

SUNY Cortland Teacher Education Unit
Executive Summary of Case Studies of Completer Impact on Students

Prepared: August 2022

Research Conducted: January - June 2022

Introduction

- Why we conducted case studies
- Background on how the research group was formed, meetings, discussion, development of research protocols and materials used in the research.

SUNY Cortland collected impact and application of knowledge/skills disposition data because there is an absence of such data from the New York State Education Department. We also use this data to inform our decision-making about curricula improvements to our programs.

A Professional Learning Team (PLT) of researchers conducted case studies of program completers across various programs with two intended goals: to examine program completer impact on P-12 student learning through the review and discussion of available artifacts; and to observe the effective application of professional knowledge, skills, and dispositions with the same participants through structured observation protocols and pre- and post-observation interviews.

We use these case studies to inform the systematic and ongoing investigation of program completers' impact on their students, which informs our own teacher education programs in all three schools of SUNY Cortland.

Dean Andrea Lachance proposed a Case Study Research project initially in 2017. In 2019, the Teacher Education Unit conducted a second round of case studies, then in 2022, a research team conducted a 3rd round of research. As always, the research team was comprised of faculty from various departments in the three schools of the university that house teacher education programs.

Six researchers convened in January 2022 for initial meetings in preparation for the research. The researchers were from the following programs: 1 from Adolescent Education English, 1 from Adolescent Education Social Studies, 1 from Health, 1 from Childhood/Early Childhood Education, and 2 from Foundations and Social Advocacy. Meetings were held to confirm research protocols that were used in the two previous rounds of research and to confirm the continued use of the observation rubric that is based on already validated observation rubrics in use in New York State (e.g. Danielson, 2011). A day-long workshop to establish validity and reliability protocols was also held. An IRB was submitted to the IRB Chair at SUNY Cortland and approved in February 2022. Research was conducted soon after with each member of the team conducting research on two teachers who were completers of the education programs listed above.

Overview of procedures and methods for all 12 case studies

The research team used a descriptive, multiple case study research design in examining 12 program completers across P-12 content and grade levels that included semi-structured interviews and structured observations. A purposive sampling approach was used to focus on information-rich cases that produced data to inform the investigation of impact and effectiveness across a representative sample of program completers. The plan included collecting observation data using questions and prompts adapted from Charlotte Danielson's (2011) Framework for Teaching Evaluation Instrument, as applied within New York State for teacher observation and evaluation. The instrument used within Danielson's framework has been validated as a tool for observing teaching practice across multiple classrooms. The research team sent out an initial recruitment email to program completers from targeted SUNY Cortland teacher education programs, including the Childhood/Early Childhood Education, Foundations and Social Advocacy (special education), Health and Physical Education, and Adolescence English Education and Adolescence Social Studies Education. The initial recruitment email described basic parameters for the study, including that each participant would share artifacts that demonstrated impact on student-learning growth.

The list of artifacts requested from each participant is detailed in Appendix D of the IRB Application, and included such items as APPR data from previous year's final scores, portfolios with Student Learning Outcomes (SLO) data, lesson plans, student work samples, teacher reflections, pre- and post-teaching assessments for individuals, small, and whole groups, teacher-generated curriculum guides, block plans, scope and sequence plans, communications with parents/community, efforts to differentiate instruction and student choices, and other artifacts selected by participants. Participants were expected to sample from this list and were not required to have most or all artifacts.

Each researcher conducted one initial interview to review artifacts with their participants, and then returned to conduct one structured classroom observation. Before the classroom observation, there was a second interview and then after the observation there was a third interview with each participant. Data were compiled using various research templates that were created by the research team to better organize data and to assure uniformity across each of the 12 case studies. The data included what was gathered from the initial interview, a pre-observation interview, and a post-observation interview, and the classroom observation itself. Data also included structured observation tools used during the classroom observation and the completion of a Case Study Template to summarize and synthesize the information for each case.

Cross-case analysis was conducted in writing and at a final meeting in June 2022. A structural narrative analysis was conducted in stages where the group focused on themes within and across cases and then research team members checked these themes within and across the case study templates provided.

