. There are key principles, based on decades of research and already well-documented in the literature⁶ that are worth reiterating. I focus primarily here on the process of education and what students do rather than inputs or products. (Astin, 1984; Gibbs, 2010). In sum, to promote learning and development, students benefit from:

- 1) *Frequent, high quality interactions with academics, both in and outside of class*. In particular, students benefit from mentoring, advising, and supervision from those who are farther along in their learning journey (Chickering & Gamson, 1987). Relatedly, smaller class size is associated with higher quality learning (Gibbs, 2010).
- 2) Cooperation and collaboration with other students. Learning is an essentially social activity. Collaboration among students allows them to articulate, test and challenge their assumptions, gives them access to the knowledge and experience of their classmates and a variety of perspectives on the topic and processes for learning it (Chickering & Gamson, 1987).
- 3) A sense of belonging within a new academic and, subsequently, professional community. Higher education involves a transition from one community to another home communities (whether those are young students transitioning from family life to a life away from their home; or adult learners who are seeking to transition from one job to another). Social integration is vital to making that transition (Braskamp, Trautvetter, & Ward, 2016; Strayhorn, 2012).
- 4) Active involvement in thinking and learning. Learning is an active, not a passive process. Learning happens when students read, talk, write, explain, make connections between ideas, try things out and observe the results, analyse, evaluate and organise their knowledge in meaningful ways. Good instruction engages students in actively processing and using new ideas rather than just listening to or watching their teachers. Teaching is simply the means of promoting student learning, not an end in itself. This principle implies that students need frequent opportunities to write, explain, and talk about what they are learning. (Chickering & Gamson, 1987; National Research Council and others, 2000).
- 5) *Time on task in goal directed practice.* A large chunk of students' time and effort should be spent in studying, and this study should be purposefully directed toward learning goals. Much of the literature suggests the value of those goals being students' own goals, even if those are arrived at within teacher-articulated objectives for students (Ambrose, Bridges, DiPietro, Lovett, & Norman, 2010; Chickering & Gamson, 1987; Gibbs, 2010; National Research Council and others, 2000).
- 6) Learning that is relevant to their own goals and interests. Students are more motivated when they have some control over their learning and when they see its relevance to their own lives, goals and interests. Motivation also depends upon students expecting to succeed in the task and perceiving a supportive environment. Adult

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⁶ I focus here on citing reviews and syntheses of literature, rather than primary sources, as the evidence is copious related to each principle.

- learners, in particular, often pursue higher education in order to meet their own, pragmatic goals. They may thrive on situations in which the relevancy to practice is most clear, such as practical fieldwork experiences, interacting with real life scenarios and shifting from theory and classroom work to hands-or, real-life problem-solving (Ambrose et al., 2010; Chickering & Gamson, 1987).
- 7) Timely, specific feedback that gives guidance about progress and how to improve. Feedback on student performances (e.g. writing an essay, giving a presentation, answering a question, demonstrating a skill) is one of the most powerful methods of instruction (Black & Wiliam, 1998). Feedback helps to clarify what good performance looks like, and provides useful information so that students can monitor their own performance (Nicol & Macfarlane-Dick, 2006) and close the gap between the desired and their actual performance (Ambrose et al., 2010; Chickering & Gamson, 1987).
- 8) A challenging but supportive environment. People thrive when important others have high expectations for them and communicate those within an environment that supports students emotionally, socially and intellectually to reach their full potential (Ambrose et al., 2010; Chickering & Gamson, 1987; Gibbs, 2010).
- 9) *Opportunities to engage in "high impact" educational practices*. Certain practices have been shown, when well-executed, to have particularly profound effects on students (Kilgo, Sheets, & Pascarella, 2015; Kuh, 2008). These include learning communities (where a group of students take several interlinked modules together in the same term), service learning (community service linked to academic classes so that service is a vehicle for learning particular academic skills and content), internships, research experiences, and study abroad (Gibbs, 2010; Pascarella, Terenzini, & Feldman, 2005). These activities are most effective when there is an opportunity for students to reflect on their experiences (Ambrose et al., 2010; National Research Council and others, 2000).
- 10) *Courses on diversity-related issues.* Exposure to critical, alternative perspectives such as gender, racial and cultural awareness courses and workshops offer opportunities to re-examine taken-for-granted notions and develop principled reasoning (Pascarella et al., 2005).
- 11) *Interactions with diverse peers.* While living on campus has traditionally offered this opportunity, the key experience is the interaction, no matter where across the co-curricular structure this happens (Braskamp et al., 2016; Pascarella et al., 2005).
- 12) Discussion of ethical dilemmas integrated into courses. Students will encounter dilemmas in their professional lives, for which they need to be prepared. Discussion of ethical issues that are integrated into students' coursework promotes principled reasoning (Braskamp et al., 2016; Pascarella et al., 2005). Recent literature (Fenwick, 2016) recommends that discussions that avoid easy answers, embrace the messiness of real world practices, and avoid rule-driven decision-making are more likely to be effective.
- 13) *Deliberate mission-focused attention to the entire campus experience*. Campuses that effectively support holistic student development have a shared ethos, expressed across the campus and evident in the culture, curriculum, co-curriculum, and a strong sense of community across various members of the University. Leaders are intentional in stating the mission and vision and connecting initiatives and rewards to it (Braskamp et al., 2016; Colby, 2003).

