This is a preprint. Please cite as:
Dave Towey, Matthew Pike, and Zhiye Chen (2021), "Student Mentorship Programmes: Students as the Real Teachers?", in Proceedings of the International Conference on Open and Innovative Education (ICOIE 2021), pp. 114-122.

Student Mentorship Programmes: Students as the Real Teachers?

[1]Dave Towey, [2]Zhiye Chen, and [3]Matthew Pike

[1,3] School of Computer Science
University of Nottingham Ningbo China
Ningbo, Zhejiang 315100, People's Republic of China
{Dave.Towey,Matthew.Pike}@nottingham.edu.cn

[2]Department of Psychology
Fu Jen Catholic University
New Taipei City, Taiwan 242062, China
victor.chenzhiye@gmail.com

Abstract

Purpose – The Sino-foreign Higher Education Institutions (SfHEIs) in the People's Republic of China (PRC) grew as an innovative response to a (then) pressing PRC education problem — providing sufficiently high quality and quantity higher education (HE) opportunities. These SFHEIs have also been centres of innovation, with many exciting initiatives being developed to address the ongoing challenges that SfHEIs have faced. This paper looks at a key element of many such initiatives, that of students as change agents (SACA), where students themselves become the agents to make the changes they seek. In this instance, a recent Student Mentorship Programme (SMP) is explored.

Design/methodology/approach – The paper is structured around a report on a partially student-led initiative at University of Nottingham Ningbo China (UNNC), the first SfHEI in the PRC. Identifying several challenges and opportunities surrounding undergraduate student learning, and the potential for senior undergraduate students to gain teaching experience, a small group of proactive final year Computer Science (CS) students collaborated with CS staff to create an SMP, whereby senior students would volunteer to support more junior students in their learning. This involved supporting computer lab sessions, and also offering general study strategy advice. They were also able to serve as an additional line of communication between students and faculty, providing both feedback and advice to students and staff.

Findings – This report highlights a number of advantages to SACA initiatives in general, and this SMP in particular. The mentored students reported increased satisfaction, the relevant teachers received additional feedback and support for their teaching, and the mentoring students also gained valuable insight into teaching as a potential future career direction. An additional gain was the newfound ability to provide teaching-related comments in the mentors' graduate study applications. The overall experience resonated with an earlier experience of the author, a decade earlier, at another SfHEI (United International College, UIC), where a spectrum of four types of Teaching Assistants (professional; graduate students; foreign language; and undergraduate students) were deployed to support UIC's teaching. These two experiences are contrasted, and recommendations for best practice identified.

Originality/value/implications – The COVID-19 situation has again emphasised the need for adaptability, in education and in other fields. The findings and recommendations in this paper, especially in the context of peer support and peer learning, will be of interest to educators seeking more opportunities for student feedback, and seeking to more deeply engage their students in the learning journey.

Keywords: COVID-19, mentorship, peer learning, Students As Change Agents (SACA), teaching support.

1 Introduction

The COVID-19 pandemic caused disruption to many higher education (HE) institutions (HEIs), resulting in changes and innovations to their teaching and learning (T&L) practice (Lau et al., 2020), including in the provision of feedback to students (Gill et al., 2020; N.D.). This has again emphasised the need for HEIs to be flexible, adaptable, and agile (Towey, Walker, & Ng, 2018; 2019).

University of Nottingham Ningbo China (UNNC) was the first Sino-foreign HEI (SfHEI), created in 2004 as a partnership between University of Nottingham and the Wan Li Education Group, established the first SfHEI, UNNC. United International College (UIC) was founded in 2005 by Beijing Normal University and Hong Kong Baptist University. UIC was the first "SfHEI" between the People's Republic of China (PRC) and Hong Kong. Both UNNC and UIC are English Medium of Instruction (EMI) institutions.

