CUNY CareerPATH:
Integrated Instruction in the CUNY CareerPATH Program: An Implementation Report

The City University of New York

Integrated Instruction In The Cuny Careerpath Program: An Implementation Report

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Introduction

As part of CUNY CareerPATH, a USDOL-funded training initiative for unemployed and incumbent workers, the eight-college consortium implemented a variety of collaborative instruction approaches, based on the Integrated Basic Education and Skills Training (I-BEST) model, to improve student comprehension of challenging material and to help increase student success on course assignments and certifying exams. With guidance and ongoing technical assistance from the Central Office Continuing Education and Workforce Programs (CEWP) unit, the colleges in the consortium worked to strengthen academic support for students through the integration of academic skills instruction and occupational training. Three of the colleges were able to design and implement a true integrated model.

What is I-BEST? (adapted from Highline College I-BEST Resources (http://ibest.highline.edu/])

Based on the "Tipping Point" research[1], the Washington State Board of Community and Technical Colleges (SBCTC) developed the Integrated Basic Education and Skills Training (I-BEST) initiative to help underserved populations achieve a livable wage.

With integrated programming, students get the benefit of support from basic skills instructors while earning credit toward a certificate or degree … Basic skills (ABE/GED/ESL) students entering academic and professional programs are often at a disadvantage. Not only do they lack certain academic skills, but they've often been sheltered in the basic skills classroom, where instruction is paced to the students' needs rather than to curriculum goals. These students often go into the professional or technical classroom with less vocabulary, struggle to follow lectures, lack familiarity with U.S. academic culture, and often feel isolated from their peers.

I-BEST relies on collaboration between the technical and the skills instructors to develop curricula that integrates basic skills competencies with those of the technical program. Both the technical and academic skills instructors are present in the classroom for at least half of the total time of instruction. In this way, students receive instruction and practice in the related content and in academic skills such as reading comprehension, writing, applied math, note-taking, study strategies, and so on. This method of presentation supports comprehension in both technical content and academic skills; the technical content is fortified with relevant and timely academic skills instruction, and the academic content is anchored for students by the real-world context of occupational training materials.

1 http://www.sbctc.ctc.edu/docs/data/research_reports/resh_06-2_tipping_point.pdf

Three colleges, three models

Queensborough Community College, Kingsborough Community College, and the College of Staten Island brought integrated instruction to their colleges for the first time through the CUNY Career-PATH program. Although they were already offering many forms of supplemental academic support for students, the integrated model gave students the kind of enriched classroom and targeted instruction that is only possible with a content instructor and a skills instructor working together in the classroom. LaGuardia Community College, also part of the consortium, has used an integrated model, called NY-BEST, since 2007; its model was also a valuable resource for the three colleges implementing the approach for the first time. LaGuardia's experience with and expertise in integrated instruction for workforce education programs is well known and documented, and is therefore not included in this report.

Queensborough Community College (QCC): QCC used a classic I-BEST model in their phlebotomy class, with two teachers in the classroom throughout the class session. One teacher, an instructor with field-related technical knowledge and skills, served as the content instructor. Another teacher, with experience in teaching basic academic skills to adults, served as the skills instructor. They worked together in the classroom, with the content instructor providing information and technique, and the skills instructor offering support in comprehension through instruction in note-taking, reading strategies, pre-reading activities using relevant vocabulary, and the like. In addition, the skills instructor held a 12 hour pre-course workshop to review the course syllabus and textbook, and to work with students on reading comprehension skills and test-taking strategies.

Kingsborough Community College (KCC): KCC employed a range of strategies for integrating technical content and academic skills instruction. In one instance, the content and skills instructors overlapped during the last half hour of the content class. While students were working on an independent activity, the instructors conferred about how best to target the skills portion that was to follow. They then offered a short lesson together; in one class session, for example, students worked on a writing assignment while both instructors offered help as needed, either with the content or with writing skills. After that, the skills instructor stayed and taught the targeted skills component, based on conversation with the partner instructor about that day's content class. In another instance, for the culinary arts class, the content and skills instructor worked together in KCC's commercial kitchen, using a more traditional co-teaching approach. Much of the skills instruction in this class was in math: reconfiguring recipes, estimating and rounding amounts of ingredients, etc.

College of Staten Island (CSI): After a few semesters of standalone supplemental reading/writing instruction, CSI introduced an integrated model into their CareerPATH Entrepreneurship course. The class was co-taught by a business professor and an academic skills instructor. The business instructor opened the class with a mini-lecture on the topic of the day; the rest of class was run as a workshop, with the technical instructor offering feedback on the content of the day's work (business plans, budgets, business incubation proposals, marketing plans) and the skills instructor giving feedback on the mechanics, style, organization, and clarity of the writing itself.