Changes made to this 3rd iteration of the Case Study Research

Several changes were made to the research process during this 3rd round of research. Those changes are listed below.

1. The research group refined its list of artifacts that served as evidence of student learning to ensure they were directly produced by students. They developed a second list of supplementary artifacts that supported student learning--such as teacher-generated curriculum guides, parent communications, and community-oriented documents like newsletters--that could be explored as secondary evidence but couldn't replace primary, student-produced work. Over the first two iterations of the case study research, these two categories were lumped into one long list.
2. The research group refined research protocols to strengthen practices that support participant confidentiality.
3. The research group improved the interview protocols to allow participants to define diversity (in terms of race, ethnicity, and gender identity) in ways that made sense to their classrooms and to them. Questions related to diversity were therefore more open-ended (e.g., "Could you please describe the diversity among your students?").
4. The research group removed the question "How many of your students are male and female?" because it fails to account for nonbinary students. Questions about gender identity were included under "diversity."
5. The research group also added this open-ended prompt to begin the post-observation interview: "Tell me how you think the lesson went." Again, the group was seeking ways to give the participants control over how they constructed their reflections and understanding of practice.
6. The research team focused on graduates from our Cortland Urban Recruitment of Educators (C.U.R.E.) program. All but 3 of the 12 teachers were C.U.R.E. scholars.

List of 12 teacher-participants, their grade level(s), subject area, and SUNY Cortland program from which they graduated.

Participant Code	Grade Level(s)	Subject Area(s)/School	SUNY Cortland Program
4301	9th grade	teaches primarily English/urban high school	BA English Education; C.U.R.E. scholar (2016)
4302	primarily 11th grade	English/suburban high school	MAT English Education (2017)
4303	3rd grade	22 students/urban elementary school	BS Childhood/Early Childhood; C.U.R.E. scholar (2020)
4304	2nd grade	22 students/urban elementary school	BS Childhood/Early Childhood; C.U.R.E. scholar (2020)

4305	3rd grade	13 students/suburban elementary school	BS Childhood/Early Childhood; C.U.R.E. scholar (2020)
4306	4th grade	32 students/urban elementary school	BS Childhood/Early Childhood; C.U.R.E. scholar (2020)
4307	9th grade	Global History and Geography/urban high school	BA History and Social Studies Education; C.U.R.E. scholar (2021)
4308	7th grade	History of U.S. and NYS/suburban middle school	BA History and Social Studies Education (2021)
4309	primarily 10th grade	Health/suburban high school	MST Health Education (2019)
4310	primarily 7th grade	Health/suburban middle school	MST Health Education; C.U.R.E. scholar (2020)
4311	4th grade	21 students/urban elementary school	BS Inclusive Childhood Education; C.U.R.E. scholar (2021)
4312	kindergarten	12 students/urban elementary school	BS Inclusive Childhood Education; C.U.R.E. scholar (2020)

Context and description of the P-12 learning data that was examined

The P-12 learning data that was examined included:

- Textual analysis essays with English Regents rubric and peer evaluation
- student-written journals
- lessons plans and lesson materials, including engage NY modules
- workbooks, curriculum maps, word problems in math
- pre- and post-data of lessons
- graphic organizers created by students
- student work, activity sheets, student writing samples, worksheets
- exit tickets
- formative assessments of students

The context of this P-12 learning data includes data collected by 12 SUNY Cortland completers of the education programs noted above who work in suburban and urban settings in New York State. The completers represent a mix of teachers and schools: 2 Health teachers in suburban schools, an English teacher in an urban school and 1 in a suburban school, 6 teachers in elementary schools (5 of which are urban districts and 1 a suburban school); and 2 History

teachers (1 in an urban school and 1 in a suburban school). Completers represent graduates from our undergraduate programs as well as from our graduate MAT program in English Education and our MST program in Health. All completers graduated from SUNY Cortland within the last 6 years and have been working in their school for no less than 1 year. All but 2 of the teachers were within their first 3 years of teaching. All held full time positions.

