ACADEMIC ADVISORS’ PERCEPTIONS OF ACADEMIC ADVISING IN PUBLIC UNIVERSITIES OF MALAYSIA

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Abstract: This study explored academic advisors’ perceptions toward academic advising implemented at public universities of Malaysia. Using a qualitative research design with cross-site analysis strategy approach, interviews were conducted with eight academic advisors from four Malaysian public universities. Each interview session was assisted by the interview protocol. The interview was recorded and transcribed verbatim. The qualitative data was analysed in the form of thematic analysis with the assistance of NVivo12. Several themes emerged from the initial analysis. Further analysis using several coding and themes revealed one advanced theme namely the outcomes of academic advising and four sub-themes related to student development: academic development, personal development, social development, and career development. This study found that academic development, personal development and career development were the first, second, and third themes most stated while the subtheme social development was hardly stated by the academic advisors when asked regarding their perceptions towards academic advising. The finding of this study implies that social development of students was not part of academic advising tasks of academic advisors from the perspective of Malaysian public universities.

Keywords: Academic advising, academic development, student perception, public universities, cross-site analysis

INTRODUCTION

Higher education institutions regardless of their geographical locations in the world are investigating better ways to support student success in the academic setting (Dadgar, Nodine, Reeves-Bracco, & Venezia, 2014). One of the many ways employed to support student success is academic advising. This type of support student service in some form has been a part of higher education in many advance countries (Gordon, Habley, & Associates, 2000).
Many studies have been conducted to investigate the role of academic advising in promoting students’ satisfaction, retention, recruitment, and graduation (Cuseo, 2003; Soria & Mumpower, 2012; Young-Jones, Burt, Dixon & Hawthorne, 2013; Tinto, 1987). Hunter and White (2004) through their study for example concluded that academic advising can assist students to shape meaningful learning experiences. These experiences include encouraging achievement of educational, career, and life goals.

Realizing the functions played by academic advising for supporting students’ growth and development, all Malaysian public universities established their own academic advising programmes. The academic advising programme requires academic advisors to play active roles in rendering supports and assistance to students to complete their studies (Universiti Teknologi Malaysia, 2010). The nature of academic advising format implemented in Malaysian public universities is in a form of partnership between academic advisors and students (Universiti Teknologi Malaysia, 2010). This partnership format of academic advising requires students to attach to their respective academic advisors throughout their studies.

Unlike many other universities in the world, academic advising tasks of overseeing students at Malaysia public universities is considered an extra-job of academician. The academic advising programmes located at faculty levels are managed and handled by the students’ respective faculties. In this academic advising programme, academicians (lecturers) of respective faculties are appointed as academic advisors to render advice to a group of approximately 20 students (Hussin & Tuah, 2007; Ismail & Ridzuan, 2012; Nor, Zaini, & Zahid, 2013). The actual number of students to look after by any academic advisor varies from faculty to faculty and it depends on the needs of the respective faculties.

At Malaysian public universities, the appointment of academic advisors is based on the discretion of the dean of faculty. In most cases, prior to their appointment many academicians have experience as engineers, school teachers, researchers, medical doctors, bankers, and other non-education related institutions. They come to the academic institutions with diverse background. These different background of academicians lead to different perspective on academic advising. Some of them were exposed to “mentoring programmes” (Ismail, Abdullah, & Khian Jui, 2011) employed by their previous organizations, while others barely have knowledge on academic advising (Van, Said, Mohd Rameli, Karim, Tajuddin, & Chai, 2015). Due to lack of knowledge and experience regarding academic advising tasks, their appointments as academic advisors for students of the same faculties invited many controversial issues particularly perceptions towards academic advising (Hussin & Tuah, 2007; Nor et al., 2013). One unique example of the issues is academic advising outcomes
where academic advising programme was developed prior to academic advisors know the actual outcomes of academic advising (Howell, 2010; Smith & Allen, 2006).

Many studies have been conducted to examine the perceptions, attitudes, and satisfaction of the various interested parties on academic advising. However, most of these studies focused on students’ expectations and satisfaction because they are the primary users of these services. Majority of studies done to assess academic advising have used student satisfaction ratings as measured by survey instruments (McGillen, 2000). Only limited studies focusing on academic advisor perceptions of the process of academic advising. The limited studies have focused on the opinions, attitudes, and practices of lecturers as academic advisors. Most of these studies reported that they used self-report survey instruments for data collection. Generally, almost all these studies ranked themselves as being effective and helpful academic advisors. Despite of these findings, there are complaints related to lack of reward and recognition, and absence of consideration of advising duties on decisions for promotion and tenure.