A recent initiative at UNNC, the Student Mentorship Programme (SMP), was a UNNC collaboration between staff and students, whereby more senior students would volunteer to provide support (academic and other) to more junior students. The SMP ran as a pilot in the second semester of the 2018-2019 academic year, and was in the process of being expanded the following year when it was impacted by the COVID-19 pandemic and subsequent lockdown in the PRC (Gollwitzer et al., 2020).

This paper reports on some of the initial reflections and findings as part of the on-going development of the SMP. Some of these findings resonate and relate to an earlier study we conducted at UIC (Chen, 2010), prompting a number of further reflections that we share here.

2 Background

As discussed previously (Towey 2014; 2016), China's economic growth based on a manufacturing industry boom needed to change to a services-oriented economy, which required some restructuring of the PRC HE landscape (Zhao, 1998; Li et al., 2012). One aspect of these changes was the emergence of the SfHEIs (Lixu, 2004). SfHEIs appeared as an innovative solution to the PRC need to provide more HE opportunity, and, as well as thus being innovations, they are also often themselves been hosts to innovative projects (Towey, 2014). Two SfHEIs, UIC and UNNC, are the settings for the studies discussed in this paper.

The distinction between native and non-native English speakers represents a paradox for many researchers in applied linguistics (Medgyes, 1994; Moussu &

Llurda, 2008), who may argue that the dichotomy is not "linguistically acceptable," but is nonetheless "socially present." The definition of *nativeness* is elusive, especially in the case of speakers of more than one language, but there is a clear reported preference in many contexts for the *native speaker* (Moussu & Llurda, 2008). The situation is further complicated (or confused) by the many varieties of English in the world (Kachru, 1994); the fact that the majority of communication through English does not involve native speakers (Smith, 1988; Smith & Nelson, 1985; Smith & Rafiqzad, 1979); and the fact that research indicates that the most intelligible English speakers are not the native speakers (Smith & Rafiqzad, 1979).

Among the many varieties of English, although *Chinese English* does not yet have the degree of championing that some other regional varieties may have — e.g., Indian English (Kachru & Nelson, 2006) — there is increasing awareness of its legitimacy (Xu, 2010). One reason for the choice of the UIC TESL (Teaching English as a Second Language) to be TESL rather than TEFL (Teaching English as a Foreign Language) was the hope that English may become a second language in China (Jiang, 2003). In such a case, the demand for Chinese people as English teachers should increase. At the very least, demand for lower ranking academic staff (including teaching assistants, TAs) with appropriate skills, but without necessarily being native speakers of one of the canonical varieties of English (Kachru, 1994), should certainly increase. This motivated our earlier study (Chen, 2010) investigating the effectiveness of different types of TAs, where native English was one of the distinguishing characteristics.

HE classroom interactions and expectations have been changing significantly, including the appearance of more student-centred approaches (King, 1993; McWilliam, 2009; O'Grady et al., 2014). The inclusion of more student input has not been confined only to feedback on teaching (Nicol, Thomson, & Breslin, 2014; Xie, Towey, & Jing, 2014), but can be seen in programmes such as the Students as Change Agents (SACA) (Dunne & Zandstra, 2011), which explicitly include students in the development of their own education pathways. The 2019 UNNC SMP was started partly as a SACA-style initiative.

3 UNNC Student Mentorship Programme (SMP)

UNNC runs a software engineering team project (SETP) class for penultimate year undergraduate computer science (CS) students (Towey, 2016; Towey & Pike, 2021). The SETPs are completed by teams of five to seven students, who work on software engineering problems over the course of a year, under the supervision of a member of staff. As part of the support for the SETPs, the coordinator (an author of this paper, Towey) provides weekly workshops, lectures, and other activates (Towey, 2015). One very popular activity is the annual Seniors Consultation session, when previous SETP participants join the SETP cohort for an experience-sharing and consultation. Feedback from some senior student participants highlighted that they enjoyed this opportunity to contribute to their juniors' experience, and that they would like more such opportunities (Dybå, Maiden, & Glass, 2014). This led, in 2019, to the first (pilot) trial of the UNNC CS student mentorship programme (SMP).