Benefits and challenges

Benefits

There have been many benefits of using an integrated instruction model in the CareerPATH program, for students, instructors, the college, and the CUNY grant administrators.

Students: Students received the clear and unambiguous benefit of having two instructors, with two different bodies of knowledge and skill sets. As has been well documented,[2] co-teaching models give students more focused attention, opportunities for additional practice in needed areas, an increase in differentiated instruction, and more targeted and individualized assessment. CareerPATH students reported positive experiences in classrooms with two teachers, and spoke about the importance of each teacher's role. In a post-training survey, over 88% of students agreed or strongly agreed that "working with both an academic instructor and a content instructor helped me be successful in this program."[3]

Instructors: All instructors who participated in more than one semester of an integrated approach spoke highly of the benefits both to their students and their own practice (a few instructors didn't feel that the model was a good fit, and didn't continue with the model for subsequent semesters). Instructors said that working with another teacher in the classroom:

- increased their ability to gauge student comprehension by being able to more efficiently distribute their time to students
- gave them ideas for teaching strategies by watching the partner instructor in action
- allowed them to dive deeply into concepts and materials with students who were more advanced

2
http://ccrc.tc.columbia.edu/publications/how-i-best-works.html
http://www.highereducation.org/reports/Policy_Practice/IBEST.pdf

3
CUNY CareerPATH Evaluation, Post Occupational Training/Office of Research, Evaluation Program Support CUNY Office of the Senior University Dean for Academic Affairs, updated 7/30/14

- enabled them to provide students with more monitored hands-on practice
- allowed students to progress through the content more quickly, because those who were struggling could meet with the skills instructor immediately for additional support while the rest of the class moved on
- enabled them to provide students with individualized recommendations to increase comprehension and improve study skills such as note-taking, vocabulary study, and test preparation

Colleges: Implementing the co-teaching model increased the level of ongoing support for students, which directors felt had a positive impact on retention. In addition, adjunct and other part-time instructors felt more connected to the program and to the college through their planning and review meetings with each other.

CareerPATH Lead Administrators: CEWP at the Central Office, in its role as co-lead and programmatic lead for CareerPATH, worked closely with program directors, advisors, and instructors to help them implement integrated instruction at their campuses. The research, learning, and experience that staff acquired through this work have had a positive benefit in a number of ways:

- CEWP staff have become well versed in the integrated approach and have applied its tenets to other contexts, such as the development of a holistic model of student advisement that involves both advisors and instructors
- Learning about the thinking behind integrated instruction has given CEWP staff an increased understanding of how best to serve adult students
- Through research, observation, technical assistance, and the creation of a video about integrated instruction, CEWP staff have increased their ability to participate on CUNY-wide, regional, and national levels in the growing conversation about workforce education

Challenges

Although the benefits of integrated instruction are clear, it also presents tangible challenges. Scheduling, budgeting, hiring, training, and communication are all issues that must be addressed to make integrated instruction feasible.

Students: One challenge for students was in understanding each instructor's role and being able to see equal value in both. This did not take away from the benefit of co-teaching, but students may have initially been unsure about the classroom dynamics in this non-traditional setup.

Instructors: Initial challenges, such as resistance to sharing a classroom or even class materials, were resolved through carefully-considered hiring and placement in subsequent semesters. Instructors were offered professional development relevant to the model through workshops, onsite technical assistance in meetings and in the classroom, and regular communication with CEWP staff, and most felt sufficiently supported in this way. The needed changes in teaching style were not voiced as a challenge and most instructors came to value and enjoy the new approach. However, all instructors noted the need for more collaborative planning and review time. (see Appendix A) Time for planning, review, and communication between co-teachers remains the biggest challenge from the instructor's perspective.

Colleges: The two biggest challenges for the colleges were hiring and budgeting. Because the model is more expensive in terms of personnel, program directors had to re-direct funds from other priorities. Most of the time, this resulted in inadequate funds allotted for instructor co-planning and review, which hampered successful implementation. In addition, directors were often unclear about how best to hire for collaborative teaching positions. Ongoing technical assistance from the Central Office CEWP resolved the hiring issue for the most part, but budgeting issues continue. An additional challenge at some of the colleges was the lack of support for the model from college administration.

An additional challenge was lack of clarity about the model, and lack of understanding or buy-in about its value. Because content knowledge was crucial for success on certifying exams and credit articulation, skills instruction was often seen as a "luxury" or and "add-on," rather than as an essential component of content comprehension and job performance once in the workplace.

Central Office/CEWP: Because most instructors were adjunct, as noted above, it was extremely challenging to provide centrally-based professional development. As a result, only two consortium-wide instructor meetings were held over the course of the three-year grant. Much of the professional development took the form of campus-based technical assistance — classroom observations with follow up conversation, planning meetings, demonstration lessons, support with curriculum development and selection of course materials, and guidance around instructional hiring, budgeting, and scheduling.