This current study intended to provide a clear demonstration that academic advising is a longitudinal process that reaches across the institution. Further, this study will investigate the academic advising from the perspective of academic advisors to determine the benefits of academic advising process for student development (Habley & McClanahan, 2004; Kuh & Ikenberry, 2009; Wessel, Ryan, & Oswald, 2008).

LITERATURE REVIEW

Review of literature on academic advising indicated that academic advising provides many benefits and impacts on student’s achievement. Some researchers considered academic advising is the place for students to seek assistance for their needs to reach their own target (Crookston, 1972; Obanion, 1972). To enable students to grab these benefits, Crookston (1972) highlighted the needs of academic advisors to play their roles as teachers in providing encouragement and fostering growth in students. With the unique model of one-to-one discussion between student and academic advisor, academic advising is assumed played an important role for individual student development and success (O’Banion, 1972). Crookston (1972) recommended that academic advisors conduct advisement processes that support the personal development and intellectual growth of students.

Academic advising provides important academic information and support psychological readiness and leaves academic decision making in the hands of the students. Jayne (2011) emphasized that student success must be at the core of all institutional work, and decision
making; therefore, academic advising is critical to the success of higher education. Academic advising is considered helping students to value the learning process, to apply decision-making strategies, and to put the college experience into perspective. The academic advising assist in setting priorities and evaluating events, to develop thinking and learning skills, to make choices, and to value the learning process (Jayne, 2011). Effective academic advising helps students become more self-aware of their distinctive interests: talents, values, and priorities. academic advisors who enable students discover their potential, purpose, and passion, assist them connection between their present academic experience and their future life plans (Cuseo, 2003; Kuh, 2008).

Studies indicated that students who have integrated with at least one adult on university campus experience higher levels of satisfaction and higher retention rates than students who do not (Astin, 1978; Tinto, 1987). Similarly, as adults, academic advisors can foster a positive connection with students by demonstrating themselves as knowledgeable student advocates (Smith, 2002). Notably, as representatives to the university, academic advisors can directly transmit the mission, vision and requirements of the university to students. This way of relationship between students and academic advisors indicates that academic advising is more than clerical recordkeeping. In fact, it is a very human art of building relationships with students and helping them connect their personal strengths and interests with their academic and life goals (Jayne, 2011).

Review of the literature also showed that there are many studies investigated the relationship between academic advising and students’ success or academic performance. Studies indicated that academic advising can significantly impact on self-efficacy to practical applications of study skills (Saba’Ayon, 2015). Students who spent more time to integrate with their academic advisors get more support and better result in academic performance (Astin, 1975, 1993; Shelton, 2003).

**METHODODOLOGY**

This study employed a qualitative research design with cross-site analysis approach to explore the perception of academic advisors on academic advising. In this study, a self-developed interview protocol was used to guide the interview sessions. A total of eight interview sessions were conducted with eight academic advisors from four Malaysian public universities, namely UTM, UM, USM, UTHM. The academic advisors were selected based on the nomination by their respective university administrators. They were nominated based on their vast experience in academic advising and have published and presented papers related to academic advising. Each interview session was held in the academic advisor office.
and the interview session took place around 40 to 45 minutes. Each interview session was recorded and transcribed verbatim. Later, all interview transcripts were emailed to each respective academic advisor for verification. The academic advisors were asked to read the transcripts and make changes, modifications, or addition if they think necessary. They were given two weeks to verify and make changes or amendment on their interview transcripts. Once the transcripts were verified, the interview data then was analysed in the form of thematic analysis with the assistance of NVivo12.