Some of the original objectives and content of the SMP included:

- Provision of training to introduce basic teaching, coaching, ethical, and pastoral principles to equip the student mentors to engage junior students, through the CS classes (including labs, seminars, and tutorials).
- The student mentors were to serve as role models to the junior students (having already recently taken the same classes).
- They were expected to have closer relationships with the junior students than was possible between teachers and students.
- They were to be relatively free in how they mentored, without obligations, for example, to always attend certain classes, or labs.
- The student mentors were expected to gain leadership experience, and experience as potential future tutors (something that can be important for some postgraduate study programmes).
- They would also represent a new stakeholder class in the UNNC CS T&L experience, feeding into feedback mechanisms at multiple levels.

As with any new initiative, educational or other, our pilot run was expected to have challenges (Ertimer, 1999; Fullan, 2007), which it did (and which are discussed in the Discussion section). Nevertheless, there was, overall, a very positive impact, with feedback from the student mentors, mentees, and other relevant stakeholders all very good. Based on this, we planned to expand the SMP over the following year, the 2019-2020 academic year.

The COVID-19 situation in the PRC caused a lot of disruption, at UNNC and elsewhere (Gill et al., 2020; N.D.). The SMP was also disrupted. Some of our observations on the SMP from its initial pilot, up to now, allowed us to identify common themes with our earlier study at UIC (Chen, 2010). Although both the SMP and our study of the related issues continue, the next section presents some key initial points.

3 Mentorship and Teaching Assistance

Across both the UIC study and the UNNC SMP, the main actors could be considered to fall into the following categories:

3.1 UNNC Student Mentors (SMs)

Since 2019, UNNC CS has been exploring and expanding the SMP, though which senior CS student volunteers are invited to join and offer support to the more junior CS students. These student mentors (SMs) do not receive remuneration.

3.2 Native English-speaking TAs (NES TAs)

Since its foundation, UIC employed a number of native English speakers (NES) to act as English Language TAs. Usually, these NES TAs (later labelled *foreign interns*) were recent graduates with a Bachelor's degree, often in a field unrelated to language or education. In the year of the UIC study (Chen, 2010), the TESL Department had the use of eighteen NES TAs: Three of these TAs majored in English or Language Studies; five in Politics; four in Sociology; two in History; two in Philosophy; and

one each in Business and Anthropology. Fourteen of these TAs had previous experience tutoring (the highest number since UIC's founding in 2005), and one had received professional training for tutoring.

Bauer has suggested that NES TAs may face more challenges in the HE context, compared with local TAs (Bauer, 1996). The different cultural and social backgrounds, and probable lack of familiarity with the Chinese teaching and learning settings may lead to such challenges (Luo, Bellows, & Grady, 2000).

3.3 Professional TESL TAs

From 2008, the TESL Department had also been able to employ TAs with a background related to TESL (usually holding a Master's degree in Linguistics or Teaching Methodology, and having some relevant work experience). In the year of the UIC study (Chen, 2010), there were two full-time TESL TAs. Both were Chinese nationals with overseas and tutoring experience, with one also having received professional training for tutoring.

3.4 Student TAs (STAs)

Since 2008, when PRC visa restrictions reduced the availability of NES TAs (AFP, 2008; Baker 2008), TESL had been appointing senior TESL students as Student TAs (STAs) to help the more junior students. Initially, these STAs received a small honorarium for their TA work. At the time of the UIC study (Chen, 2010), TESL had recruited 21 STAs, five of whom had previous experience tutoring, but none had received professional tutoring training.

It should also be noted that, in contrast to the UNNC SMs, the TESL STAs, in addition to their honorarium, may have had the additional incentive of their TA work contributing to practical experience related to their TESL degree studies. The UNNC SMs, as CS majors, had less obvious practical connections for their mentoring efforts.