VIII. A guiding theory

Just as educational literature offers empirical findings about how to promote learning (and retention), it also proposes theories that can guide inquiry, further thinking, and action at Kent. Astin's classic theory of student involvement (Astin, 1984) focuses attention on what students do – their degree of involvement in the institution. Student involvement (in current parlance, "student engagement") indicates the degree of physical and psychological energy invested in an activity, whether that is something as broad as the student's experience at university or preparing for a particular mathematics test. Involvement varies within and between students. It is also both quantitative and qualitative. Importantly, the degree of student involvement is directly and positively related to the learning outcomes, as noted at the end of Section I. Any institutional policy or practice can be evaluated in terms of its impact on students' involvement. These basic premises continually bring educators' and administrators' attention back to what students are doing, how they are spending their time, and the quality of their engagement.

While Astin's model is primarily behavioural (what students do), Maehr and Braskamp's Personal Investment Theory (Braskamp, 2009; Maehr & Braskamp, 1986) also focuses on internal motivators encapsulated as students' sense of self (their personal sense of purpose, their goals/motivators, and their abilities and strengths). For Braskamp (2009), students' patterns of behaviour (involvement, engagement, productivity) are influenced by their sense of self and the socio-cultural environment (the curriculum, co-curriculum, culture and community of their university). This three pronged framework is consistent with the co-production model espoused in the University's and Kent Union's Education and Student Experience Strategy. It focuses both on the responsibility of the university (and the Kent Union) to provide opportunities for growth through its curriculum, co-curriculum, culture and community, while also privileging the individual student's agency over their own sense-making and decisions about how to spend their time and energy.

IX. What to do next at the University of Kent?

I recommend that we frame an inquiry and vision-development process around Maehr and Braskamp's (Braskamp, 2009; Maehr & Braskamp, 1986) theory of personal investment discussed in Section III and the various empirical principles identified in Section II above. In short, that means asking students to talk about their own sense of self (in particular, their purposes and motivators – what they *value*) as well as the opportunities they perceive (and act on) in the campus culture, curriculum, co-curriculum and community. Further questions would focus on the extent to which they are experiencing (and appreciate the value of⁷) the 13 powerful practices identified in section II and whether they would add others to that list. Trained interns from the Kent Union will lead a substantial number of focus groups across different subgroups (by Faculty, by College, by campus, by key demographic variables such as BME students, commuter students, students with caring responsibilities).

Focus groups with both academic and professional staff at both Canterbury and Medway campuses can be asked parallel questions, enabling us to compare the extent to which staff understand student perspectives and to compare across different subgroups and campuses to identify common versus distinctive elements.

I further suggest that each focus group seek to identify existing strengths and opportunities for enhancement. All focus groups could conclude with personal/group action plans that will stimulate individual reflection and action and, taken together, could form the foundation for

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⁷ Recent research with under-represented minority students in the US suggests that students often "do not know the [high impact] practices by name, how to seek them out, why they are worth the 'extra time' or what their larger purpose is relative to other experiences on campus." (Finley, 2016, p. 1)

group and university level plans for ensuring that Kent students have a world class student experience. Detailed focus group interview protocols are under development, as well as a refinement of the existing sampling plan for focus group outlined in the January paper. Ethics approval has been sought through the Centre for the Study of Higher Education.