RESULTS AND DISCUSSION

The first level of thematic analysis revealed 29 codes (nodes) related to academic advisors’ perceptions toward academic advising. All these codes can be grouped into 11 categories. Advanced thematic data analysis formed four big advanced themes, namely academic development, personal development, social development, and career development. The detail of nodes is demonstrated in figure 1 and table 1 below. All themes mentioned about describe the outcome of academic advising for students learning and development from the perspective of academic advisors.
Table 1 Category of Nodes and Themes

| Notes/codes | Academic advisor | Category of theme | Advance theme |
|-------------|------------------|-------------------|---------------|
|            | Source | Reference |            |               |
| 1. Know procedure and process of study | 8      | 12      | Learning experiences | Academic development |
| 2. Know the rules and regulation to get a degree | 8      | 12      | Learning experiences | Academic development |
| 3. Know students’ responsibility about study, finance, and health | 6      | 8       | Non-academic experiences | Personal development |
| 4. Know requirements of graduate’s outcomes (Knowledge, skills, behaviour) | 8      | 16      | Learning experiences | Academic development |
| 5. Can contact academic resources in university when needed | 4      | 6       | Communication skills | Personal development |
| 6. Can contact non-academic resources in university when needed. | 6      | 8       | Communication skills | Personal development |
| 7. Know the necessary policies for students learning and development. | 8      | 15      | Learning experiences | Academic development |
| 8. Know about course registration | 8      | 16      | Learning experiences | Academic development |
| 9. Know the rules for subject registration | 8      | 8       | Learning experiences | Academic development |
| 10. Know how to make appointment with academic advisors | 8      | 8       | Communication skills | Personal development |
| 11. Know how to calculate GPA for self | 4      | 4       | Learning experiences | Academic achievement |
| 12. Make own educational plans for the whole course | 6      | 11      | Interpersonal skills | Academic achievement |
| 13. Make own plans for transition after graduation (find job or continue study) | 3      | 6       | Career orientation | Career development |
|   | Activity                                                                 | Level 1 | Level 2 | Skill Area                  | Development Area             |
|---|--------------------------------------------------------------------------|---------|---------|-----------------------------|------------------------------|
|14.| Understand own academic progress and implementation procedure          | 5       | 8       | Learning skills             | Academic development         |
|15.| Manage time in their study                                              | 8       | 15      | Interpersonal skills        | Personal development         |
|16.| Overcome problems in their study                                        | 8       | 18      | Problem solving skills      | Personal development         |
|17.| Access university’s website to get information on course registration    | 4       | 6       | Information searching skills| Academic achievement         |
|18.| Searching study material needed                                         | 4       | 10      | Learning skills             | Academic development         |
|19.| Have necessary material for study                                        | 6       | 10      | Learning skills             | Academic development         |
|20.| Use IT well for studying                                                | 4       | 8       | Learning skills             | Academic development         |
|21.| Apply some popular software for study                                    | 6       | 13      | Learning experiences        | Academic development         |
|22.| Preparation of topics, questions, and contents for advising process      | 6       | 16      | Plan making skills          | Personal development         |
|23.| Bring adequate information to discuss in advising process                | 6       | 17      | Communication skills        | Personal development         |
|24.| Actively attend extra-curriculum activities                              | 3       | 7       | Social activities skills    | Social development           |
|25.| Respect academic advisors                                               | 4       | 9       | Positive Attitude           | Personal development         |
|26.| Respect staff in university                                             | 6       | 14      | Positive Attitude           | Personal development         |
|27.| Respect individual value                                                 | 6       | 18      | Positive Attitude           | Personal development         |
|28.| Respect person’s graduate degree                                        | 8       | 15      | Positive Attitude           | Personal development         |
|29.| Respect and contribute their study for labor market/family and society   | 8       | 16      | Positive Attitude           | Personal development         |
Data analysis revealed that during the academic advising process, students were assisted, managed and encouraged to study to attain their own academic goals. The academic advisors showed that they can evaluate the benefits of academic advising based on what their students received from academic advising during each meeting and information sharing from their academic advising group.

Since academic advisors and students have close relationship along the way of studies at the university, they know each other regarding their own interests, learning styles, capacities and their own targets. This may be one of the reasons that academic advisors are the only whom students can believe in sharing, discussing, getting inspiration to manage their study that fits with their goals.

Results showed that the relevant and desirable learning and development outcomes from active participation in academic advising programmes can be divided into four advanced themes: academic development, personal development, career development and social development. Below are responses from academic advisors’ perceptions that illustrate the types of student development outcomes for academic advising that they were experiencing.