It has been reported that STAs are often employed by professors or supervisors to help with the classes that they have already in their previous academic study. However, due to their limited knowledge of the academic content, STAs may often be considered as unreliable resources in content-based class tutoring (Liao, 2009). On the other hand, STAs are reportedly responsible with their duties, and can help to build an effective connection between teachers and (Liao, 2009).

3.5 Graduate Student TAs (GTAs)

In the year of the UIC study (Chen, 2010), a top-scoring graduate of the 2006–2010 TESL cohort was working on her MPhil degree (by research), as part of the conditions for which she provided some Graduate TA (GTA) support to TESL. This student, as well as being a graduate from TESL (and therefore intimately familiar with the programme) was also one of the original STAs in 2008. However, she had not received any professional tutoring training.

UNNC CS also employs GTAs, all of whom are PhD students. The UNNC GTAs are paid an hourly stipend for their GTA work.

3.6 Class Teacher

In any situation of TA or SM involvement, the relevant class teacher was naturally consulted and included in the arrangements. The involvement of the teacher varied with the nature of the TA/SM: the professional TESL TAs, for example, had significant guidance from the teacher; the SMs, in contrast, had very little.

3.7 SM/TA Coordinator

In addition to the class teacher involvement, there was also an overseeing coordination role. The overall coordination of all TESL TA activity was done by the then department head, an author of this paper: Towey. Likewise, Towey was also involved in the establishment and coordination of the UNNC SMP. The UNNC SMP students, unlike the TESL TAs, had far less engagement with the coordinator, with most such communication surrounding feedback or advice, rather than explicit instructions.

4 Discussion & Conclusion

An expectation common for all TAs/SMs was to augment the communication between students and instructor (and coordinator). This appeared to happen in all cases.

In the UIC study, it was expected that STAs, professional TESL TAs, and the GTA would all (1) help the students with technical (course-related) questions; (2) Provide possible Chinese language support to help student comprehension; and (3) be a role-model for students (either as current students or future graduates). It was also expected that the TESL TAs and GTA would be approached very often for career advice. These things all seemed to happen.

Only the NES TAs were explicitly expected to improve UIC TESL student English production skills (speaking, presentation, and writing), and only they were explicitly expected to become friends with their assigned students, and interact in social as well as academic surroundings. It was also expected that they would help most with showing students different approaches for research (e.g. using the library, databases, etc.) — which is what the UNNC SMs were anticipated to do.

The UIC STAs were the only UIC group explicitly expected to also help students make a transition to college life. The UNNC academic structure differs from UIC in that, although both are 4-year degrees, the UNNC first year is conducted independently of the major — spent in a sort of year of English enhancement and UK-Education preparation. This means that the students whom the UNNC SMs interacted with, while possibly in the first year of CS classes, were not in their first year at UNNC.

The UIC GTA was expected to be the TA most approached (overall) by students, and the professional TESL TAs were the only group expected to assist the instructor in grading/marking, and in the provision of formal, course-oriented tutorials. This, again, is an area where UIC and UNNC differ: UNNC has no professional TA structure (no full-time teaching assistants), and has much stricter regulations over what a GTA can do regarding marking.

It was noted, in both UIC and UNNC, that how the TAs/SMs were engaged with evolved over time. Some of these changes could be correlated to the students' changing levels and nature of coursework.

Towey (2015) reported on a failed attempt to flip the classroom, as part of his reflection on which he noted how he learned things from his students. The various TA structures and SMP initiative explicitly aim to support student learning, but also aim to provide feedback to the various stakeholders (including teachers): this is also an opportunity for teachers to learn.

Given the many different motivations and aims related to the different TA/SM provisions (and investigation), there are many interesting aspects deserving of deeper investigation and analysis, which are ongoing, and we look forward to reporting on in our future work.

Acknowledgements

The work in this paper was partly supported by a Natural Science Foundation of China (project code 61872167). Towey also acknowledges the support of the UNNC Artificial Intelligence and Optimisation (AIOP) Research Group, and the Faculty of Science and Engineering.