Measuring success

Measuring the success of an instructional model relies on analysis of both quantitative and qualitative data. A variety of tools were used to gather information about implementation and to begin a conversation about potential impact:

- Student surveys, interviews, and focus groups
- Pre- and post-program student writing assignments to assess content knowledge and writing skills
- Pre- and post-instructor surveys to assess knowledge of teaching strategies and openness to collaboration
- Formal student assessments such as CUNY placement tests and course exams (as an additional source of data—not for any causal evaluative purposes)
- Student progress into credit-bearing coursework
- Student credit accumulation toward a college credential
- Student achievement of occupational certification

Additional lessons learned:

- Whether co-taught or not, the traditional lecture style used in many college classes is often incompatible with the learning needs of adult students
- Program directors need varying levels of technical assistance and support in order to design, implement, and assess the instructional models in their programs — ranging from periodic check-ins to sustained and frequent collaboration and guidance
- Instructors need varying levels of technical assistance and support to implement and assess the model, ranging from periodic check-ins to sustained and frequent collaboration

Recommendations for best practices

Through this experience, the Central Office CEWP has developed a list of essential elements for a successful implementation of integrated instruction models. Although use of these elements certainly doesn't ensure success, successful implementation would most likely be severely limited without the following:

For students:

- Clear explanation of the model — its structure, its purpose, its approach, and its value
- Frequent conversations to make sure students see the value and can reflect on, internalize, and display the enrichment they are receiving
- Frequent conversations about the transferability of the skills acquired in the classroom both to other higher education contexts and to the workplace

For instructors:

- Sufficient paid planning and review time, including a thorough review of course syllabus, materials, and assignments prior to the beginning of the course
- Clear expectations for both instructors
- Systems for ongoing communication
- Support from program administrators
- Clear understanding of the model, both the technical content and the academic skills sides
- Content instructor's willingness to revise curriculum
- Content instructor's willingness to revise teaching approach
- Skills instructor's willingness to look beyond formal assessment as teaching goal
- Willingness to "leave the egos" at the door
- Openness to the spontaneity needed in a co-teaching environment

For colleges/central administration:

- Ample budgetary allotment for paid instruction, planning, review, and professional development time for instructors
- Clear understanding of the value of integrated instruction for specific student populations
- Vision for hiring and professional development based on understanding of model
- Clear explanation of the model to relevant departments, programs, and administrative offices, to garner support and ease of implementation

Questions to Consider

Through conversations with instructors and program directors, student outcome analysis, classroom observation, and other means of information gathering, a few questions emerged that remain unanswered. These are important to keep in mind when designing, implementing, and evaluating an integrated approach:

- How much of the approach's effectiveness is due to structural elements, how much to administrative elements, and how much to instructional elements?
- What kind of support from program administrators is most effective and useful?
- How much institutional support is needed for the model to be effective? What level of support is insufficient and can render it ineffective?
- What impact does this approach have on a student's long-term academic success?

Appendix A

The following is a summary of the integrated instruction model, taken from Highline Community College I-BEST resources and the article "Team Teaching" by Melissa C. Leavitt.[4]

Integrated Instruction

Integrated instruction is a teaching approach that utilizes two teachers: an academic skills instructor and a content instructor, who work together to help students understand and learn both the course content and the skills needed to succeed on assignments and exams. Integrated instruction can take on a variety of forms; even though some are more obviously collaborative than others, all models require careful planning and a willingness to revise course planning, teaching style, and classroom management. Because integrated instruction can increase engagement for students and improve teaching practice for instructors, it is increasingly seen as worth the additional planning and effort.

Below are 5 models of integrated instruction; all require a collaborative approach and all provide students with additional support, in different ways.

1. Team teaching, where two teachers share instruction of both the content and the skills. When the class is divided into two groups, with each teacher working in the same way with each group, this is sometimes called parallel instruction.

2. Collaborative instruction, where teachers use open discussion of the course theories and concepts to give students a more in-depth understanding of the material.

3. Complementary-supporting instruction, with one instructor teaching the content and the other giving instruction on related study skills or comprehension strategies.

4. Differentiated split class instruction, with the students divided into small groups depending on the support they need. Each teacher works with a group to offer targeted instruction in content, skills, or both.

5. Monitoring instruction, with one teacher responsible for teaching the whole class while the other works on comprehension and additional practice with individual students at their desks as the need arises.

4
Leavitt, Melissa C., PhD: "Team Teaching." Speaking of Teaching, Fall 2006, Vol. 16, No. 1. Stanford Center for Teaching and Learning.