X. Potential Contribution

Well documented articulation of students' purposes, motivators and experiences will have immediate use in our professional development programmes for new teachers, ensuring that participants better understand students' expectations and perspectives. The work is also likely to have value nationally because it applies an explicit theory taken from American research on student development that is not generally used in this country. In so doing, it helps fill a gap in research on student experience in the UK, which has tended to neglect the holistic student experience across the whole range of campus life (Ertl & Wright, 2008). While the research community is not the same as the prospective student community, research on this topic is one way to "put us on the map" in terms of concern for conceptualising and creating powerful student experiences. Taking action based on the results is also likely to influence key TEF metrics such as satisfaction and retention.

Guiding Research Questions

- 1. What do students want from (value about) their experience at Kent? (What are students' motivators (goals) and sense of purpose in attending the University of Kent? How is that changing as they progress through university? What do is important to them?)
- 2. What do they actually experience? (What opportunities do students perceive in the curriculum? Co-curriculum? Culture? Community? What do they find weak or missing in supporting them to fulfil their goals/purposes? What opportunities do students take up? Why or why not? How do they choose to spend their time and energy?)
- 3. To what extent do students see the powerful learning principles from the literature as positive and powerful? How do they value and prioritise them? What might staff do to engage them further with the practices embedded in the principles?
- 4. How do students' expectations and experiences vary by background, degree course and campus?
- **5.** To what extent do staff understand students' perspectives? What strengths and weaknesses do they perceive in the curriculum? Co-curriculum? Culture? Community? How well are we implementing the 13 powerful principles from the literature?

References

- Ambrose, S. A., Bridges, M. W., DiPietro, M., Lovett, M. C., & Norman, M. K. (2010). *How learning works: Seven research-based principles for smart teaching*. San Francisco, CA: John Wiley & Sons.
- Astin, A. W. (1984). Student involvement: A developmental theory for higher education. *Journal of College Student Personnel*, 25(4), 297-308.
- Black, P., & Wiliam, D. (1998). Assessment and classroom learning. *Assessment in Education: Principles, Policy & Practice*, 5(1), 7-74.
- Braskamp, L. A. (2009). Applying personal investment theory to better understand student development. In A. Kaplan, S. Karabenick & E. De Groot (Eds.), *Culture, self, and motivation: Essays in honor of martin L. maehr* (pp. 21-38). Charlotte, NC: Information Age Publishers.
- Braskamp, L. A., Trautvetter, L. C., & Ward, K. (2016). *Putting students first: How colleges develop students purposefully* John Wiley & Sons.
- Chickering, A. W., & Gamson, Z. F. (1987). Seven principles for good practice in undergraduate education. *AAHE Bulletin*, *3*, 3-7.
- Colby, A. (2003). Educating citizens: Preparing america's undergraduates for lives of moral and civic responsibility John Wiley & Sons.
- Ertl, H., & Wright, S. (2008). Reviewing the literature on the student learning experience in higher education. *London Review of Education*, 6(3), 195-210.
- Fenwick, T. (2016). *Professional responsibility and professionalism: A sociomaterial examination*. Abingdon: Routledge.
- Finley, A. (2016). Well-being: An essential outcome for higher education. *Change: The Magazine of Higher Learning*, 48(2), 14-19. doi:10.1080/00091383.2016.1163163
- Gibbs, G. (2010). *Dimensions of quality* Higher Education Academy York.
- Kilgo, C. A., Sheets, J. K. E., & Pascarella, E. T. (2015). The link between high-impact practices and student learning: Some longitudinal evidence. *Higher Education*, 69(4), 509-525.
- Kuh, G. D. (2008). *High-impact educational practices: What they are, who has access to them, and why they matter.* Washington, D.C.: Association of American Colleges and Universities.
- Maehr, M. L., & Braskamp, L. A. (1986). *The motivation factor: A theory of personal investment*. Lexington Books/DC Heath and Com.
- National Research Council and others. (2000). *How people learn: Brain, mind, experience, and school: Expanded edition* Washington DC: National Academies Press.

- Nicol, D. J., & Macfarlane-Dick, D. (2006). Formative assessment and self-regulated learning: A model and seven principles of good feedback practice. *Studies in Higher Education*, 31(2), 199-218.
- Pascarella, E. T., Terenzini, P. T., & Feldman, K. A. (2005). *How college affects students* Jossey-Bass: San Francisco, CA.
- Strayhorn, T. L. (2012). *College students' sense of belonging: A key to educational success for all students* New York: Routledge.