The population of students taught by these 12 program completers include kindergarteners through 11th graders, many of whom receive free and reduced lunch. The students are diverse in racial, ethnic, and socio-economic status background, and some are English language learners. 5 of the 12 teachers teach in suburban schools, the rest are in urban schools.

Description and explanation of the representativeness of the data

All the researchers made a concerted effort to view documents provided by the teachers and to observe their teaching in a way that would reveal the teachers' impact on K-12 students' growth. This was sometimes a shortcoming in our last iterations of the case study research: teachers did not always show in their teaching and provide documents that explicitly demonstrated their impact on student learning.

In this most recent iteration, researchers viewed documents to find examples of student impact, but also focused more closely on the teaching that they observed. For example, elementary school teachers (4305, 4311) used formative assessments and exit tickets to check on student learning and found that students successfully completed their exit tickets. In the case of the English teachers (4301, 4302), both scaffolded their teaching to better impact student learning and the positive results were discernable by the researcher. Documents that teachers provided were also good indicators of their impact. For example, one teacher (4303) provided to the researcher a pre-teaching assessment of students and then their mid-unit assessment, which showed student improvement over the course of time. A history teacher (4308) showed the researcher student work, including a graphic organizer that demonstrated progressive development over time. Another history professor (4307) maintained a portfolio of students' writing, which provided evidence of how students' abilities improved over the year.

These are just a few of the examples of the documents and data of classroom instruction that showed student growth. Yet, though the researchers made a concerted effort to steer teachers to show documents that demonstrated "growth" and not just "good work," it was still difficult for some of the teachers to provide this information. But again, the research teams continue to work on this and each time we conduct the research the researchers are more successful in their quest for hard evidence that demonstrates "impact."

Analysis of Data

The researchers found evidence that completers of our programs contributed to student learning. Sometimes this evidence of teacher impact was documented with exits tickets and formative assessments. For example, the kindergarten teacher (4312) had students complete

an exit ticket either verbally or written to demonstrate their understanding of number bonds and the relationship between part and whole. During the researcher's post-interview, the teacher also cited several examples of formative assessment data that verified that students understood the material. When reviewing exit ticket results in the post interview, the teacher showed that all students were able to successfully represent number bonds between 11-19. The 4th grade teacher (4311) cited several examples of formative assessment data to monitor progress and check for understanding including informal observation, oral contribution to whole-class discussion, practice set problems completed with partner or individually, and completion of exit ticket to confirm students' progress towards the objective. On the exit ticket, although she noted that some students still had misconceptions, the majority were able to successfully break down a word problem and solve it correctly showing their work.

The use of formative assessments was also used by one of the high school English teachers (4301). The researcher noted that each student in this teacher's classroom was challenged at an appropriate level and produced work commensurate with that level. The relationship between teacher-generated feedback and student-generated writing seemed highly correlated. Essential to students' strong performance was this teacher's continuous use of formative assessment data to move students toward the next step in task completion. Through the teacher's conversations with each student, she developed a feedback loop that offered a progressive set of responses to students' drafts and clear improvements in their work.

The middle school History teacher (4308) also demonstrated his impact on student learning. Examples of disciplinary learning came through artifacts the teacher shared with the researcher. The teacher included student work from a lesson on the War of 1812 that demonstrated rich historical thinking skills and support for English language learners. Students worked with audio-visual materials (avatars of historical actors who narrated their historical positions on the War of 1812). Students, with the aid of a graphic organizer, decided whether each historical actor supported or opposed the War of 1812 and provided written explanations of the reason for that decision. Likewise, in examples of student station work, the teacher demonstrated student learning in developing connections between historical claims, evidence, and reasoning. At each station, the teacher provided a short, written claim and image-based evidence. Students provided written explanations of how the evidence demonstrated the claim. All this showed the very real impact the teacher was having on students' understanding of the War of 1812.

Some teachers demonstrated their impact on student learning by scaffolding lessons. It became evident to the researchers that students were learning as the lesson progressed from one concept to another, and students used previous concepts to understand new concepts. This was true of the English teacher (4302), as well as the 3rd grade teacher (4305). The 3rd grade teacher employed a range of instructional strategies to facilitate their learning. Each instructional decision was made with intentionality and informed by prior assessment data or the ongoing formative assessments built into the lesson. Although not every student successfully solved the exit ticket, the teacher had already observed this outcome through meetings with students and a review of their exit tickets. In the post-interview, she shared

initial ideas on how she might better scaffold students in the lesson. The researcher noted that this type of reflexive practice will likely lead to continual refinement of the teacher's teaching and even greater impact on student learning.