Steps to Successful Implementation

1. Co-planning

Integrated instruction requires careful and collaborative planning, with clear roles and coordination of activities. Instructors need time to talk outside of class in order to be effective inside class. In addition to agreements about pedagogical approaches, instructors must decide about assignments (joint or separate?), grading, interaction with students, what to do in case of disagreement about what the other instructor says, etc…

Of course, unexpected things will come up, and spending some time reviewing and reflecting will strengthen the relationship and the teaching. Instructors should agree on ongoing methods of communication—regular emails, a log that stays in the office, phone calls, etc…

Course planning should begin with identification both of content and skills outcomes so that both instructors keep all outcomes in mind. Activities and assessments can be designed to support and measure both types of outcomes. For example, if a guest speaker will come to class to talk to students about a specific career, students can also practice writing and comprehension skills by taking notes, planning and asking interview questions, and summarizing the presentation afterward.

The course syllabus should reflect the importance of both components; make it clear that students will learn content and practice skills. Explain the concept of co-teaching and how it differs from a traditional classroom so students will know what to expect.

2. Co-teaching

Both teachers should be active participants in whatever role they take. Addressing the whole class, working with small groups, offering clarification when needed—any role should be seen as an active and valued one. Even if both are not in the classroom at all times, each instructor should make reference to the other, to keep the connection clear in students' minds.

Be ready to be surprised! Flexibility is identified as one of the most important elements of successful co-teaching. Respect for each other and for the subject you're teaching can greatly increase both the learning experience for students the teaching experience for instructors.

Appendix B

The following are notes from the first CareerPATH integrated instruction workshop. The notes were written around the room "graffiti board" style in response to prompts, and each board became the basis for a group discussion.

a. What is your general impression of this approach?

i. It works! If you understand the content.
ii. I like it!
iii. Could be helpful—another pair of eyes would be great
iv. Helps with evaluation of students
v. Creates many opportunities for students
vi. It will work—have to vary lesson plan—requires flexibility
vii. Gets better with practice
viii. Ideally requires shared goals, philosophy and paid planning time
ix. Creates innovative means of delivering learning objectives if successful

b. How could aspects of this be valuable in your classroom?

i. Many, if given paid time to plan jointly
ii. A different experience could be provided to students
iii. Writing skills builds confidence in careers
iv. Give students exposure to different teaching styles
v. Reinforce content and academic skills at the same time
vi. Students having difficulty keeping up with content could be more easily identified
vii. Decrease time content instructor must spend elucidating assignments, by demonstrating writing skills

c. What would prevent this from being valuable or feasible in your classroom?

i. Lack of cooperation
ii. Personalities
iii. Lack of time!
iv. Content instructor undervaluing academic support
v. Different education levels of students

d. What most gets in the way of students learning the OT content?

i. Fear
ii. Cultural backgrounds
iii. Technical language
iv. Lack of time management skills
v. Students do not know what to expect
vi. Language barriers
vii. Lack of study habits
viii. Amount of information required to learn
ix. Unfamiliar terminology
x. Family/job commitments
xi. Lack of time (single parents, busy, etc.)

e. How can skills instructors best help students learn the course content?

i. Plan together so you have common goals
ii. Applying the content in new situations
iii. Identify the barriers of students who are non-native speakers of English
iv. Working through students' assignments with them
v. Doing scenarios together
vi. Become familiar with the content that students are learning
vii. Help them develop time management skills

f. How can content instructors best support skills instructors to promote learning?

i. Figure out how to complement each other's teaching style
ii. Allow them in the classroom
iii. Define learning outcomes
iv. Cooperation
v. Sharing ideas and lesson plans
vi. Be relieved of pressure to teach to the CAT exam
vii. Communicate lesson so skills instructor can correlate it to skills taught
viii. Stimulate curiosity in students (students desire to expand their knowledge and skills)
ix. Constant communication between the two (with paid time to do it)
x. Increased communication
xi. Discuss assignment expectations with skills instructor

g. What do instructors have to give up in order to get the benefits of I-BEST?

i. Autonomy
ii. Arrogance
iii. Time
iv. Structured lesson plan
v. Ego
vi. Ownership of class
vii. Control of the class
viii. Independence

Appendix C

Links to additional resources:

a.

I-BEST overview
http://www.sbctc.ctc.edu/college/e_integratedbasiceducationandskillstraining.aspx

b.

I-BEST evaluation from CCRC
http://ccrc.tc.columbia.edu/publications/how-i-best-works.html

c.

I-BEST planning tools, strategies, and templates
http://ibest.highline.edu/

d.

Overview of a variety of integrated and contextualized instructional models
http://www.sbctc.ctc.edu/college/_e-abepd_integratedinstruction.aspx

e.
Integrated Instruction in CUNY CareerPATH: a video overview
https://vimeo.com/108497150