**Academic Development**

The initial data analysis revealed 29 nodes that can be categorized into nine categories: learning experiences, non-academic experiences, communication skills, interpersonal skills, career orientation, information search skills, plan making skills, social activities skills, and positive attitude. Further analysis of the nine themes using advanced themes approach revealed four big themes: academic development, personal development, career
development, and social development. The advanced analysis indicated that in total 14 codes from the initial analysis grouped together under theme of “academic development”. This is to suggest that the main focus of academic advising outcomes from the perspective of academic advisors is on the cognitive development. Despite of all these, academic advisors were also shared that not all students seek the academic achievement from the academic advising as we discuss above. They noted that some students can also find advise from other resources available in the universities.

The sample advisors in this study mentioned their perceptions as following:

“In my opinion, academic advising does everything related to academic issue. The clear outcome of academic advising is that students can register courses in each semester, manage their own studies, know how to calculate their GPA and have their own plans to achieve good academic performance”

(RA 1, 2, 4, 7, 8)

After academic advising process, my students know regarding the procedure of study, rules and regulations, requirements to get a degree that is very important to adapt with academic progress.

(RA 1,2,4,6)

“My students know the necessary policies for students to study in Malaysia. For example, what is the requirement for local or international students? Some priority policies related to scholarships for students also being discussed”

(RA 7,8)

“In my experience, in the advising meeting I usually remind my students to pay attention seriously to academic regulation to help them in avoiding facing the difficult situation. For example, requirement of repeating the courses, registering the subject, extended time to drop the course, etc. When they know clearly about that they can effort to avoid from doing bad case”.

(RA 1, 6,7)

“I have around 20 students in several programmes, some students are not from my major. However, in advising meeting I can help them with the basic learning skills and support learning skill in IT environment. For example, which is useful websites, software or links to access necessary study materials. Especially, I advised students that in higher education they need to study independently, they need to develop their critical thinking, deep understanding, and present their own ideas.”

(RA1, 6)
Personal Development

From the nine themes revealed from the initial data analysis, four themes (non-academic experiences, communication skills, interpersonal skills, plan making skills) were grouped together to develop one big theme labelled as personal development. This means that from the initial analysis there were 13 codes related to “personal development”. This is to indicate that personal development is the second focus of outcomes of academic advising from the perspective of academic advisors. The high number of codes related to personal development shows the significant effect on students’ personal development resulting from academic advising process.

The unique model of communication one on one of academic advising between student and their academic advisor shows the great impact on student individual development. Most of codes focus on the awareness of individual responsibilities, student life skills, individual values and behaviours. The sample advisors in this study mentioned their perception related the theme that is demonstrated as following:

In advising meeting, especially with fresh student, I give advice on personal well-being, life style, self-awareness, upholding their self-image. First of all, we need to help them to have safe lifestyle, healthy, great individual finance management skills, time management skills for study and for themselves.”

(RA1)

“I think that UTHM establishing academic advising to provide a good platform for students to connect to any resources in the university when students need to graduate. For example, they know their own responsibilities in studying, finance, health and if they have any problem related to these issues, they can find good advices to solve the problems”

(RA3)

In my experience, my young students come to see me to learn how to make own decision for themselves, how to ask a person or answer questions clearly, communicate effectively with academic advisors and anyone in the campus. That helps them in personal development.
“My students see me when they got troubles or problems. Through advising, I help students identified their own problems, seeking what are the causes, and based on that assist them to find solutions. This process will help them to grow and manage their own problem. They relate their experiences with other aspects for personal development”

“Students always look at their academic advisors as role model. A good academic advisor will exhibit good example for students to follow thus could encourage them to be a good personal. For me, I try my best to help my students to realize their own values from having rich knowledge, study well from work hard and competently learning skills, good behaviours and respect with each other.”

“My students will become teachers in the future, therefore, academic advising is important, not only related to the academic aspect or performance, but to a more holistic development like emotional intelligent or psychological, soft skill, self-esteem, etc.”

“In my university, academic advising mainly helps students in two parts, academic achievement and student development. Academic advising assists students in personal issue or problem solving; especially academic advising helps students develop their own values by respecting academic advisors, staff, university; understanding the value of graduation and motivate students in studying, satisfaction and happy with their achievement”

In general, academic advisors perceived that academic advising can provide significant effect on individual student personal development. With the unique model of communication of one-on-one on campus, academic advisors can assume that they can apply multi ways to advice students including assisting in non-academic matters, providing guidance on personal building activities, motivating for personal development, and others.