The high school History teacher (4307) kept a portfolio of students' writing, which provided evidence of how students' abilities had developed over the academic year. Writing samples from the beginning of the year showed students' struggles to create complete, concise sentences. Later samples revealed students' development in their abilities to craft complete sentences, and from there complete paragraphs. This teacher also shared examples of "enduring issues" assessments, and aggregate data of student performance on these assessments. In an enduring issues assessment, students read a history text (such as a short excerpt from a primary source) and identify an enduring issue that connected to the text, define the enduring issue, and explain the connection between the enduring issue and the text. The teacher worked with a professional learning community (PLC) at her school to examine student performance on enduring issues. The PLC analyzed aggregate data of student performance on enduring issues assessment to identify areas of strength and develop strategies for improvement. In one example, the teacher's sections of Global 9 students outperformed other sections in students' ability to identify and define enduring issues. Unlike other sections of Global 9 this teacher had her students create vocabulary flash cards to support their understanding of the enduring issues concepts of conflict, impact of trade, technology, environment, and diffusion of culture. Other Grade 9 instructors adopted this instructional scaffolding for their sections of Global 9 following this data analysis. This assessment data demonstrates the impact this teacher had on students' ability to identify and define enduring issues concepts.

The 2nd grade teacher (4304) also used scaffolding and formative assessments to be sure that students were learning, and the impact that the teacher was having on students was quite clear, though this researcher noted that issues related to classroom management may have prevented greater impact. Some teachers were able to demonstrate their impact on student learning—or at least their potential for impact—but because of the behavior of some students and their inability to create an environment conducive to learning, their impact was limited.

The researcher of the 2nd grade teacher (4304) noted, "I could see that during direct instruction, the teacher was positively impacting student learning but that there were also improvements in classroom management that could allow her to see a more accurate picture of student skills (at least in this lesson)." The same researcher noted that this teacher believed that almost all of the students who were present on the day that the researcher observed the class could answer ELA questions correctly if the teacher or another adult would sit with them and ask, but that their ability to answer questions in writing was limited due to their lack of writing ability. A Health teacher (4310) had challenges with the management of her classroom, as well—a classroom that the researcher described as "chaotic." Here, the impact on learning was seen in the teacher's summative assessment of students during a lesson on preparing healthy meals, but the researcher noted that it was difficult to discern impact when the environment of the classroom was chaotic. Rather, the researcher saw the myriad ways that

the teacher "tried" to impact student learning, but when she did is not so clear. It may also be difficult to measure impact in a Health setting, where Health teachers have students for such a limited time.

In general, all the researchers noted that the teachers they observed had a positive impact on student learning. However, some teachers were much more intentional in gathering the data needed to show improvements. Some researchers had systematic assessment procedures and other teachers assessed in a more informal way. Some kept work of students so that their improvements could be clearly seen; others did not. So, while the researchers were able to discern the impact that teachers had on students, it may be helpful for our education programs to emphasize a bit more the importance of documenting in a more systematic way their impact on student learning.

Overview of evidence that completers effectively apply the professional knowledge, skills, and dispositions that the preparation experiences were designed to achieve (CAEP 4.2)

This section focuses on themes from the evidence that are related to each of the four Domains on the Structured Observation Rubric, which is aligned to Danielson's (2011) framework used to observe in-service teachers in New York State.

Planning and Preparation (3.2/4 average across participants=Proficient+)

Proficient application of planning skills was demonstrated and documented in almost all of the 10 cases. Many of the teachers were Exemplary in this area. For many teachers their planning and preparation demonstrated their knowledge of the EngageNY modules and their various professional organizations. For example, the kindergarten teacher (4312) planned according to the Council for Exceptional Children Standards, the Health teacher (4310) demonstrated in her preparation her knowledge of the National Health Education Standards, and the elementary school teachers (for example, 4303 and 4304) planned using the EngageNY modules. The middle school History teacher (4308) planned according to the National Council for the Social Studies and was quite adept at making connections between units in the NYS Social Studies Framework. That teachers understood these modules, standards, and frameworks, and used them in their preparation of lessons reflects well on our teacher preparation programs.