References

AFP (2008). China changes visa policy ahead of Olympic Games. *Sydney Morning Herald*, May 7th, 2008. Available from http://www.smh.com.au/news/news/china-changes-visa-policy-ahead-of-olympic-games/2008/05/07/1209839701586.html (Accessed 2 May 2021).

Baker, R. (2008). China, the Olympics and the Visa Mystery, *STRATFOR*, July 29th, 2008. Available from http://www.stratfor.com/weekly/china_olympics_and_visa_mystery (Accessed 2 May 2021).

Bauer, G. (1996). Addressing special considerations when working with international teaching assistants. In J. D. Nyquist and D. H. Wulff, *Working Effectively with Graduate Assistants*, chapter. 7, 84-103. Thousand Oaks, CA: Sage.

Chen, Z. (2010). Native and Non-Native English Speaking teaching Support: An Examination of Foreign and Student Tutors in an EMI Institution in Southern China. *B.A. (Hons) Dissertation*, Beijing Normal University—Hong Kong Baptist University: United International College, Zhuhai, China.

Dunne, E., & Zandstra, R. (2011). *Students as Change Agents: New ways of engaging with learning and teaching in Higher Education*. Bristol: Escalate.

Dybå, T., Maiden, N., & Glass, R. (2014). The reflective software engineer: reflective practice. *IEEE Software*, *31*(4), 32-36.

Ertmer, P. (1999). Addressing first- and second-order barriers to change: Strategies for technology integration. *Educational Technology Research and Development*, 47(4), 47-61.

Fullan, M. (2007). *The new meaning of educational change*, 4th ed. New York, NY: Teachers College Press.

Gill, A., Irwin, D., Towey, D., Walker, J., & Zhang, Y. (2020). Reacting to the Coronavirus: A Case Study of Science and Engineering Education switching to Online Learning in a Sino-foreign Higher Education Institution. In *Proceedings of the 2020 International Conference on Open and Innovative Education (ICOIE 2020)*, pp. 385-404.

Gill, A., Irwin, D., Towey, D., Walker, J., & Zhang, Y. (N.D.). Reflections Post-Lockdown: Science and Engineering Education Switching to Online Learning. *International Journal of Mobile Learning and Organisation*. [To Appear]

Gollwitzer, M., Platzer, C., Zwarg, C., & Göritz, A. S. (2020). Public acceptance of Covid-19 lockdown scenarios. International Journal of Psychology. https://doi.org/10.1002/ijop.12721

Jiang, Y. (2003). English as a Chinese Language. *English Today*, 19(2), 3-8.

Kachru, B. B. (1994). The Speaking Tree: A Medium of Plural Canons. In J. E. Alatis (ed.), *Georgetown University Round Table on Languages and Linguistics (GURT)*, Georgetown University Press, Washington, 6-22.

Kachru, Y., & Nelson, C. L. (2006). *World Englishes in Asian Contexts (Vol. 1)*. Hong Kong University Press.

King, A. (1993). From sage on the stage to guide on the side. *College Teaching*, 41(1), 30-35.

Lau, H., Khosrawipour, V., Kocbach, P., Mikolajczyk, A., Schubert, J., Bania, J., & Khosrawipour, T. (2020). The positive impact of lockdown in Wuhan on containing the COVID-19 outbreak in China. *Journal of travel medicine*, 27(3), taaa037.

Li, Y., Whalley, J., Zhang, S. & Zhao, X. (2012). The higher educational transformation of China and its global implications. In C. Ennew & D. Greenaway (eds), *The Globalization of Higher Education*, Palgrave Macmillan, chapter 10, 135-162.

Liao, H. Y. (2009) A Research on the Model of Employing the Excellent English Major Student Teaching Assistants within the College English Education [英语专业优秀本科生辅助大学英语教学的助教模式研究]. *Education and Vocation*. 12, 162-164.