**Career Development**

From the nine themes revealed from the initial data analysis, only one theme, career orientation, was employed to develop one big theme labelled as career development. This
mean that from the initial analysis there was only code related to career development. This is to indicate that career development is the third or fourth focus of outcomes of academic advising from the perspective of academic advisors. The very small number of nodes related to career development shows the limited effect on students’ career development resulting from academic advising process. It is possible that the academic advisors limited their discussions to academic and personal development rather than the whole spectrum of student development.

“As my students are from education background, most of them would end up in the teaching profession. I spoke about the professionalism of teacher and their career path. Quite a few of them continue to master level immediately after finish their first degree.”

(RA1)

“In my university, the Career Centre will respond to support students in career development. However, in academic advising process, we help student understand the value of career planning during studying time in university and the periods of career development after graduation.”

(RA4)

Social Skills Development

From the nine themes revealed from the initial data analysis, only one theme, social activity skills, was employed to develop one big theme labelled as social development. This mean that from the initial analysis there was only node related to social development. This is to indicate that social development is the third or fourth focus of outcomes of academic advising from the perspective of academic advisors. The very small number of nodes related to social development shows the limited effect on students’ social development resulting from academic advising process. It is possible that the academic advisors limited their discussions to academic and personal development rather than the whole spectrum of student development. This may mean that academic advising roles in the present practice is still in the walls of universities, less of assisting students to connect with community activities.

“I encourage my students join extracurricular activities for social skill development”

(RA 6)

“For fresh students, I have introduced students to some people or offices staff in the campus related to academic and non- academic when they need to solve their own issue…”

(RA1)
CONCLUSION

The finding of this study clearly indicated that academic advising outcomes is for student development. This study found that academic development, personal development, and career development was the first, second, and the third themes most stated while social development was hardly stated by the academic advisors when asked regarding their perceptions towards academic advising. This finding was supported by Noel-Levitz (1997) which indicated that academic advising impacts all major dynamics of student's life. Academic advising assists students in becoming responsible consumers of their own educations, making viable academic decisions, seeking guidance and assistance, adjusting to a new environment, clarifying life goals, and enhancing own interests in university education. Another notable thing is that the finding of this study implies that social development of students was not part of academic advising tasks at least from the academic advisors of Malaysian public university perspective. This finding is paralleled with Ender, Winston, and Miller (1982) and Crockett et al. (1987) which stated that the development of meaningful educational goals that are consistent with the student personal interests, values and abilities, is the outcome of academic advising.

In sum up, academic advising plays an important role in promoting students’ success and graduation on time. Effective academic advising is not only about fulfilling the administrative formality with signing the forms, but also to focus on relevant and desirable learning and development outcomes for student development. In tandem with other studies, this study showed that academic advisors are in charged to improve student academic achievement, personal growth, career development, and social development. These outcomes of academic advising become clear evidences for academic administrators to invest more time, human resources and finances to restructuring, improving, and enhancing the quality of academic advising. The finding of this study can be used for the development local questionnaire to conduct survey research in the future.