In general, teachers understood and implemented the EngageNY modules in their planning, as well as Common Core Standards and subject area standards, as well as the CAEP standards that have guided teacher education programs at SUNY Cortland. Teachers also used formative assessment data to plan future lessons. For example, the high school History teacher (4307) demonstrated skills of using assessment data to drive iterative cycles of assessment, analysis, and instruction, which allowed her to identify areas of improvement. An English teacher (4301) made good use of rubrics to plan his classes and to be prepared to assess their progress. One of the 3rd-grade teachers (4303) was prepared for each lesson to remind students about steps in math lessons and then set up an independent practice. The other 3rd grade teacher (4305) was able to detail how the lesson she taught fit within the curriculum and displayed the

curriculum map to the researcher, which was used to plan the scope and sequence of the grade level team. This same teacher taught a math lesson that illustrated an exemplary method for integrating whole, small, and individual instruction into a 60-minute lesson. Her ability to do this, according to the researcher, was due to her fine preparation.

Classroom Environment (3.6/4 average across participants=Proficient+)

In general, the researchers noted that the teachers applied skills that they learned in their college programs in developing a classroom environment that was respectful and professional. Teachers knew that they must model professional behavior and that a positive classroom environment is important to establish. This is something that is emphasized in all teacher education programs at SUNY Cortland. Researchers also noted that teachers proved their ability to use culturally relevant subject matter and to teach using culturally responsive pedagogies (for example, 4304; 4308; 4309; 4312). Teachers also showed caring, kindness and respect toward students (for example, 4303; 4305; 4306).

The 11th grade high school teacher (4302) was described in this way: His "classroom was warm, welcoming, and rigorous; all students--including those, [the researcher] was later told, who were marginalized in their peer order--were consequently engaged in discussions that were masterfully and meaningfully conducted." In general, teachers worked hard to create caring relationships, even when classrooms were rather chaotic, as was the case for the 2nd grade teacher (4304) and the Health teacher (4310). Even when newer teachers lacked some classroom management skills, as was the case with the 2nd grade teacher (4304), researchers noted the efforts that each teacher made to create welcoming and rigorous classroom environments where high expectations and caring went hand in hand.

One researcher noted that a 3rd grade teacher's (4303) classroom was elaborately decorated with affirmations and culturally relevant reminders. The most striking was displayed in huge letters above the white board --"You Belong Here." The overwhelming feeling in the room was that the students and teacher were in this work of school together and that all were seen and valued.

Creating a caring and rigorous environment in the classroom seems to be a strength of SUNY Cortland programs. Every researcher noted successful efforts by teachers to create such an environment. What was noticed also was the degree of high expectations that teachers showed as well. Caring also meant that teachers did not give up on students, did not lower expectations. Even when students sat alone, teachers were eager to draw them in. The third-grade teacher (4303), for example, demonstrated a "warm demander" stance associated with culturally responsive teaching. There was a Black male student sitting with his desk isolated from others. The teacher repeatedly called on him for answers, asked him to demonstrate his work and praised him when he made good choices. The student, although separated physically, was fully integrated into the lesson and flow of the class.

Instruction (3.3/4 average across participants=Proficient+)

In their classroom observations of teachers, the researchers saw many examples of differentiated instruction (for example, 4301, 4303, 4311), peer review strategies and other ELA pedagogies (for example, 4301, 4302), scaffolding techniques (for example, 4302, 4308, 4311), discussion techniques (for example, 4302, 4311), active listening strategies (for example, 4302, 4311), formative assessments (for example, 4303, 4305, 4306), and culturally relevant pedagogies (for example, 4303, 4306, 4308, 4312). There were other examples of instruction techniques used in the classroom that were clearly learned in the teachers' education programs, with many researchers being able to indicate in which college course those techniques were taught.