Lixu, L. (2004). China's Higher Education Reform 1998-2003: A Summary. *Asia Pacific Education Review*, 5(1), 14-22.

Luo, J. L., Bellows, L., & Grady, M. (2000). Classroom Management Issues for Teaching Assistants. *Research in Higher Education*, 41(3), 353-383.

McWilliam, E. L. (2009). Teaching for creativity: from sage to guide to meddler. *Asia Pacific Journal of Education*, 29(3), 281-293.

Medgyes, P. (1994). *The Non-Native Teacher*. Macmilan Publishers, London.

Moussu, L. & Llurda, E. (2008). Non-native English-speaking English language teachers: History and research. *Language Teaching*, 41(3), 315-348.

Nicol, D., Thomson, A., & Breslin, C. (2014). Rethinking feedback practices in higher education: a peer review perspective. *Assessment & Evaluation in Higher Education*, *39*(1), 102-122.

O'Grady, E., O'Reilly, J., Portelli, J. P., & Beal, C. (2014). Putting the Learner into the Curriculum, not the Curriculum into the Learner: A Case for Negotiated Integrated Curriculum. *International Journal of Pedagogical Innovations*, 2(2), 51-64.

Smith, L. E. (1988). Language Spread and Issues of Intelligibility. In P. H. Lowenberg (ed.), *Language Spread and Language Policy: Issues, Implications and Case Studies*, Georgetown University Press, Washington D.C., 265-282.

Smith, L. E. & Nelson, C. L. (1985). International Intelligibility of English: Directions and Resources. *World Englishes*, 4(3), 333-342.

Smith, L. E. & Rafiqzad, K. (1979). English for Cross-Cultural Communication: The Question of Intelligibility. In L. Smith (ed.), *Readings in English as an International Language*, Pergamon, Oxford, 49-58.

Towey, D. (2014). Open and flexible learning as an alternative in mainland Chinese higher education. In *Emerging modes and approaches in open and flexible education* (K. C. Li and K. S. Yuen, eds.), chapter 2, 12-26, Hong Kong: The Open University of Hong Kong Press.

Towey, D. (2015). Lessons from a failed flipped classroom: The hacked computer science teacher. In *Proceedings of the 2015 IEEE International Conference on Teaching, Assessment, and Learning for Engineering (TALE),* 11-15.

Towey, D. (2016). Preparing the next Generation of China's Computer Scientists: A Snapshot of Challenges for Sino-foreign Computer Science Education. In *Proceedings of the Third International Conference on Open and Flexible Education (ICOFE 2016)*, Hong Kong, China, 224-231.

Towey, D., & Pike, M. (2021). Not a Silver Bullet, but a Silver Lining: Metamorphic Marking Administration. In *Proceedings of EDUCON2021 - IEEE Global Engineering Education Conference*, 933-940.

Towey, D., Walker, J., & Ng, R. Y.-k. (2018). Traditional Higher Education Engineering versus Vocational and Professional Education and Training: What can we Learn from Each Other? In *Proceedings of the 2018 International Conference on Open and Innovative Education (ICOIE 2018)*, 474-486.

Towey, D., Walker, J., & Ng, R. Y.-k. (2019). Embracing Ambiguity: Agile Insights for Sustainability in Engineering in Traditional Higher Education and in Technical and Vocational Education and Training. *Interactive Technology and Smart Education*, 16(2), 143-158.

Xie, C., Towey, D., & Jing, Y. (2014). Current Trends in the use of Student Input in Teacher Evaluation in Universities in Mainland China. In *Proceedings of the Fourth Asian Conference on Language Learning (ACLL2014)*, Osaka, Japan, April 17-20, 12-21.

Xu, Z. (2010). *Chinese English: Features and Implications*. The Open University of Hong Kong Press, Hong Kong.

Zhao, F. (1998). A Remarkable Move of Restructuring: Chinese Higher Education. *Education Policy Analysis Archives*, 6(5), 279-290.