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REFERENCES

Astin, A. W. (1975). *Preventing students from dropping out*. San Francisco: Jossey-Bass.
Astin, A. W. (1978). *Four critical years: Effect of college on beliefs, attitudes, and knowledge*. San Francisco: Jossey-Bass.
Astin, A. W. (1993). *What matters in college*. San Francisco: Jossey-Bass.
Crockett, D. S., Habley, W. R., & Cowart, S. C. (1987). *The ACT national survey of academic advising: Preliminary report*. Iowa City: IA: American College Testing Program.
Crookston, B. B. (1972). A developmental view of academic advising as teaching. *Journal of College Student Personnel*, 13(1), 12-17.
Cuseo, J. (2003). Comprehensive academic support for students during the first-year year of college. In G. L. Kramer (Ed.), *Student academic services: A comprehensive handbook for the 21st century* (page number). San Francisco: Jossey-Bass.
Dadgar, M., Nodine, T., Bracco, K. R., & Venezia, A. (2013). *Integrating student supports and academics*. San Francisco: WestEd.
Ender, S. C., Winston, R. B., & Miller, T. K. (1982). Academic advising as student development. *New Directions for Student Services*, 1982(17), 3-18.
Gordon, V. N., Habley, W. R., & Associates. (2000). Academic advising: A comprehensive handbook. San Francisco: Jossey-Bass.
Habley, W. R., & McClanahan, R. (2004). What works in student retention? Two-year public colleges. ACT Research Report.
Howell, N. G. (2010). Appreciative advising from the academic advisor's viewpoint: A qualitative study. PhD Dissertation. University of Nebraska.
Hunter, M. S., & White, E. R. (2004). Could fixing academic advising fix higher education? About Campus, 9(1), 20-25.
Hussin, S. H., & Tuah, K. M. (2007). Towards a quality support service: the academic advising system: a lesson from the mentor-mentee system. Retrieved on 01.03.2012 from: http://www.calm.unimas.my/calm_arc/insite_v10/article2.html
Ismail, A., Abdullah, D. N. M., & Khian Jui, M. K. (2011). Relationship between mentoring program characteristics, self-efficacy and mentee outcomes: A study of the Malaysian institutions of higher learning in Sarawak. FRGS Research Report, Universiti Malaysia Sarawak, Sarawak.
Ismail, A., & Ridzuan, A. A. (2012, March). Relationship between mentoring program and academic performance. The mediating effect of self-efficacy. In The Proceeding of the 3rd International Conference on Business and Economics Research (ICBER) (pp. 12-13).
Jayne, D. K. (2011). The role of academic advising in student retention and persistence. About Campus, 16(3), 8-12.
Kuh, G. D. (2008). Advising for student success. In Gordon, V. N., Habley, W. R., Grites, T. J., & Associate (Eds), Academic advising: A comprehensive handbook (2nd ed) (p. 68-84). San Francisco: Jossey-Bass.

Kuh, G. D., Ikenberry, S. O., Jankowski, N. A., Cain, T. R., Hutchings, P., & Kinzie, J. (2014). Using evidence of student learning to improve higher education. San Francisco: John Wiley & Sons.

Kuh, G. D., & Ikenberry, S. O. (2009). More than you think, less than we need: Learning outcomes assessment in American higher education. National Institute for Learning Outcomes Assessment.

McGillin, V. A. (2000). Current issues in advising research. In V. N. Gordon & W. R. Habley (Eds.), Academic advising: A comprehensive handbook (pp. 365–75). San Francisco: Jossey-Bass.

Nor, A. S. M., Zaini, R. M., & Zahid, S. M. (2013). Shortage of accountants: Does mentoring helps to increase the number? International conference on Social Science Research, ICSSR 2013. 4-5 June 2013, Penang, MALAYSIA.

Nguyen, T. V., Said, H., Mohd Rameli, M. R., Karim, N. A., Tajuddin, N., & Chai, T. T. (2015). Role of academic advising in mitigating the challenges of ethnic minority students at Universiti Teknologi Malaysia. International Education Studies, 8(13), 52.

O’Banion, T. (1972). Academic advising in the two-year college: A national survey. Journal of College Student Personnel, 13(5), 411-419.

Soria, K. M., & Mumpower, L. (2012). Critical building blocks: Mandatory prerequisite registration systems and student success. NACADA Journal, 32(1), 30-42.

Saba‘Ayon, N. (2015). Academic advising: Perceptions of students in a Lebanese University. IJAEDU-International E-Journal of Advances in Education, 1(2), 118-126.

Shelton, E. N. (2003). Faculty support and student retention. Journal of Nursing Education, 42(2), 68-76.

Smith, J. S. (2002). First year student perceptions of academic advisement: A qualitative study and reality check. NACADA Journal, 22(2), 39-49.

Smith, C. L., & Allen, J. M. (2006). Essential functions of academic advising: What students want and get. NACADA Journal, 26(1), 56-66.

Tinto, V. (1987). Leaving college: Rethinking the causes and cures of student attrition. Chicago: University of Chicago Press.

Wessel, J. L., Ryan, A. M., & Oswald, F. L. (2008). The relationship between objective and perceived fit with academic major, adaptability, and major-related outcomes. Journal of Vocational Behavior, 72(3), 363-376.

Young-Jones, A. D., Burt, T. D., Dixon, S., & Hawthorne, M. J. (2013). Academic advising: Does it really impact student success? Quality Assurance in Education, 21(1), 7-19.