Several researchers noted how teachers were able to move from one technique to another, using each as they saw fit. For example, one researcher noted of the high school English teacher (4302): "Over the course of the lesson I observed, this teacher drew on skills introduced in at least three graduate courses in her MAT program in English education. She utilized a variety of writing-to-learn journaling strategies that were emphasized in her course on the composing process (ENG504). The discussion techniques she drew on were introduced and practiced in both her English language art methods course (AED541) and her course in adolescent literature (ENG619). Further, the scaffolding technique utilized in the set of journal prompts described above were also presented and rehearsed in both AED541 and ENG619."

Several of the researchers noted in various ways that the teachers had high expectations for their students. They gave a lot of "in the moment" feedback, expected students to comprehend what was being taught, and pushed students to perform at their highest levels. Researchers also saw the benefits of this. For example, the 2nd grade teacher (4304) "demonstrated her high expectations for the students during the brain break and the vocabulary section of the lesson by telling them, 'I know you know how to behave,' and 'I know you can figure this out.'" The researcher noted: "To hear a group of students define themselves as clever because their teacher told them so is to see the power of relationship and high expectations in the lives of students."

Professional Responsibilities (3.3/4 average across participants=Proficient+)

Though it's difficult to evaluate a teacher's professional responsibilities, since many of those responsibilities take place outside of the classroom--attending conferences, reading, learning from peers--the researchers did note that most of the teachers were aware of their responsibility to know standards, to seek professional development, and to participate in other activities in order to improve their ability to teach and engage students. As mentioned earlier, teachers were aware of subject standards, the EngageNY modules, and Common Core Standards.

Researchers saw examples of how teachers connected with families. For example, the 2nd grade teacher (4304) discussed her efforts to connect with students who were chronically absent. To keep communication open despite these absences, she sends to families an email newsletter and texts a link for the newsletter to all parents, a practice she learned in her program at SUNY Cortland. The teacher said this reinforces to families that “school is right here waiting for them,” when the students are unable to attend.

Teachers also discussed their collaborations with others in the school, which they found necessary for helping students. The high school History teacher (4307), for example, participates in a Professional Learning Community with colleagues in her department to address issues related to teaching, which lead to improved instructional methods. The researcher noted that this is a key feature of their college program: urging teachers to create Professional Learning Communities with colleagues in their schools.

Other teachers collaborated outside their departments. For example, one of the 3rd grade teachers (4305) collaborated with the administration, special education teachers, and a teaching assistant to best serve her students. This was quite common among many of the teachers that were studied, and is a key component taught in programs across SUNY Cortland's teacher education unit. This same 3rd grade teacher also attended district-wide mathematics professional development and the grade level's professional learning community meetings. The researcher noted: "Thus, [this teacher's] lifelong learning and professional collaboration disposition which are helping her develop as an educator, may be connected back to the program's emphasis on collaboration and professional community building."

Trends

Certain trends can be found in the data. One is, in general, the 12 teachers who were studied here did a very good, and at times, excellent job balancing the many tasks that teachers have. They provided warm, welcoming classrooms. They held high standards. They used culturally relevant teaching strategies. They coordinated with others in their buildings to improve instruction. The teachers were clearly skilled and well-prepared. However, what was also noticed was some problems related to classroom management. It was not always clear if the teachers themselves lacked the skills to manage their classrooms effectively, or if they had just found themselves in difficult situations that would have strained even the best teachers. But this is something that our programs may want to investigate further.

Also interesting about the data was how little the issue of COVID came up. There were some references to students who had been absent, but the classrooms seemed to be back to normal for the most part. There was no mention of students being behind because of COVID's impact on schools, or students not being prepared for normal schooling, etc.. No doubt, COVID impacted students, teachers, and schools. But it seemed that these teachers were moving past COVID and trying to bring normalcy to their classrooms.

We also saw in this data a continuation seen in the previous iteration of the case study research: teachers were using various forms of assessment to evaluate their students in formal and informal ways. There were many examples of teachers checking-in with students, overseeing work, giving exit tickets, doing various kinds of formative assessments, and so on. These assessments were very well integrated in the instruction. Instruction and assessment seemed to be well coupled and integrated in a way that we had not seen before. The assessments seemed to be built into the lessons. Education programs at SUNY Cortland had been focusing on improving assessments, and we may be seeing the result of those improvements, even though some of these students were in some cases years away from graduating from their programs.

Completers were using what they learned in their programs. The use of multiple methods of teaching, small group work, exit tickets, conferencing with students, close readings of texts, centers, multiple means of informal assessments, all indicated that completers were using what they learned in their program--and doing it effectively.

Most of the teachers were graduates of the Cortland Urban Recruitment of Educators program, which among other things focuses on culturally relevant pedagogies, so it should be no surprise that many of the teachers were quite adept in this area. Interestingly, it did not seem that the teachers drew attention to their pedagogy. They did not, at least in this data, explicitly discuss their work as culturally relevant. It seemed that they just thought that what they were doing was good pedagogy. All good pedagogy is culturally relevant.

In a previous iteration of the case studies, we noted that it seemed that some teachers were having trouble adjusting to the culture of their schools. This did not present itself as a trend in this research, however there was mention of teachers have difficulty managing students. Classroom management is always a concern to our teacher candidates. We may want to explore ways to better prepare our graduates for classrooms that may be challenging.

Program Changes

SUNY Cortland education programs continue to make curricula improvement based on feedback we get from surveys and research we have done on our completers, including these case studies. Since the last iteration of our case studies three years ago, we spent over two years adjusting to the COVID pandemic. Despite the challenges that COVID presented, we did make some changes that have improved our programs. As we saw in our case studies, teachers are becoming more skilled in applying culturally relevant teaching strategies. While this may be because most of the teachers graduated from our C.U.R.E. program--where culturally relevant teaching strategies are emphasized--it can also be an indication that our programs have improved in this area.

For example, undergraduate programs in the School of Education have added a new concentration area to the existing 5. This new area is in Urban Education. We have also added to the social science concentration various courses in comparative and urban education. This

new concentration in Urban Education includes courses in sociology, urban geography, African American studies, economics, and other areas that focus on urban politics, schooling, and culture.

The Adolescence Education English program has also expanded its requirements regarding students whose first language is not English. Undergraduate students in this program now take a new class, ESL 402: Teaching English as a Second Language in the Content Area. Graduate students in the English Education program are required to take ESL 522, Theory and Practice of Bilingual/Multicultural Education. Graduate students are also able to take FSA 505 (Sociology of Education) instead of the traditional foundations course. All these changes are improvements to help completers to teach in more culturally diverse environments.

We continue to see that our graduates are quite comfortable with many forms of technology. They used computer programs, apps, and other technologies to teach and assess student learning. We have put a focus on hiring faculty with greater awareness and dexterity with educational technologies and have continued to focus on making our graduates comfortable with learning the vast array of technologies that are being used in schools today. The English department, for example, has altered its program to include PWR 210, Digital Writing with Data course.

In the case studies, we saw that our graduates were teaching according to modules that their schools were sometimes using and in accordance with their subject standards. Education programs at SUNY Cortland continue to focus on these aspects of teaching in our education programs. Discussion about the benefits of modules, and some of the challenges, have occurred in some faculty meetings, but also in the college classrooms, to introduce our candidates to the reality of teaching in schools where sometimes curricula is provided to teachers. The Adolescence Education: Social Studies and History program redesigned their AED 301 course (Pre-Practice Teaching Seminar) to include a portfolio assignment that is more closely aligned with the new National Council for the Social Studies standards. They also added an applied learning project and an inquiry-based lesson design to other courses. Instruction was one of the strengths that our completers showed in their teaching. This is partly due to past case studies that have urged us to increase our focus on instruction, especially in terms of diversity and technology.

In general, these case studies indicate that SUNY Cortland produces strong teachers. They strive in the classroom. They are reflective. They hold high standards for their students. And they are professional, and aware of the challenges that students sometimes face. The case studies continue to be helpful in guiding our revisions to our programs. It has helped us too, as an education unit, to be reflective and to make continuous improvements to our programs.